

February 17, 2011

O B Research

Orvana Minerals

200,000 Ounces AuEq

Outstanding Profitability



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Orvana Minerals Corp.
(TSX: ORV)

Recommendation: Buy
December 31st 2011 target: C\$ 7.00

Mcap: C\$405 million at share price C\$ 3.48

Basic Shares: 116.38 million

Warrants/options: 3.5 million

Fully diluted shares: 119.9 million

Website: <http://www.orvana.com/>

Gold, copper & silver

Introduction

Orvana Minerals has been a very profitable gold producer for almost 10 years in the midst of a major bull market. Despite being quoted on the main TSX exchange and rapidly moving towards production of 200,000 ounces of gold equivalents, the company and its management are basically unknown to investors. In fact it received its first Canadian brokerage coverage only 6 months ago and the second one just recently.

This is absolutely about to change as the company now starts its 100,000 ounces/year EVBC Spain gold mine with rich copper & silver credits. Orvana will still be producing very profitable gold ounces (plus copper & silver) in Bolivia but will from this spring and onwards be known as a high grade European producer and one that has among the highest profit margins in the mining business. Taking guidance from the two bankable feasibility studies & reserve statements published in 2010, we will try to estimate just how profitable Orvana will be during 2011 and 2012.

In the last segment, we will begin to look at and value a part of Orvana that we believe will come into focus during 2011. We expect a pre-feasibility study with conversion of copper resources into 43-101 compliant proven & probable reserves as well as the company submitting the application for mine permit. We are of course talking about the 3 billion pounds Copperwood project in Michigan slated for production in early 2014.



Expected production 2011 and 2012

In Bolivia this year the company shifts mining from the soon depleted Las Tojas open pit deposit to the nearby UMZ (Upper Mineralized Zone), situated on top of the previously mined LMZ underground mine. UMZ is also designed as an open pit and Orvana will be able to extract not only gold but copper and silver as well. The shift is scheduled to take place late February 2011 when Las Tojas will be mined out and production at the UMZ is expected to commence.

In EVBC Spain, ore is now being mined and stockpiled with mill start up and ramping up during the rest of H1. We expect EVBC to produce roughly what corresponds to 6 months' worth of full production during 2011.

Spain	2011	2012
Gold	48,000 ounces	99,000 ounces
Copper	3.5 million pounds	7.5 million pounds
Silver	80,000 ounces	180,000 ounces

Bolivia	2011	2012
Gold	25,000 ounces	21,000 ounces
Copper	17.2 million pounds	19.5 million pounds
Silver	500,000 ounces	680,000 ounces



Key assumptions both 2011 and 2012

Gold	US\$ 1,350 net payment including effect of 10% hedged gold US\$ 1,330
Copper	US\$ 3.60 net payment/pound from smelter including effect of Spanish copper hedge
Silver	US\$ 27 net payment/ounce
USD/Euro	1.35

Estimated profitability (all numbers US\$ million)

Year	2011E	2012E
Gold sales	98.5	162
Copper sales	74.5	97.2
Silver sales	15.7	23.2
Total sales	188.7	282.4
Total operating costs Spain	32	64
Total operating costs Bolivia	34	34.4
Total operating costs	66	98.4
Royalties Spain	1.8	3.9
Royalties Bolivia	10	10.2
Total royalties	11.8	14.1
Central G&A	4	4
Other costs	5	5
EBITDA	101.9	160.9
Total depreciation	13	21
EBIT	88.9	139.9
Interest on debt	3	3
Tax (average 33%)	28.4	45.2
Government grant (Spain)	6.6	-
Net income after tax	64.1	91.7
EPS C\$ cent (1:1 US\$)	55	79

Valuation of the producing parts of Orvana Minerals

Our valuation of Orvana’s two producing units EVBC and UMZ is based on the assumption of a smooth ramp up of the production during this year. For 2011 we calculate with 85% of the expected full production from UMZ and nearly 50% of the expected annual production from EVBC. During 2012 we expect to see close to full production in accordance with guidance and feasibility studies.

Our valuation at this stage will mostly focus on the price/earnings ratio and the reserves + resources metric that support these earnings. We generally feel that the discounted cash flow model is an inferior valuation model since analysts in the gold sector play around too much with the discount rate and what’s even worse: subjectively calculate “multiples of NAV”. We have seen plenty of examples of discounting future profits in West Africa at 5% or lower and then attaching a multiple of 3 or even higher to NAV justified only on a “promising trend” rather than real reserves and resources.

When valuing Orvana Minerals and setting a target for the end of 2011, we choose to mainly look at the 2012 expected earnings since these are based on the rate of production we expect the company to have achieved at the time of our target, i.e. Dec 2011.

EVBC (El Valle-BoinásCarles) Spain outlook and comments

EVBC’s production is currently supported by seven years of P&P reserves and total resources (incl. reserves) of 25 years. The company is currently executing the recommended (from the feasibility study) infill drilling to convert further ounces into M&I and reserves. We expect P&P reserves to increase to over 10 years of production during 2011. This would support a 30% increase in the production rate at EVBC, which also can be handled by the existing mill, requiring only minor additional investments. The EVBC area is also considered to be highly prospective for finding additional resources.

UMZ (Upper mineralized zone) Bolivia outlook and comments

UMZ’s production is supported by nine years of P&P reserves. We do not expect any additional growth or investments from Orvana in Bolivia in the near future and we assign to this part of Orvana a much lower earnings multiple. Still one should keep in mind that most mining is done in “less favorable” jurisdictions these days. Look at a key mining country like Australia where miners have been hit with stupid proposals from politicians, fires, floods and an overvalued currency. All in all, we think that Spain (remember the grants for creating jobs and very favorable tax rules for the first years for the very same employment reasons) really should have a premium valuation far outweighing the discount caused by Bolivia.

Metrics for valuing Orvana EVBC & UMZ

Due to the factors discussed above, we have chosen to assign a weighted price/earnings multiple of 7 for the expected total production on an annualized basis using the rate expected at the end of 2011 for the two production units. A higher multiple is reasonable once further reserves are added in Spain and once production has ramped up at both units.

Expected earnings per share of 79 cents indicate a target value of C\$ 5.52/share for these two production units.

Copperwood: emerging from the unknown

Introduction

Anyone that has looked at the fundamentals for copper for the coming years realize that supply really has serious difficulty of keeping up with demand. Copper is *the key* commodity as China expands its infrastructure as well as its internal consumption.

Unless the world faces another 2008 melt down or the growth rate of China collapses, we face several years of serious copper deficits. In various mergers and acquisitions, great copper projects are rapidly being snapped up at increasing prices. Some weeks ago Hudbay Minerals bought Norsemont (copper project in Peru with expected start 2016) for 9 cents/pound of 43-101 resources.

Facts about the Copperwood project

Location: Michigan USA

Size: ~ 3 billion pounds of copper at around 1.4% grade + silver by-product

Status: PEA done 2010 (before the significant resource growth reported Dec 2010), Pre-feasibility study + mine permit application expected early summer 2011 and full feasibility during spring 2012. Production start expected in late 2013 or early 2014.

Expected annual production (PEA) of 48.5 million pounds of copper and 103,000 ounces of silver at an expected cash cost of ~ 1.2 \$US/pound. With only US\$ 143 million in pre-production capital requirement, this is a very profitable project with an expected IRR of 45% based on a copper price of US\$ 3.5/pound and a silver price of 19 US\$/ounce. We do however expect the planned production to grow since the resource base has grown so considerably. We will know more about this in the upcoming pre-feasibility study.

Support/Opposition:

A very important aspect when it comes to investing in the USA. We rank many states in the US as "bad jurisdictions". This has caused us to do careful research on the subject on how the project is viewed in Michigan and among the people in the Upper Peninsula. What we found provided some hope for industrial production in the US. There seems to be good support for mining activity in the area, even among key politicians, as voters focus on the unemployment in the state.

Valuation of Copperwood:

We believe that Orvana Copperwood will gain value very quickly as it moves to the pre-feasibility stage with conversion of resources into 43-101 compliant reserves. We should also see a mine application this spring and a full feasibility study within 15 months. As with all mining projects, these are key value-creating steps and we expect that approximately 800 million pounds of copper will be classified as reserves by June this year.

Copperwood is an advanced project with very robust IRR and a low CAPEX of about 140 MUSD (PEA autumn 2010).

Based on our assumption of 800 million pounds of P&P reserves this spring and 2.2 billion additional pounds of resources with a valuation of reserves at 10 cents and resources at 4 cents, the whole project has a value of 168 million US\$ or C\$ 1.45/share. With permits in place and a full feasibility study done, expected by spring/summer next year, we will change to a valuation based on expected production and profitability which should be a trigger for a higher valuation.

Conclusion and recommendation

Orvana Minerals and its very competent management are proven mine builders and producers of gold. Since our official coverage started in June 2010, they have successfully moved all projects rapidly forward with few delays and the stock price has responded very favorably despite the lack of broad coverage from the Canadian investment houses.

The company has no less than three very interesting pieces and we still see another double in the share price as the transition year is over and the year of more visibility begins. We expect the following triggers to move the price:

- Imminent commercial production of gold, copper and silver from UMZ replacing the almost depleted Las Tojas deposit.
- First gold pour from EVBC, Spain in May.
- Pre-feasibility study, mine permit application and announcement of P&P reserves at Copperwood in June.
- The reporting of the April-June income statement that will make it obvious that Orvana is on its way to become not only a 120,000 ounce gold producer but rather this amount of gold + by-products bringing cash costs to around zero dollars per produced ounce of gold. In fact, we wouldn't be surprised if the market at that moment takes a less conservative view when valuing the company than what we have done here, especially if the reserve growth in Spain will be visible at the same time.

As per our calculations above we sum up the value of the company to C\$ 7.00/share by the end of this year. Orvana Minerals remains our top pick for 2011.



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