

# objective corporate research

Mining Sector Core activities: Exploration Core area of activity: Albania

Listing: Unlisted

# **Balkan Resources Inc**



Balkan is exploring the previously mined Perlati copper deposit in Albania and the Devolli JV with European Nickel. Perlati contains a historic, non-NI 43-101-compliant mineral resource of just under three million tonnes, averaging 2.45 percent copper. The company is working to a listing on the TSX Venture Exchange.

Objective Capital Limited
Token House
11-12 Tokenhouse Yard
London EC2R 7AS
Tel:+44-(0)870-080-2965
Fax: +44-(0)203-137-0076
US toll-free: 1-888-802-7215
editor@objectivecapital.com

Corporate: www.ObjectiveCapital.com Research: www.ObjectiveCapital.co.uk

#### **Contents**

**Executive Summary** 

Key Points	3
Overview	5
Valuation	8
Key Risks	11
Corporate Overview	13
Industry Overview	16
The Perlat Property	25
The Devolli JV Property	37
Other Properties	44
Financials	45
Appendix: Management	46

I certify that this report represents my own opinions.

Will Purcell, Analyst will@objectivecapital.co.uk Richard Ryan, P. Geo richard@objectivecapital.co.uk

This report has been prepared by Objective Capital Limited.

Objective Capital is a provider of corporate research. Our research reports provide information, analysis, and estimates and may reference our opinion on the value of highlighted companies. Objective Capital is not registered by any financial authority, and does not provide or purport to provide investment advice or recommendations of any description.

The information in this report is designed to present the opinion of Objective's analysts and what they believe to be the objective prospects of the highlighted company. Where reference is made to estimates of value or relative value of a specific company these are based on standard analysis assuming an "average" investor. There is no guarantee that these estimates are reliable or will eventuate. They should not be relied upon in forming specific investment decisions and readers should seek advice specific to their situation and investment requirements from a person authorized under the Financial Services and Markets Act 2000, before entering into any investment agreement.

Objective Capital's detailed reports are only available to ordinary business investors, market counterparties, high net-worth and sophisticated individual investors.

This report does not constitute an offer or invitation to purchase or acquire any shares in any company or any interest therein, nor shall it form the basis of any contract entered into for the sale of shares in any company.

The information in this report is believed to be correct, but its accuracy or completeness cannot be guaranteed. No representation or warranty, express or implied, is given by any person as to the accuracy or completeness of the information and no responsibility or liability is accepted for the accuracy or sufficiency of any of the information, for any errors, omissions or misstatements, negligent or otherwise.

Objective Capital (including its Directors, employees and representatives) or a connected person may have positions in or options on the securities detailed in this report, and may buy, sell or offer to purchase or sell such securities from time to time, subject to restrictions imposed by internal rules. Objective Capital and its analysts are barred from trading in the shares of companies on which Objective Capital provides coverage.

You are reminded that the value of shares in any company may go up or down. Past performance is not necessarily a guide to future performance.

## **About Objective Capital:**

Objective Capital is a leading UK provider of objective corporate research.

We offer investors two levels of insight – a regular survey of the complete small and mid-cap segment, highlighting those stocks where attention should be focused, and our detailed institutional-quality, sponsored research coverage. As always, our research doesn't offer trading recommendations or advice but an objective uptodate assessment of the prospects, and risks, of the companies we cover.

While the companies we cover sponsor our research, it is always written on behalf of our readers. It is of the essence of our research that it be **independent** — that is opinions, estimates and valuations be solely those of Objective's analyst; **objective** — that is based upon verifiable data; and **transparent** — that is based upon explicit assumptions.

Our research complies with all FSA recommendations as may arise out of CP172 and CP176, i.e., that it be independent of any broking or trading interests; and CP205, i.e., that it comply with standards for objectivity.

# **Key Points**

28 September 2009 Price: unlisted

Balkan Resources is an emerging junior Canadian-based private company with a geographically focused on metals exploration in Albania. Balkan has two priority projects, Perlati and Devolli. The company is currently private, but it is working on obtaining a listing on the TSX Venture Exchange.

#### The Perlati licence is one of Balkan's two priority projects

Balkan Resources holds a 100-percent interest in the 290-hectare Perlati project in northern Albania. The property contains the previously identified Perlati copper deposit, a portion of which saw historical mining. The deposit contains a historic, non-NI 43-101-compliant mineral resource of just under three million tonnes, averaging 2.45 percent copper, after accounting for probable depletion while the mine was in production.

# A second priority project offers added potential

The Devolli project in southeastern Albania is another advanced project deemed a priority by Balkan Resources. The project is a joint venture between Balkan and European Nickel plc that includes the Kokogllave, Devolli and Zemblak exploration areas, which encompass 5,100 hectares of land. The project contains a nickel laterite deposit that has seen 136,800m of historic drilling, resulting in a historic resource potential in excess of one hundred million tonnes, averaging 1.21 percent nickel.

#### Balkan is adding to existing data at Perlati with a new drill programme

The company commenced drilling on the Perlati deposit in 2007 and eighteen holes have been completed to date. Balkan proposed a second phase of drilling that would allow the company to upgrade the historic calculations to a NI 43-101-compliant indicated and inferred resource. As well, the company intends to expand the known mineralised zone, which remains open, and to test new targets on the property.

#### Modern exploration techniques and assaying could expand the potential of Perlati

The historic assays concentrated on copper, and tests for precious metals and zinc were spotty at best. Tirex Resources is in the midst of a multimillion-dollar exploration programme on its Mirdita property, which surrounds Perlati, and its assays show significant zinc, gold and silver values.

# **Current fair value of equity**

Expected Value C\$14.9m Value per share C\$0.29

#### Derisked upside potential\*

Our core scenario C\$0.57
Our optimistic scenario C\$0.92
Maximum potential C\$1.16

\* potential assuming one priority project reaches permitting

#### **Company details**

Planned quote TSX Venture
Shares issued (m) 51.7
Fully diluted (m) 73.2
Website: www.balkanresources.com

#### **Analysts:**

Will Purcell
will@objectivecapital.co.uk
Richard Ryan, P. Geo
richard@objectivecapital.co.uk

Balkan is conducting advanced exploration on the Devolli Project
Balkan Resources has commenced a series of confirmation drill holes on
the Kokogllave property this year and assays from the first tests are positive.
European Nickel completed 9,257 metres of diamond drilling to complete their
JORC-compliant report on the Devolli portion of the project. The company has
embarked on a prefeasibility study that includes completing 44,000 metres of
drilling, which should be sufficient to upgrade the historic data to NI 43-101
standards. Balkan plans to employ European Nickel's patented heap leach
technology for the Devolli Project which has been successfully implemented
on the Caldeg nickel laterite deposit in Turkey.

# Our assessment yields a core base-case valuation of C\$0.29

We assess Balkan Resources' current value at C\$0.29 per share, with significant potential for appreciation with exploration success. Continued development suggests valuations as high as C\$1.16 per share in the post-permitting environment under more optimistic scenarios.

Balkan Resources Inc is a private, Canadian-based, junior exploration company founded in 2006. The company holds several mineral properties in Albania, one of the last under-explored regions in the world. The company is as yet private, but it intends to obtain a public listing on the TSX Venture Exchange. Balkan is conducting exploration programmes on its key properties, all of which contain known mineral deposits, with additional work planned over the next year.

## The Perlati deposit is one of Balkan's two key projects...

Balkan Resources holds a 100-percent interest in the Perlati property, which lies in northern Albania near Burrel, about fifty kilometres north of the capital Tirana. The 290-hectare property is surrounded by the Mirdita property, where Tirex Resources is in the midst of an aggressive drill programme that is yielding encouraging assays of copper, zinc and precious metals.

The Perlati property contains a known copper deposit with an historic, non NI 43-101-compliant, mineral resource and good access to local infrastructure. The Perlati copper deposit is classified as a volcanogenic massive sulphide deposit, which typically are polymetallic in nature, containing significant quantities of base and precious metals.

#### ... with its significant copper potential

The historic resource dating to the mid-1980s, contained 2.56 million tonnes of mineralisation -- roughly equivalent to indicated-to-inferred resources by current terminology -- containing an average of 2.20 percent copper, with an added 1.187 million tonnes, roughly equivalent to an inferred resource, averaging 1.78 percent copper. An unknown amount of this material was mined between 1979 and 1991. Additional work to 1992 resulted in the identification of another 0.98 million tonnes averaging 3.26 percent copper, none of which was mined. The numbers suggest Perlati contains approximately three million tonnes of mineralisation, averaging 2.45 percent copper.

The Perlati deposit is yet to be fully delineated and Balkan believes there is significant room for expansion of the deposit. The company is in the midst of a multiphased drilling and exploration programme, with several additional holes, totalling 12,500 metres, planned in its proposed prefeasibility study. The company is focussing its drilling at Perlati on bringing the historic resource to NI 43-101 standards, expansion of the known mineralised zones, and testing of new targets on the property.

# **Overview**





Source: Balkan Resources

#### The Devolli property contains a promising nickel deposit

Balkan Resources also ranks its Devolli Project, a Joint Venture with European Nickel plc, highly based on the presence of a significant nickel laterite deposit. The project includes three exploration licensed areas in southeastern Albania: Kokogllave, Devolli, and Zemblak, with a total area of 5,100 hectares, not far from the Greek border.

These three licensed areas have a resource potential of 99 million tonnes of nickel laterite ore at 1.2 percent nickel, with the Kokogllave licensed area estimated resource of 26.4 million tonnes at 1.2 percent nickel, the Devolli licensed area estimated resource of 35.6 million tonnes at 1.2 percent nickel, and the Zemblak licensed area estimated resources of 37 million tonnes at 1.2 percent nickel.

Of this estimate, Balkan Resources has produced a resource estimate of 26.4 million tonnes averaging 1.2 percent nickel content for the Kokogllave portion of the Devolli Project.

Historic drilling on the Devolli licensed area (Kapshtice and Verniku West deposits) saw 553 holes as well as 114 trenches and pits. European Nickel used both historic data and newly acquired information to create their JORC-compliant resource estimate of 35.6 million tonnes averaging 1.2 percent nickel.

Preliminary exploration work on the Zemblak portion of the Devolli Project has led Balkan Resources' geologists to a resource estimate of 37 million tonnes averaging 1.2 percent nickel content.

The joint venture plans 44,000 metres of diamond drilling to complete its prefeasibility study for the Devolli Project, and produce a NI 43-101-compliant report targeting a mine plan of 20,000 tonnes of nickel annually, with a 15 year life of mine. Metallurgical studies are underway to implement European Nickel's patented heap leach technology for the Devolli ore.

#### Balkan has two other Albanian prospects

The company also holds several other licences in Albania, including two of particular interest. Balkan is conducting a two-year, 1,350 metre drill programme on the western portion of its Librazhd exploration licence that will step out beyond the bounds of the known nickel mineralisation zone.

Balkan holds the Peshkopi prospecting licensed area, a 333km² land package in north eastern Albania. The Peshkopi project contains known gold, arsenic, molybdenum, lead, zinc and copper deposits. Balkan is conducting prospecting work in Peshkopi to isolate areas suitable for advanced exploration work. Once defined, Balkan will apply for exploration licenses for these targeted areas.

#### Balkan's management has both financial and geological experience

Balkan Resources has a management team with considerable experience in mineral exploration. Claude Schimper, the company's CEO, has more than twenty years experience in the industry, having worked with Placer Dome, Anglo American and St Andrew's Goldfields. Menachem Ben Mashiah, the company's Chairman, has over forty years of experience in international business, leading both private and public companies during this time. Elliot Kramer, the company's Vice Chairman, brings start-up experience and country knowledge to the team. He founded the company in 2006 and has spent the bulk of the time since in Albania.

Balkan also maintains a team of Albanian geologists, as its corporate strategy is to combine its Canadian-based management and geological expertise with top local geologists familiar with the local geology and working conditions.

# **Valuation**

#### Our valuation approach

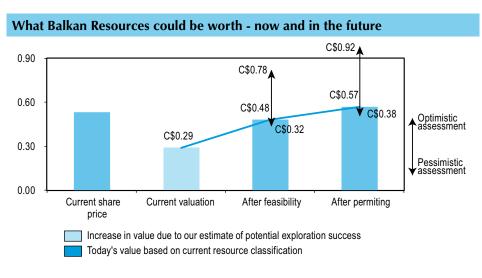
We have valued Balkan Resources based on assessing the economic potential of the company's key property, the Perlati volcanogenic massive sulphide project. In so doing we have accounted for: the likelihood that an economic resource will ultimately be proven; the likelihood that feasibility will be established, after considering metallurgical, social and permit issues etc; and the likely economics if actual mining were to occur, considering parameters such as tax, operating costs, revenues etc.

One of the key issues that any mining analysis must consider is the problem posed by the dependence of our assessment on commodity prices. This issue takes two forms -- what will be the price environment when mining eventually occurs; and the operating dynamics in response to changing mining prices.

From a valuation perspective, the aspect of operational dynamics that is of interest is the ability to "mothball" operations during periods when the commodity price is below the marginal cost of extraction. This creates what is frequently referred to as "optionality" - something that traditional NPV fails to capture. Intuitively this can most easily be understood by thinking of NPV as assuming that positive and negative deviations from our mid-case have a similar likelihood of occurring and hence balance each other - however, in mining, the downside is capped at the cost of "mothballing" the site.

We capture these aspects by valuing each year's production as an option assuming that prices revert to mean over the long run - that is, the mine will only operate if the commodity price is above the extraction cost. In essence, rather than valuing that year's production as we would in an NPV model as the discounted value of the cash-flow estimated using the mid-case for the commodity price we value the probability that the price is above the extraction cost.

In valuing the economic potential of resource projects, we assume that while commodity prices are volatile they return to an inflation-adjusted, long-run mean. For example, in the case of copper it has historically traded at approximately US\$1.75 per pound in current dollars since the early 1950s, with deviations from mean normally correcting over 8.0 years with a volatility of 20 percent.



Source: Objective Capital

#### **Fair value summary** (US\$m) Scenario Base Pessimistic Optimistic Property portfolio - Perlati 9.8 3.1 22.4 9.6 - Devolli (6.2)25.4 - Librazhd 0.7 0.7 0.7 - Tuc 0.2 0.2 0.2 - other 0.0 0.0 0.0 20.3 48.8 Total (2.2)Less: overhead 3.9 3.9 3.9 44.9 **Expected value of portfolio** 16.4 (6.1)Add: other investments 0.0 0.0 0.0 Add: starting cash + new funds 0.7 0.7 0.7 Total current value for firm 17.1 (5.4)45.6 Less: bank & other debt 0.0 0.0 0.0 17.1 45.6 Total value to equity claims (5.4)Less: warrants 0.0 11.6 3.4 Ordinary equity holders 13.8 (5.4)34.1 Value per share (US\$) 0.27 (0.10)0.66

# Fair value for different exploration scenarios

Value per share (C\$)

Scenario	Our view	Optimistic outlook	Pessimistic outlook	Resources fully proven up	No further exploration success
Risked mineable resource	ce (m t	onnes)			
- Perlati	2.0	4.0	0.9	5.4	0.0
- Devolli	25.2	32.4	18.0	32.4	0.0
<b>Property value</b> (US\$m)					
- Perlati	9.8	22.4	3.1	31.0	(10.8)
- Devolli	9.6	25.4	(6.2)	25.4	(6.2)
Balkan Valuation (US\$m)	13.8	34.1	(5.4)	40.1	(19.2)
Value per share (US\$)	0.27	0.66	(0.10)	0.78	(0.37)
Value per share (C\$)	0.29	0.71	(0.11)	0.84	(0.40)

0.29

(0.11)

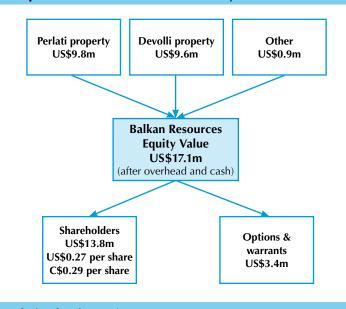
0.71

Sensitivities to market assumption	s on	•••			
Long run real copper price (US\$/lb)	1.25	1.50	1.75	2.00	2.25
Value (C\$/share)	0.16	0.23	0.29	0.35	0.40
Time for copper price to revert to mean (years)	6	7	8	9	10
Value (C\$/share)	0.26	0.27	0.29	0.30	0.31
Volatility of copper price (%)	15%	20%	25%	30%	35%
Value (C\$/share)	0.27	0.29	0.31	0.33	0.35
Interest rate (%)	4.8%	4.9%	5.0%	5.1%	5.2%
Value (C\$/share)	0.31	0.30	0.29	0.28	0.27

# Sensitivities to assumptions on ...

•					
Recovery rate (%)	75%	80%	85%	90%	95%
Value (C\$/share)	0.19	0.24	0.29	0.34	0.38
Change in value (%)	-34%	-17%		+17%	+33%
Operating Costs (US\$ per tonne)	38.00	40.00	42.00	44.00	46.00
Value (C\$/share)	0.31	0.29	0.27	0.25	0.23
Change in value (%)	+7%		-7%	-13%	-20%
Increase in Capital Cost (%)	+0%	+10%	+20%	+30%	+40%
Value (C\$/share)	0.29	0.27	0.26	0.25	0.24
Change in value (%)		-5%	-9%	-14%	-18%

#### Components of Balkan Resources' entity value



Perlati valuation (C\$m)			
Scenarios for exploration success	Base	Optimistic	Pessimistic
Net value of production	161.3	161.3	161.3
Expected mining success*	33%	67%	15%
Expected net value of production	53.2	108.1	24.2
Add: tax shield on depreciation charge	15.7	15.7	15.7
Less: development & operational capex	29.8	60.5	13.5
Value of mining operations	39.2	63.3	26.4
Probability of reaching mine development	<b>52%</b>	52%	52%
Expected value of deposit	20.6	33.2	13.9
Less:			
<ul><li>expect pre-development costs**</li></ul>	1.1	1.1	1.1
- further exploration costs ***	9.7	9.7	9.7
Expected value of project	9.8	22.4	3.1
effective risk haircut	86%	71%	92%
Ownership	100%	100%	100%
Balkan Resources' share	9.8	22.4	3.1

- \* portion of reserve/resource expected to be converted to a mineable resource, probability-weighted for our confidence they will be proven-up
- \*\* shown as expected value of being incurred after allowing for likelihood of reaching each development stage

#### **Commodity market assumptions**

Copper prices are mean reverting

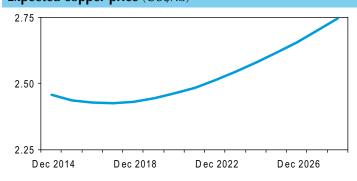
Long run level 1.75 US\$/lb

Avg time to revert 8 years

Volatility 20%

Inflationary price growth 2.5%

# **Expected copper price** (US\$/lb)



<sup>\*\*\*</sup> present value

#### Our key assumptions

We have modelled Balkan Resources' Perlati deposit project based on the following key assumptions:

- the property currently has a hypothetically mineable tonnage of 7.5 million tonnes, averaging 2.45 percent copper, with 20 grams of silver and 2.0 grams of gold per tonne. Our analysis assumes that further exploration will convert this combined amount to a mineable resource of some 6.0 million tonnes or, after allowing for the confidence level of each resource category, 3.0 million tonnes on a risk adjusted basis.
- assuming exploration success we have modelled that mining will commence
  in the first quarter of calendar 2013 with a milling capacity of 1,500 tonnes
  per day. We assume capital expenditures will begin in early 2011, with a
  total cost of approximately US\$133.5m over the following two years.
- we assume initial operating costs of US\$54 per tonne initially, escalating at a nominal rate of inflation thereafter. We assume a tax rate of thirty percent.

Balkan Resources has yet to complete exploration of the Perlati project. We have assumed success probabilities of 65 percent, 85 percent and 95 percent at the pre-feasibility, feasibility and permitting stages respectively.

#### Our results

After allowing for likely economics, exploration potential and development risk our analysis suggests an expected value of US\$9.8m for the Perlati copper project. We ascribe US\$9.6m for the Devolli nickel project and current nominal book values of US\$0.7m for the Librazhd nickel prospect and US\$0.2m for the Tuc copper prospect. After allowing for corporate overhead and outstanding warrants, our assessment of Balkan Resources' ordinary equity results in a base case current valuation of US\$17.1m, or C\$0.29 per share, with an optimistic current valuation of C\$0.48 per share, assuming higher probabilities of exploration success.

Our analysis suggests that Balkan Resources' current value is based largely on exploration and development potential at Perlati and Devolli and should there be no further success, then the current level of risked resources may not be sufficient to justify extraction. Alternately, if all available potential resources in the company's Perlati project were ultimately proven, they could yield up to C\$1.16 per share. If Devolli is also proven up then they could yield up to C\$3.16 per share overall.

Our base-case and optimistic outlooks, assuming success at all stages through permitting at Perlati, result in valuations of C\$0.57 and C\$0.92 per share respectively. Success at any of the company's other projects, or delineation of additional resources beyond our hypothesised estimates could add significantly to these estimates.

**Key Risks** 

Balkan Resources' Perlati copper and Devolli nickel projects offer good potential for exploration and development success, but both projects remain at early-to-intermediate stages of exploration, without formal resource calculations, or completed scoping or prefeasibility studies. As a result, much of the company's value will depend on the ability of Balkan Resources to expand and upgrade its historic resources to NI 43-101 standards and demonstrate economic viability through formal economic assessment. Therefore, its projects carry significant risk.

# Balkan Resources' success depends on ...

... the company delineating sufficient resources to support mining at Perlati
Balkan Resources has four properties in Albania with mineral deposits, with two
as priorities, based on historic mineral resources and exploration potential. The
company will have to upgrade the historic calculations to NI 43-101 standards
through continued drilling, whilst continuing to expand the known dimensions of
the key deposits. We base our valuation of Balkan on the reasonable assumption
that the company will achieve a significant increase in tonnage at Perlati, and
on the likelihood that its assays will show worthwhile grades of zinc, gold and
possibly silver. Failure to expand the historic resource materially would have a
proportionately adverse impact on our valuation.

#### ... the company expanding the available tonnage at Devolli

The Devolli nickel laterite deposit contains substantial mineralisation and the recent joint venture agreement with European Nickel, and the acquisition of the Zemblak exploration licence allows inclusion of most of this deposit. This mineralisation requires further drilling to upgrade the historic resources to NI 43-101 standards.

#### ... the copper and nickel market recovering from the market turmoil

After experiencing strong increases since the early 2000s, the prices of nickel and copper have collapsed during the latter half of 2008 amid slumping demand triggered by the global recession and fears of worsening economic conditions in the major consuming regions. Prices for most base metals, including copper and nickel, are now below their long-term, inflation-adjusted means. The currently low prices significantly impair the ability of junior companies to advance metals projects. Like other explorers, Balkan therefore faces a significant risk that continued low prices will render its projects uneconomic.

#### ... the company's ability to work effectively in a politically uncertain area

All of Balkan's projects are in Albania, a country still emerging from fifty years of communist rule. There is the risk of political upheaval and civil issues, although the country was recently admitted to NATO and is making considerable progress toward economic and political integration within Europe. As well, Balkan would face heightened risk during the permitting and environmental stages of development.

# ... the company's ability to demonstrate economic potential

Balkan faces infrastructure issues with its Albanian projects, and the company will have to control both its capital and operating costs to achieve an economically viable rate of return, should its exploration programmes meet with success. In particular, obtaining secure access to uninterruptible power and water supplies will be critical to the advancement of its projects beyond the prefeasibility stage.

# ... the company's ability to raise further funds for exploration and development

Balkan is a junior exploration company with limited access to capital and will need increasing and significant amounts of cash to fund its exploration programmes. In the longer term, the company may need capital to cover development costs for at least one of its projects, given continued exploration success. The need for further private placements of Balkan shares could result in significant dilution to shareholders.



Source: Balkan Resources

Balkan Resources Inc is an emerging Canadian based junior exploration company with a sharp focus on Albania. The currently unlisted company is going public in the near future.

**Corporate Overview** 

Balkan was founded in 2006 to explore and develop several mineral prospects in Albania, which remains one of the few remaining regions not to benefit from modern exploration techniques. The company currently holds licences covering four properties with known metal deposits.

Balkan is planning aggressive exploration programmes on its key properties over the next year. The company's strategy is to combine the benefits of local expertise with modern technology to give its promising projects an effective assessment.

# The Perlati licence is one of Balkan's two priority projects

The Perlati project is located near Burrel and lies about fifty kilometres north of Tirana, the capital of Albania, in the northern part of the country. Perlati lies in a known copper district and it is surrounded by the Mirdita project, which is currently yielding promising assays of zinc, copper and gold for Tirex Resources.

Two former copper producers lie within the licence area and an historical, non-NI 43-101-compliant resource of 2.56 million tonnes averaging 2.0 percent copper exists. Balkan continues to collect and assess historic exploration and production data from the Perlati project.

Balkan has a pending application for a Mining Licence from the Ministry of Economic, Trade and Energy. The company have been granted exclusive rights to the property pending the application for the mining permit, which Balkan Resources expects to be completed before the end of this year.

Balkan completed reconfirmation drilling on Perlati and resource modelling and scoping studies are under way. The company recently commenced a second phase drill programme at Perlati, with the intention of completing 10,000 metres of delineation drilling. The goals of the programme are the delineation of the known deposit to a NI 43-101-compliant mineral resource, expansion of the existing mineralised zone and testing of further exploration targets.

#### The Devolli Project is Balkan's priority nickel deposit

Albania is best known as a copper producer under the former communist regime, but Balkan Resources has two prospective nickel properties, led by the Devolli Project Joint Venture in the southeastern part of the country near Bilisht, just west of the Greek border and 125 kilometres southwest of Tirana.

The property contains iron-nickel and nickel silicate lateritic mineralisation tested with extensive diamond drilling historically. The Albanian government explored the property during the 1980s and developed a non-NI 43-101-compliant estimate of 102 million tonnes, averaging 1.2 percent nickel. The geometry of the deposit appears amenable to open pit mining.

# Examining drill core



Source: Balkan Resources

Balkan Resources has commenced a drilling programme to confirm the historic estimates. A total of 44,000 metres of diamond drilling has been planned to complete a prefeasibility study for the Devolli Project and upgrade the existing mineralisation to a NI 43-101-compliant resource. The prefeasibility study will include preliminary modelling and planning, metallurgical test work, environmental impact analysis, and social impact analysis. The company plans to implement European Nickel's patented heap leach technology, proven successful at their Caldag nickel laterite property in Turkey, for the Devolli Project ore.

#### Balkan has a second nickel prospect at Librazhd

The company has a second nickel prospect in Albania. The Librazhd exploration licence lies in the east-central part of the country, about forty kilometres east southeast of Tirana. Balkan is undertaking a two-year exploration programme in the area, through which the Albanian nickel belt runs.

The 20,000-hectare zone includes ten formerly producing mines, including primarily nickel and chrome operations, within a region still regarded as underexplored. The zone of interest contains two areas that Balkan will target with future drill programmes, one in the eastern part of the zone, and the second in the western portion.

#### The Peshkopi area adds to Balkan's land holdings in Albania

Balkan holds a 33,300-hectare prospecting license in northeastern Albania. Historically, this area has received a lot of geological work, and is known to have mineral deposits of gold, arsenic, molybdenum, lead, zinc, and copper. Balkan is conducting prospecting work in the Peshkopi area including field mapping, sampling, and the collection of historical data.

Balkan aim to identify targets within the licensed area suitable for advanced exploration work. Once these targets have been identified, Balkan will apply for exploration licenses, and will begin advanced exploration work.

# The Tuc prospect adds to Balkan's copper potential

Balkan has a second copper prospect in northern Albania. The Tuc licence lies in the Puke district, north of the Perlati project and about 100 kilometres north of Tirana. Like Perlati, Tuc is encompassed by Tirex's Mirdita project and is therefore a promising volcanogenic massive sulphide target. Balkan holds an option on a 400-hectare exploration area for two years.

The Tuc project hosts several steeply dipping, stacked vein systems with historic data indicating significant mineralisation potential that could be exploited by underground mining. Balkan Resources intends to use modern wedge drilling techniques to assess the deposit along strike and at depth.

#### Balkan plans financing to undertake aggressive exploration

The reorganized Balkan will aggressively explore its properties. Balkan is currently working on a financing with a recognized investment firm that could reach as high as C\$25m, with interim financing of C\$2m to C\$5m.

The interim financing will be sufficient to cover Balkan's exploration activities for more than one year, including administrative, general and corporate expenses. The company is budgeting C\$2m for its next 12 months of exploration work and C\$20m to produce two feasibility studies, one for the gold-copper Perlati license area and the other for the nickel Devolli joint venture area.

# Balkan has experienced international management and on the ground in Albania

The company's Chairman, Menachem Ben Mashiah, has over forty years of experience in various international businesses, leading both private and public companies during this time. He is assisted by Claude Schimper, the company's CEO, who brings more than twenty years experience in mining to the team. He has been living in Albania for more than a year now, interfacing with the government, expanding the local team and developing the company's properties. Elliot Kramer, the company's Vice Chairman, brings start-up experience and country knowledge to the team. He founded the company in 2006 and has spent the bulk of the time since in Albania.

Balkan also retains several key geologists in Albania. These individuals are well experienced with the opportunities and challenges of exploration in Albania, and with the company's key projects. Using local expertise in combination with leading-edge technology is key to the company's strategy to unlock the mineral potential of an under-explored region.

# **Industry Overview**

#### A look at copper

Demand for copper stems from its unique properties. The metal is resistant to corrosion, is highly ductile and malleable, and it possesses excellent electrical and thermal conductivities.

Those qualities make copper the leading metal used for the transmission of electricity, from high-voltage transmission lines, down to electronic circuit boards. Electrical uses account for about three-quarters of annual copper consumption. Copper is also the metal of choice for plumbing.

Mining is the leading source of copper, providing about eighty percent of the annual supply. Recycling of reclaimed copper provides about twenty percent of the annual supply.

Mining production rose steadily from eleven million tonnes in 1996 to nearly fifteen million tonnes in 2006, while secondary production rose from just over two million tonnes to three million tonnes, bringing annual supply to 17.6 million tonnes for 2006.

#### **Price influences**

There is little demand from investors for "raw" copper. It trades more in response to changes in supply and demand than is the case with precious metals. Low copper inventories prevailed throughout the latter half of the 1980s, sending copper to US\$1.60 per pound late in 1988. Thereafter, a global recession dramatically cut demand. By 1994, copper stocks reached a maximum of 600,000 tonnes and the price had fallen by over fifty percent, to below eighty US cents per pound.

The inventory cycle has been a major determinant of the copper price throughout the nineties and noughties. More recently the effect has been made more powerful with the emergence of China and India as major economic forces, and further exaggerated by the cuts in exploration programmes during the latter half of the 1990s and early 2000s because of low prices.

It takes nearly ten years to develop a copper mine, and with few new mines coming on stream over the past five years, increased demand had to be met from expansion of existing operations. By mid-2004, global inventories of copper had declined to less than 50,000 tonnes, sending the price of copper steadily upward to a peak of US\$3.70 per pound in the summer of 2006, and briefly above the US\$4 mark in mid-2008.

Since mid-2005 inventories have recovered modestly but currently remain below 500,000 metric tonnes, after briefly rising above 200,000 metric tonnes during 2007.

Although copper is a metal with unique properties, there are suitable replacements for many of its uses. Builders often use PVC piping in lieu of copper, and aluminium offers a reasonable alternative for copper wiring in many circumstances. As a result, large swings in the price of copper are typically met, not only by rising production, but also by falling demand.

The price of copper is typically well correlated with oil, presumably because demand for the latter commodity is also closely tied to the health of the global economy.

Copper traded to record highs in 2006 and after a breather returned to those levels in the summer of 2008. In the autumn the price of copper collapsed to US\$1.68 per pound, following all commodities sharply lower amid the market turmoil and deepening world recession. Recent average prices remain moderate when compared with the long-term, inflation-adjusted price of approximately US\$1.75 per pound since the start of the Twentieth Century, according to data from the U.S. Geological Survey.

Historically, the real price of copper declined from over US\$4 per pound in 1916 to 80 US cents by 1932, because of the ravages to the world economies brought on by the First World War that culminated in the Great Depression.

Copper entered a lengthy bull market in the mid-1930s that sent the real price back above US\$3 per pound by the early 1970s. The Second World War and the need to rebuild much of Europe and Japan fuelled the surge, and the miracle economies in Germany and Japan sustained the drive.

Demand for copper more than doubled between 1970 and 2002, but the metal experienced a long-term erosion of its real price, which again dipped below US\$1. The emergence of several high-tonnage copper deposits sparked the lengthy bear market, combined with mining efficiencies that lowered operating costs.

#### The price outlook

Demand for copper sustained a five-year bull market that is currently in a sharp correction. Beyond the current supply-demand imbalance resulting from the global recession, we see a return to continued long-term development of the Chinese and Indian economies, which account for well over one-third of the world's population, as a powerful positive influence on the real copper price over the medium and longer-term.

Some traditional users of copper may move to substitute materials where possible. As a result, demand for copper could soften slightly should the price move sharply higher once global economies begin to expand anew. Meanwhile, the long-term prospect for rising demand suggest that the supply of copper could be expected

to grow, but at a controlled rate. As most of the supply comes from producing mines, any significant increase in supply must come from new deposits coming into production. At this time, we do not see the existing and planned mines being capable of meeting expected longer-term demand, and the recent implosion of the junior exploration sector will have an adverse impact on the discovery and development of new deposits.

We expect the price of copper to remain near its long-term, inflation-adjusted average of US\$1.75 per pound, but with significant gyrations possible in the coming months. For our modelling purposes, we assume copper has a mean time to revert of eight years and a volatility of twenty percent. We project the metal will gradually increase in value to a nominal price of about US\$2 per pound in the early 2010s, growing at a nominal rate of inflation thereafter. This leaves significant upside potential, should the Asian economies resume their robust rates of growth.

#### A look at nickel

Nickel has many end-use applications that contribute to demand for the metal but production of stainless steel dominates the demand side of the pricing equation. Uses include alloying and electronics components but most of the demand is tied to the construction industry. As a result, demand has been increasing steadily and at increasing rates over the past decade.

#### Primary uses of nickel

Stainless steel is a corrosion-resistant reasonably priced commodity and products fabricated from it are in high demand. As a result, the stainless steel sector accounts for nearly two-thirds of the annual demand for nickel. The most common forms of stainless steel contain ten percent nickel and eighteen percent chromium, but other combinations exist.

The production of nonferrous alloys accounts for about twelve percent of the annual demand for nickel, followed closely by the production of other steel alloys, which account for about ten percent of the available nickel supply. Electroplating and cladding of other metals consumes approximately eight percent of the nickel supply with other users taking up the remaining six percent. The latter group includes chemical uses of nickel and the fabrication of nickel-based batteries.

# Demand expected to grow

The proportion of the nickel supply going to stainless steel products has nearly doubled over the past forty years, which has resulted in much of the increase in demand. Since the mid-1970s, stainless steel production has grown by a factor of five to about 25 million tonnes globally per year. Requirements for nickel alloys have recently increased, spurred by the aerospace and liquid natural gas sectors.

Nickel also has a number of applications in the rapidly growing environmental sector. The metal is a key component in producing low-emission automobiles through its use in stainless steel exhaust components and in nickel metal hydride batteries employed in hybrid vehicles. In particular, the use of hybrid engines is expected to grow significantly in the coming years as a result of high fossil fuel costs.

Demand for nickel grew at a modest rate from 1975 to 1995, with world recessions in the early 1980s and early 1990s limiting average annual growth rates to less than 1.5 percent. Since 1995, demand for nickel has increased at an average annual rate of nearly four percent.

By early 2005, China surpassed Japan as the largest consumer of nickel and it now accounts for about one-sixth of world demand. China is expected to remain the driving force behind the surge in nickel well into the next decade. Other Asian regions also have experienced significant demand growth for nickel over the past ten to twenty years, including Japan, Taiwan and South Korea. The hot Indian economy also sparked increased demand for nickel. Much has changed over the past year, of course, but we expect the heady rates of growth in the Asian economies will resume once the global economic crisis runs its course.

The increases in the price of nickel noted early in 2007 resulted in only limited opportunity for substitution. We expect this could curtail some growth in demand for nickel, but in our view there is currently no real threat of a return to high prices significantly eroding demand. Some users boosted the proportion of chromium in stainless steels at the expense of nickel and others employed steel coated with plastics or aluminium as a lower-cost alternative to nickel coating. Further, manganese can be used as a nickel substitute in some stainless steel products.

Specialty steels without any nickel content offer an alternative to stainless steel in some uses. Titanium alloys or plastics offer workable substitutes for nickel in corrosive environments and improvements in lithium ion batteries are making them more competitive with nickel metal hydride batteries.

In any case, the recent collapse in the price of nickel is diverting attention away from possible substitutions, at least for now. As is clearly evident today, the greatest downside risk to the price of nickel is the decreasing demand for the metal occurring in response to the economic conditions in the United States and globally. This has resulted in inventories of nickel growing steadily over the past eighteen months, to eclipse previous five-year highs. It is therefore no surprise that the price of nickel collapsed to well below US\$5 per pound.

#### Supply

The supply of nickel typically lags demand. Primary metal production remains the dominant source of nickel and most of the supply comes from a limited number of producers. The ten top nickel companies account for nearly eighty percent of annual production, a markedly higher proportion than for copper, zinc and other base metals. The concentration of nearly all the supply within relatively few hands has been exacerbated in recent years by takeovers.

Scrap metal is a traditional method of meeting demand for nickel, but it appears unable to close the gap in the supply and demand equation. Scrap available for processing has been significantly reduced over the past few years and the scrap market has limited capacity for expansion.

According to the United States Geological Survey, Russia remained the leading primary nickel producer in 2006 at 322,000 tonnes. Canada ranked second, at 258,000 tonnes, followed by Australia at 180,000 tonnes. Indonesia and New Caledonia rounded out the five top producers, at 145,000 and 119,000 tonnes, respectively. Global production reached 1.66 million tonnes in 2007, a five-percent increase over 2006 production. The USGS estimates the world's current reserve of nickel at about 67 million tonnes, within a total base of 150 million tonnes.

Russia-based Norilsk Nickel is the largest corporate producer of nickel in the world, accounting for 244,000 tonnes in 2006. Brazilian mining giant CVRD now ranks second, at 226,000 tonnes after its takeover of Inco. BHP Billiton produced 148,000 tonnes of nickel last year, putting it third among producers. Xstrata sits in fourth place with production of 116,000 tonnes in 2006, boosted by its takeover of Falconbridge. China-based Jinchuan accounted for 102,000 tonnes of 2006 production. In all, the top five producers accounted for 62 percent of the world's total nickel production last year.

Nickel production is expected to grow at only a modest pace in the short term as development of new projects is lagging the depletion rates of existing mines. Sulphide deposits are traditionally the dominant sources of nickel supply but development costs are high and timelines are long. Notably, most of the global nickel resource resides in laterite deposits but most of the current nickel production comes from sulphide deposits.

Despite their abundance, laterite mines have their own issues that are increasing capital and operating costs. As a result, new mining developments in the longer term are likely to focus on lower grade sulphide deposits with huge tonnage potentials.

To be economically viable, laterite nickel deposits typically must produce around 50,000 tonnes of nickel per year, which requires a gross rock value of about US\$1.5 billion to support a fifteen-year mine life. Sulphide ores are easier to process, which reduces the necessary size of a mine, but low-grade deposits still require large tonnages to support profitable mining. As a result, this limits the potential growth in supply, which in our view adds to the attractiveness of the sulphide deposits.

#### **Price outlook**

Large mines require substantial capital expenditures and rising costs of production lengthen the payback period for new developments or significant expansions of existing mines. During 2006, the reported average cash costs of the world's key mines were about US\$3.00 per pound with an average break-even cost of nearly US\$4.00 per pound. With escalating fuel, steel and labour costs, new developments are likely to incur significantly higher capital costs. Operating expenditures at existing mines are likely to continue to rise, potentially at rates above inflation. As a result, we could soon return to a prolonged period of higher nickel prices, once the world's major economies get back on their feet.

We are generally bullish on nickel in the medium and longer-term and project the price will climb back toward its inflation-adjusted mean price over the past fifty years, approximately US\$5.70 per pound. Nickel currently fetches about US\$4.50 per pound, far below the peak of US\$24.30 set in May 2007. We expect continued price volatility, driven by the countervailing forces of inventories rapidly cycling between five-year lows and highs and possible moves toward greater substitution and recycling during periods of high prices.

We expect a return to robust economic expansion across much of Asia over the next five years and improving demand in the United States and Europe, as these regions crawl out of recession. In the longer term, increased demand in China and other developing Asian countries could push annual demand for nickel up a further twenty percent by the early 2010s, pushing the price of nickel well above its long-term average through the 2010s.

Our modelled nickel price takes the average metal price steadily higher over the next decade, from US\$6 in the early 2010s to US\$8 by 2021. This does not include the potential for increased Asian demand triggering a return to the heady days of 2007 that were so abruptly interrupted by the US housing crisis.

#### The Albanian mining environment

Nature bestowed Albania with a favourable geological setting that provides a wealth of minerals, notably chromite, copper, zinc and iron. The history of mining in what is now Albania spans a period of more than 2,000 years, dating back to the age of the Illyrians, the ancestors of modern-day Albanians, who exploited copper deposits, mainly in the northern part of the country. Still earlier, the Minoans mined copper as early as 2,700 BC on Crete, which is part of the same geological belt extending across Albania.

Despite the early beginnings and promising geology, mining in Albania languished through much of the region's history. The country's geology was not mapped extensively until the early 1800s, and exploration attempts were largely limited to chromium, oil and gas, and copper. Modest copper mines did run at Kabashi and Rubik during the 1930s and several other deposits were discovered, but activity prior to 1945 remained haphazard at best.

Mining gained in importance after the Second World War when the communists took control of the region, but the inefficiencies of the communist dictatorships of Albania and its allies made the country's mines technologically backward and costly to run. Cash profits were not a requirement until the downfall of communism, but mineral production in the country began tapering off well before Albania's government formally abandoned central planning in favour of a capitalist economy in 1992.

Like much of Eastern Europe, the Albanian resource sector suffered from antiquated machinery and exploration technology, a critical shortage of cash and work forces far larger than employed in Western mines. The advent of democracy forced major changes upon the Albanian resource sector. In the mid-1990s, the country adopted a new mining code and took steps to privatise the state companies engaged in mineral exploration and production.

Albania reacted more slowly than some other Eastern Bloc countries to the events of 1989 that culminated in the fall of the Berlin Wall. Albania did not rid itself of its communist government through election until 1992, but even then, true change came slowly. Bouts of violence, rigged elections and a series of collapsed pyramid investment schemes rocked the country through much of the 1990s, and the country received a flood of refugees from neighbouring Kosovo during the Kosovo War in the late-1990s.

By the mid 1990s, Albania's remaining mines sank further into disrepair and they technologically lagged far behind operations in the West. Copper production shrank to 2,000 tonnes by 1994 and to zero by the early 2000s. One mine resumed operation in 2004 and production reached 1,700 tonnes by 2005.

Albania's chromite production experienced a slower decline following the fall of the communist regime. Albania was producing over 240,000 metric tonnes of chromite as late as 1995, but production declined by one-half during the late 1990s. The country's production increased in the early 2000s, but remained below the levels of the mid-1990s. In 2005, Albania produced 170,000 tonnes of chromite.

Conditions have been improving since the turn of the century and the country is bidding to join the European Union (EU), along with other Balkan nations. In 2007, Albania signed a stabilization and association agreement with the EU. This is viewed as the first step toward membership, but the EU ministers are pressing for faster changes, including action on property rights, election standards and freedom of the press. Current expectations have Albania joining the EU within the next five to ten years.

Albania's democratic economy took nearly a decade to recover to the levels of 1989 and the country still has one of the lowest per-capita incomes in Europe, but it has been making markedly better progress this decade. That progress is particularly apparent in and around Tirana, the capital city, but in outlying areas, there is much to do to bring Albania's infrastructure up to a reasonable standard.

Albania is becoming a safer place to work, but corruption is not uncommon. The country's crime rate is also gradually declining from previously high levels. The poor economy and tough living conditions prompted many Albanians to leave the country, legally and otherwise, through the 1990s. The flow of workers to the West is now subsiding, a sign of the improving conditions at home.

Western explorers have run into problems working in other Eastern Bloc countries, notably Russia. On occasion, local oligarchs in some former communist countries have muscled in on a promising discovery, and more than one company has become bogged down in a legal morass for years. Encouragingly, several Western petroleum companies have been operating in Albania for a decade, without experiencing any major incidents. Still, sorting out property issues and mineral rights can be especially frustrating in a former communist country, as the notion of property ownership is new and the law is frequently inadequate to deal with disputes.

Exploration in Albania does carry risk, but the current government is working hard to crack down on crime and to bring its legislation into greater conformity with the EU. Meanwhile, the sorry state of the country's resource sector presents a good opportunity for foreign explorers with access to modern geophysical and geochemical technology, and to the cash required to develop a mineral deposit and construct an efficient mine.

Although fifteen years have passed since Albania toppled its communist government, only a trickle of Western resource companies tackled metal exploration projects in the country.

In the mid-1990s, Nebex Resources Ltd, a Canadian junior resource company, acquired concessions and completed some drilling on the Munelle copper deposit, achieving better results than obtained by the Albanians. A Turkish group arrived in 2001, winning a contract to develop the entire Albanian copper industry, but the scale of the project shrank to a license covering just the Munelle and Lak Roshi deposits by 2003. The Turks subsequently placed Munelle into production.

In 2001, an Italian company, Darfo SRL, signed a thirty-year licence agreement with the Albanian government to mine and process both chromium and iron ore. The company operates the Bulqiza chromium mine and ferrochromium smelter.

Albania remains largely unexplored by modern techniques, with large sections of ground available for foreign resource companies. One of the first off the mark was Canadian-based Tirex Resources, which acquired the rights to the 34,400-hectare Mirdita project, which contains several known volcanogenic massive sulphide copper deposits. Tirex is the first explorer to employ modern geophysics in the area, and assays from its initial drill programme are yielding impressive values of zinc and gold, as well as copper.

Balkan Resources has a similar window of opportunity and it intends to adopt a comparable approach to exploration on its prospective properties. With continued improvement in the economic and exploration environments in Albania, we expect the opportunities now available to Balkan and its current rivals will rapidly dwindle for subsequent entrants into the Albanian exploration sector.

#### Introduction

The Perlat property in northern Albania covers the Perlat copper deposit, a portion of which saw mining in the past. The property has two decommissioned production shafts and an exploration shaft. Balkan Resources is the sole registered title holder. A permit area held by Tirex Resources surrounds Perlat. The terrain is steep, with elevation varying from about 230 metres to 466 metres above sea level. The Perlat property comprises an Exploration Permit with a nominal area of 2.9 square kilometres or 290 hectares.

According to Mr Claude Schimper, Balkan submitted an application to the Ministry of Economic, Trade and Energy (METE) for a Mining License earlier this year. The company have been granted exclusive rights to the property pending the application for a mining permit, which Balkan Resources expects to be completed before the end of this year.

The copper mineralisation on the property consists of a number of volcanogenic massive sulphide (VMS) deposits in the Mirditë and Pukë districts, at the southern end of a quasi-linear belt. At least eleven of the deposits in this belt have been in production in the past.

# Project description, location, infrastructure and land status

The Perlat property is comprised of a single Exploration Permit spanning 290 hectares, granted on February 12, 2007 by the Ministry of Economy, Trade and Energy. The former Perlat mine, which was in production from 1979 to 1991, lies on the property. Tirex Resources holds a ninety percent interest in the Exploration Permit surrounding the Property.

The property is in the northern part of Albania in the Mirditë District, adjacent to the village of Perlati i Eper, approximately 20km east-southeast of Rreshen.

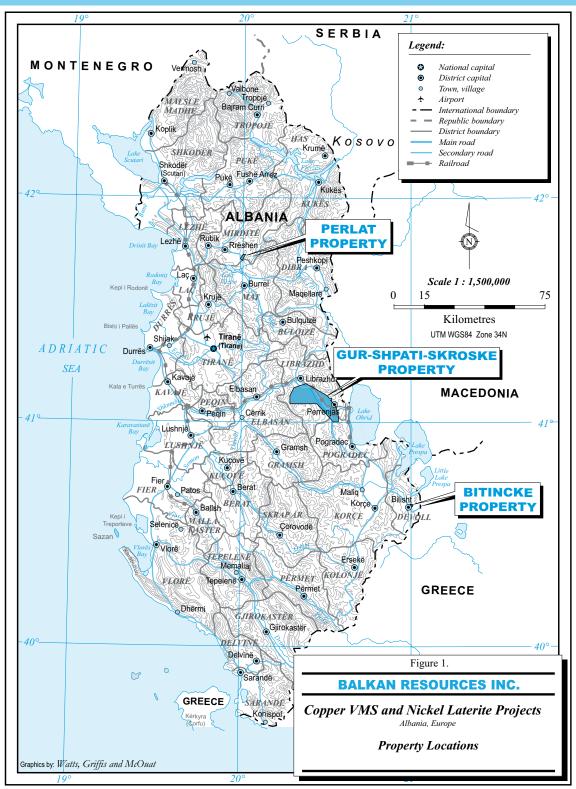
A power grid is located less than one kilometre to the east of the Perlat South shaft. Power failures occur frequently here, and as a result Balkan purchased a portable generator for use at the property in order to allow work to continue uninterrupted. Water for the current Balkan drilling programme is taken from a stream called Dodaj, which flows from north to south through the middle of the property. During periods of low rainfall, water flow in the Dodaj stream may reach as low as 50 litres per second. During periods of high rainfall, water flow can reach as much as 400 litres per second. In addition, several natural springs and four historic diamond drill holes have provided water supply.

The local economy consists mainly of subsistence farming, with sheep and goats being the dominant form of livestock in these operations. As well, the local scrub oak, which grows in the surrounding hills, is harvested for firewood. Throughout the Mirditë region, mining has been an important part of the local economy. The collapse of this industry with the fall of the communist regime caused a significant economic decline.

Skilled labour for mining is present in the nearby towns of Rubik and Rreshen. Several other villages and towns elsewhere, such as Reps and Gjegjen, have plenty of miners and other labourers who have worked on previous mining operations.

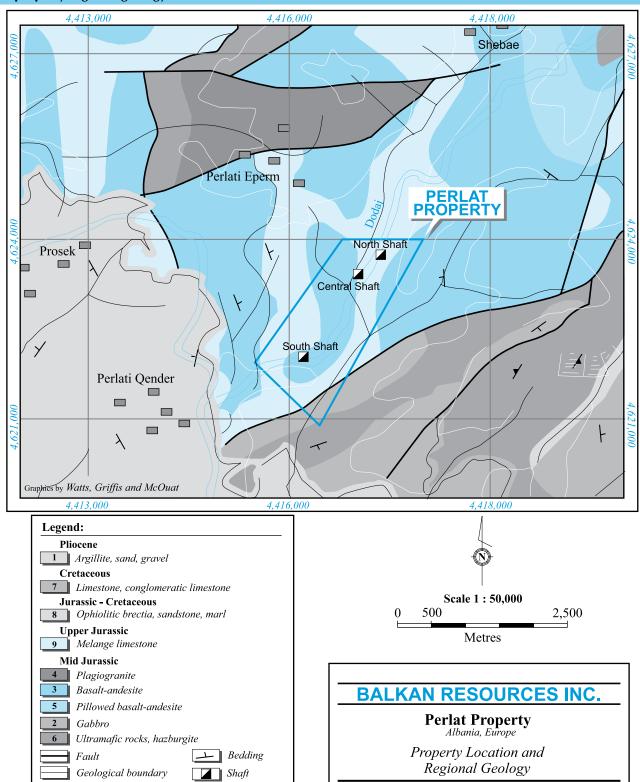
# **The Perlat Property**

# **Property locations**



Source: Balkan Resources Inc.

# Perlat property regional geology



Source: Balkan Resources Inc.

The property is subject to an annual rental payment of 30,000 leke per square kilometre, which amounts to an insignificant US\$1,150 for the entire property. According to the company an application was submitted to the Ministry of Economic, Trade and Energy (METE) for a Mining License earlier this year.

Balkan elected to submit an application for a Mining Permit at this stage, as opposed to an extension to their Exploration Permit, to avoid the forced reduction in permit area required under Albanian mining law at each renewal. The Mining Permit will only be granted once Balkan Resources have completed a prefeasibility study.

It is important to note that, according to the company, Balkan still have exclusive rights to both the surface and the mineral rights. In Albania, the majority of the surface rights are held privately, and therefore permission from local landowners is required to access their properties. This situation applies to Perlat, and in the event of a dispute with the landowner, government agencies, including the Ministry of Economy, Trade and Energy and local district administrations, would become involved in negotiations.

# Collecting core samples





Source: Balkan Resources

# Geology, mineralisation & metallurgy

The geology in Albania is complex and varied, consisting of magmatic and sedimentary rocks varying in age from Paleozoic to Quaternary. "The Albanides", is a term mostly used in Albania to differentiate a transitional zone between the Dinarides, the southern branch of the Alpine folded belt in the Albanian Alps in the northern part of the country, and the Hellenides in Greece to the south.

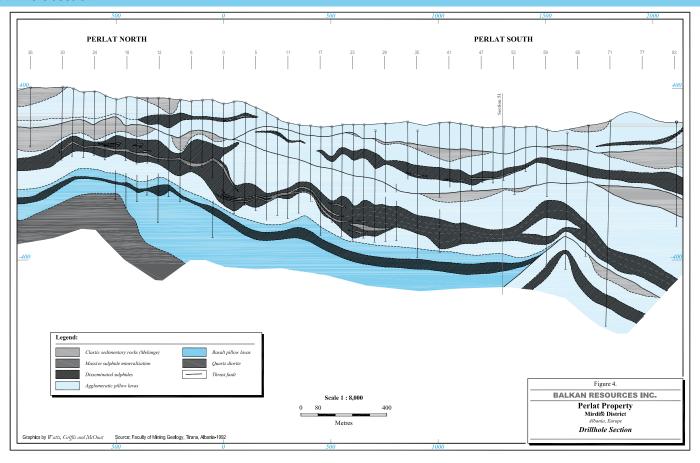
The Albanides consist of two main tectonic zones: the Internal Albanides, characterized by magmatism and intensive tectonics causing overthrusting and faulted overturned folds; and the External Albanides, characterized by a lack of magmatism and by more regular structural models than in the Internal Albanides.

The External Albanides are significantly affected by major westward thrusting of the tectonic zones and structural belts. Most of Albania's base metal deposits, including volcanogenic massive sulphide, chromium and nickel deposits occur in the Mirditë zone, which is also known as the Ophiolitic zone.

The Perlat property is underlain by volcanic and sedimentary units together with intrusive rocks. Spilitic pillow basalt and andesite occupy the lower levels of the volcanic sequence. This unit, which is more than 250 metres thick, does not outcrop on surface, but it has been intersected in a number of drill holes in the central portion of the deposit. The unit is characteristically amygdaloidal pillowed basalt and andesite, with minor variolitic and porphyritic basalt.

The Perlat deposit is classified as a volcanogenic massive sulphide (VMS) deposit. Most VMS deposits occur in clusters and are typically polymetallic and major sources of copper, zinc, lead silver and gold. In addition, they may also contain significant amounts of cobalt, tin, cadmium, bismuth and other metals.

#### **Drillhole section**



Source: Balkan Resources Inc.

The Perlat deposit is classified as a volcanogenic massive sulphide (VMS) deposit. Most VMS deposits occur in clusters and are typically polymetallic and major sources of copper, zinc, lead silver and gold. In addition, they may also contain significant amounts of cobalt, tin, cadmium, bismuth and other metals.

The Perlat deposit contains sulphide mineralisation concentrated mainly in the agglomerate and tuff-agglomerate assemblage, just above the contact with an underlying pillowed basalt-andesite sequence and conformable with the host rocks. The volcanic rocks hosting the mineralised zones are intensively altered extrusive material. The thickness of the entire mineralised and altered zones generally varies from four to twenty metres, but can reach up to 150 metres.

Ground stability problems were noted in the historical mines in areas where clay was abundant within pyritic zones. Further, drill core recoveries proved problematic in the clay-rich areas, as well as within chlorite-sericite-carbonate altered mineralisation. The clay alteration is a primary phenomenon related to the hydrothermal mineralizing event, and is not the effect of weathering or groundwater action.

Both disseminated mineralisation and massive sulphide mineralisation are present. The principal minerals are pyrite, chalcopyrite and magnetite, with minor barite (about three percent) and sphalerite. In the mineralized zones surrounding the massive sulphides, the following assemblages are present: pyrite-arsenopyrite; marcasite-sphalerite-galena; pyritechalcopyrite± sphalerite; and only pyrite.

The overall Perlat deposit is not distinctly mineralogically zoned, but the upper parts are relatively enriched in zinc, lead and arsenic. Locally, massive sulphides are distinctly zoned from massive pyrite to pyrite-chalcopyrite.

The sulphide zones form a north-northeast trend, and sulphide mineralisation has been tested on the Perlat property over a distance of more than 2km. Mineralisation of the upper part of the volcanic section consists of pyrite, chalcopyrite, with minor sphalerite and barite.

Pyrite comprises 40 to 70 percent of the massive sulphide zones and five to 15 percent of the overall sulphide mineralized zones. Chalcopyrite constitutes five to ten percent, and rarely 30 to 40 percent of the massive sulphides; sphalerite about one percent and rarely up to 20 percent; and magnetite, three to five percent.

The massive sulphide zones (No. 3, 53, 108, etc.) are limited in size, and they are highly lensoidal. Their upper contacts are sharp, but lower contacts are gradational into disseminated mineralisation. In most cases, the hanging wall of the mineralized zones consists of massive basalt-andesite flow or agglomerate, but in some cases there is a thin -- up to several centimetres thick -- cherty-argillaceous layer.

Gjoni (1993) described a series of bodies discovered between 1986 and 1993, all south of section 0, and therefore unexploited. They consist of a mixture of massive and disseminated pyrite-chalcopyrite mineralisation.

Mineralisation hosted by the lower assemblage of pillowed basalt and andesite has been intersected in only a few drill holes and is not well understood. The extrusive rocks are hydrothermally altered (chloritization, silicification, epidotization) and contain disseminated and vein-like pyrite and, rarely, thin sulphide layers containing minor amounts of copper. The Rrenjolla Deposit, north of Perlat, is located at a similar stratigraphic level.

Significantly, the sulphide mineralisation currently being drilled by Balkan at Perlat South is within a volcanic package that has been thrust into position above the main massive disseminated sulphide horizon in volcanic rocks that was mined at Perlat North. At Perlat South, the deeper "main" zone has not been tested with many drill holes, and it represents a significant, albeit deep, exploration target. Geophysical anomalies may reflect undiscovered massive sulphides, which have not yet been tested with drilling.

To date, no mineral processing or metallurgical test work has been done.

More than 165,000 metres of core drilling took place between 1975 and 1998 under the direction of the Rubik Geological Enterprise, an Albanian state-run entity. All historic drill core was disposed of long ago and there are no underground mine plans and records of remaining mineable reserves.

#### History

The Perlat property was mined from 1979 to 1991, however according consultants Watts, Griffis and McOuat (WGM) production statistics are unavailable. Two shafts, an adit and underground workings were excavated to access the mineralized zones. An exploration shaft was sunk in the southern part of the Perlat property, and a drive was developed to access the southern part of the Perlat deposit (Perlat South), but no development work was done on the mineralized zones. Mining operations ceased at the Perlat deposit during a period of low copper prices, and in an era of major political change in Albania.

Unfortunately, Balkan has not been able to obtain records of annual tonnes and grade mined and tonnes and grade of ore milled. There are also no records of tonnes and grade of copper concentrate produced.

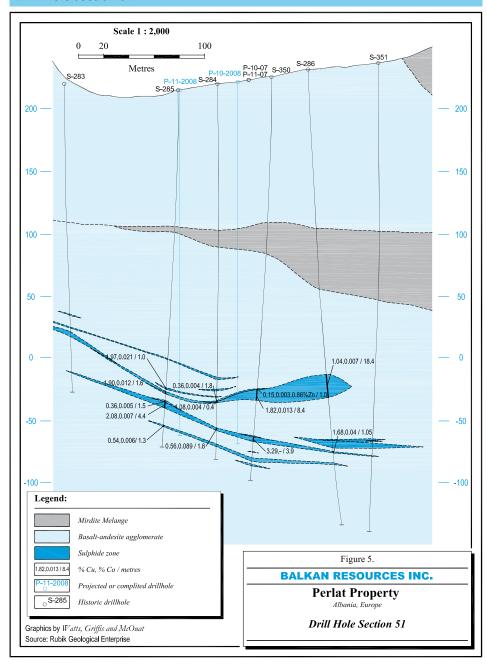
# **Drilling**

Balkan Resources have completed 18 drill holes on the property up to January, 2009. Provided sufficient financing is in place, Balkan plans to recommence their 12,500 metre drill programme of delineation drilling sometime in late 2009. The main goals of the programme are to delineate the known deposit to a NI 43-101 compliant mineral resource, expand the existing mineralized zone and test further exploration targets. To date, the company has completed 4,500 metres of drilling.

	D7-2008 drillho  Locati  E  4416727.97  4416727.5  4416665.76  4416665.76  4416671.41  4416670.93	Location (A				Depth
Drillhole	E	N	Azimuth	Inclination	(m)	
P-01-2007	4416727.97	4621888.47	_	-90°	111	
P-01-2008	4416727.5	4621888.73	_	-90°	275.5	
P-02-2007	4416665.76	4621920.2	_	-90°	216	
P-03-2007	4416665.76	4621920.2	298°	-90°	240	
P-06-2008	4416671.41	4621970.98	_	-90°	255	
P-10-2008	4416670.93	4622021.61	_	-90°	275.5	
P-11-2008	4416609.25	4622003.71	_	-90°	266	

Source: Balkan Resources

#### **Drill hole section 51**



Source: Balkan Resources Inc.

### **Resource & reserves**

Rubik Geological Enterprise reported the most recent historic mineral resource estimates for the Perlat deposit in 1993. Prior to 1986, undiluted geological "reserves", likely equivalent to indicated or inferred resources in modern standards, totalled 2.57 million tonnes and averaged 2.20 percent copper. A further classification of material, roughly corresponding to an inferred resource, amounted to 1.19 million tonnes averaging 1.78 percent copper. A cut-off of 0.7 percent copper was used in these estimates.

According to WGM, an unknown amount of this was mined. Between 1986 and the end of 1992, further tonnages were added. These additions included 0.64 million tonnes averaging 3.49 percent copper, and 0.34 million tonnes averaging 2.85 percent copper, again with a 0.7 percent cut-off. All of the resources outlined between 1986 and the end of 1992, were never mined, and occur in the central and southern parts of the Perlat deposit.

Mineral exploration continued from 1993 until 1998, but it is not known if additional resources were delineated.

We must stress that all these resources are historical in nature and do not meet NI 43-101 standards, and therefore may be unreliable.

Perlat depos	sit: "Reser	ves" outlined	1975-199	)3		
	Category	Tonnage (t)	%Cu	%Co	% <b>S</b>	%Zn
"Reserves" Ou	tlined 01/75	to 01/86				
>0.7% Cu	$B+C_1$	2,565,155	2.202	0.02458	22.426	_
	$C_2$	1,186,417	1.779	0.0167	17.134	_
0.5-0.7% Cu	C1	2,461	0.575	0.005	1.792	0.34
	C2	37,935	0.600	0.01037	8.789	_
0.3-0.5%	.3-0.5% C1		0.440	0.0059	4.757	_
	C2	115,628	0.412	0.0096	5.898	_
"Reserves" Dis	covered 01/	86 to 01/93 (sou	ıth of sectio	n 0)		
>0.7% Cu	C1	635,746	3.491	0.03619	18.71	_
	C2	344,044	2.845	0.03594	14.76	_
0.5-0.7% Cu	C1	6,027	0.60	0.0022	1.04	_
	C2	12,118	0.60	0.0087	6.88	_
0.3-0.5% Cu	C1	_	_	_	_	_
	C2	20,193	0.401	0.00398	10.75	_
Source: Gjoni	, 1993					

Risked mineable resource assu	ımptions		
Reserves		Probability	Tonnes (m)
Proven		90%	0.0
Probable		50%	0.0
Total		0%	0.0
Resources	Conversion	Probability	Tonnes (m)
Measured	0%	90%	0.0
Indicated	90%	50%	0.0
Inferred	80%	10%	0.0
Hypothesised	80%	0%	7.5
Total	80%	0%	7.5
Mineable resource			Tonnes (m)
Mineable resource			6.0
Risked mineable resource			Tonnes (m)
Current classification			0.0
Scenarios for exploration success			
- base case			2.0
- optimistic case			4.0
- pessimistic case			0.9

#### **Notes:**

- mineable resource have been estimated as reserves plus the portion of resources that would be expected to convert to reserves considering deposit type and likely grade variability
- risked mineable resource refers to the various classes of resource/reserve weighted by their assumed confidence level

Proforma Perlati operation profit and loss												
					Year	ending	g Dece	mber				
Proforma P&L (C\$m)	'12	<b>'13</b>	<b>'</b> 14	<b>'</b> 15	'16	'17	'18	'19	<b>'20</b>	'21	'22	<b>'2</b> 3
Gross revenues	0.0	69.4	68.2	67.5	67.1	67.0	67.1	67.4	67.9	68.5	69.3	70.1
Operating costs	0.0	28.3	29.0	29.7	30.3	31.1	31.8	32.6	33.4	34.2	35.0	35.8
Operating profit	0.0	41.0	39.3	37.9	36.8	35.9	35.3	34.8	34.5	34.4	34.3	34.3
Depreciation	0.0	12.9	12.9	13.0	13.0	13.1	13.1	13.2	13.2	13.3	13.3	13.4
Administrative costs	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EBIT	0.0	53.9	52.2	50.8	49.8	49.0	48.4	48.0	47.7	47.6	47.6	47.7
Assumptions												
Capital costs (C\$m)	43.8	89.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tonnes ore processed (m)	0.0	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Other assumptions												
Operating cost €40/tonne;	NSR ro	oyalty	2%; r€	ecover	y 81%	; pay ı	ate 85	%				
Source: Objective Capit	al											

#### Other relevant information

According to WGM, Balkan has no liability for previous mining operations, according to the terms of their Exploration Permit. However, the company would be responsible for some remediation for future mining operations. In addition, the main, northern shaft is open and unprotected, and may require capping.

The preparation of drill pads involves a change in the landscape and therefore prior to the commencement of any exploration work, environmental authorization must be granted by the local environmental agency. In addition, Balkan commissioned an environmental impact study that it submitted to the Ministry of the Environment, which granted its approval.

Balkan only require environmental authorization before commencing an exploration drill programme, but before commencing mining operations, an environmental permit must be obtained.

Power for the Perlat property is currently being sourced from the Perlat Village, but due to frequent power outages Balkan were forced to purchase a portable generator in order for work to continue. Therefore, Balkan will need to investigate the possibility of a more reliable power source for mining operations.

According to company management, the upper ore body outcrops around section 65. There are open pit options to remove some of the Perlati ore body, but it would be best achieved as a crown-pillar recovery, after the deeper, richer ore body is mined out by underground methods.

### Major project issues

We see the major issues facing Balkan at Perlat as:

- Balkan need to do everything possible to find records of the tonnage and grade of ore extracted during the historic mining period (1979 1991).
- it is important for Balkan to obtain detailed records of ore milled, metallurgical recoveries and grades of concentrates. In addition, it would be helpful to find out where these concentrates were smelted.
- obtaining detailed mine plans of the historic mining operations to the north
  of section zero is essential to establishing the remaining ore reserves. If these
  plans are not obtained it may be necessary for Balkan to completely re-drill
  this area.
- limited access to previous mining and exploration information including drill core and analytical results makes the resources discovered between (1986 & 1993) unreliable in terms of NI 43-101 standards

- the historic resources discovered between 1986 and 1993 were in an area south of section zero and apparently have not been mined. However, additional diamond drilling in this area will be required to verify these resources and upgrade them to NI43-101 standards.
- in order to conduct an effective diamond drilling programme at Perlat North, it will be important to verify the locations of mined out stopes and drifts in order to avoid intersecting these underground workings during future drilling operations.
- apparently zinc, silver, gold and other metals were infrequently analyzed.
   As these metals may occur in significant amounts, any future drilling programmes should analyze for potentially significant other mineralisation on a consistent basis.
- according to company management, the Zalli i Dodajve stream converges
  with the Lekunda stream around section 21, and is the main water source
  for the village of Perlati and points further south. The entire Perlat deposit
  is under the influence of the Zalli i Dodajve stream, and historic mining
  was plagued with water management issues. Open pit mining on the Perlati
  deposit would require re-routing this stream, the cost of which has not yet
  been examined.

# Introduction

Balkan and European Nickel (EN) have agreed to form a 50/50 Joint Venture (JV) agreement to combine their properties around the Devolli Nickel Laterite deposit in southern Albania. Balkan have been appointed manager and operator of the JV and are in the process of conducting a prefeasibility study which they are required to complete by the end of 2009. The prefeasibility study is expected to cost approximately US\$5-7 million.

Under the joint venture the companies have combined their licensed areas to form an exploration area of approximately 51 km2 (5,100 hectares). Included in the combined licensed area are EN's Devolli JORC compliant resource estimate of 35.6m tonnes at an average grade of 1.2% Ni, Balkan's Kokogllave resource estimate of 26.4m tonnes at an average grade of 1.21% Ni, and Balkan's Zemblaku resource estimate of 37m tonnes at an average grade of 1.21% Ni. The sum of this resource estimate aligns with the historic Albanian Geological Survey (AGS) estimate of 102m tonnes at an average grade of 1.2% Ni.

The prefeasibility study includes 44,000 metres of diamond drilling with the goal of producing a NI 43-101 compliant resource estimate to determine the economic viability of constructing a nickel – cobalt mining and processing operation producing approximately 20,000 tonnes of nickel per year, over a mine life of approximately 15 years. The diamond drill programme is based on technical information and three dimensional models from both Balkan and EN.

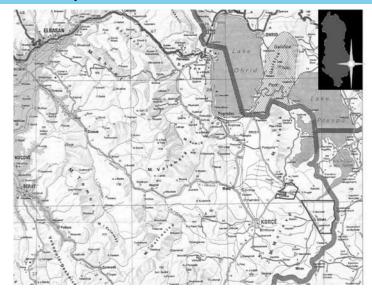
The JV will use EN's heap leaching technology. EN, supported by BHP Billiton (BHP), have demonstrated at Caldaq, in Turkey, that nickel heap leaching is a technically and economically feasible alternative to conventional nickel processing.

The deposit will produce a primary nickel product (PNP) containing 36 percent nickel, and a secondary nickel product (SNP) containing 22.5 percent nickel.

# Project description, location & infrastructure and land status

The Devolli deposit is located near Bilishti in southeastern Albania, approximately 40 kilometres from the town of Korce. The area is partially covered by scrub vegetation and by privately owned agricultural land. Elevation ranges from 476 metres to 932 metres above sea level.

# **Devolli location map**

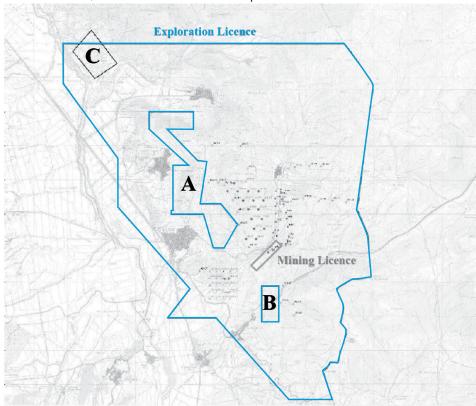


Source: Balkan Resources Inc.

# The Devolli JV Property

# **Devolli Project License Map**

Areas marked A, B and C excluded from EN exploration license



Source: Balkan Resources Inc.

The deposit is contained within a 51,900-hectare exploration license and a 20-hectare mining license for exploiting iron-nickel and nickel-silicon ore. The mining rights have been granted for twenty years with four extensions of five years each.

Albania's electric power supply is unreliable with frequent blackouts occurring and therefore it is necessary to have a backup power supply. The acid plant will supply high pressure, superheated steam to run a single steam turbo generator producing 33.6 megawatts of power.

The project area is located next to the Korca-Kapshtica road, which has recently been improved and provides access to a port at Thessaloniki. Road building will be necessary to connect the mine and limestone quarry to the plant and the plant area to the main road. Additional roads will be needed to service the ventilation and backfill shafts.

The proximity of the railway network to the project will be assessed during the full feasibility study stage. However, for the moment no use of rail transport has been assumed.

Approximately four million cubic metres of water will be needed for the full-scale Devolli operations, most of which will be used for the heap leaching and acid production operations. This water will be obtained from the groundwater.

# Geology, mineralization and metallurgy

The regional geological setting of the project area can be described as follows:

- Cretaceous limestones and calcareous conglomerate;
- Upper Jurassic iron-nickel sediments (upper sequence) and nickel silicate (lower sequence);
- and Jurassic ultrabasics.

The nickel sequence lies concordant over the Jurassic serpentinites and generally dips at approximately 15-to-25 degrees to the East. The nickel deposit is covered by a 100-to-700-metre-thick Cretaceous calcareous conglomerate and impure limestone.

The nickel-laterite deposit consists of two units up to 40 metres in thickness with layers of bedding indicating minor transport processes.

Drilling conducted by the Albanian Geological Survey and confirmed by drilling by EN has allowed modelling of the ore bearing zones in three dimensions. Additional work is necessary to improve the level of confidence in resource classification during the feasibility study stage. Additional data is also needed to determine the geotechnical characteristics of the hanging wall, ore and footwall.

The Devolli deposit contains several different structures. For example, the Verniku West deposit contains synclinal folding in the centre of the deposit. The general strike of the Verniku West deposit is north-to-south and dips approximately 25-30 degrees to the east. The deposit is approximately three kilometres long from north to south and 1.5 kilometres wide. The major faulting system is predominantly normal faulting, striking north-to-south and dipping 40-60 degrees to the west.

In 2000, EN began investigating Balkan laterites in order to determine their amenability to nickel extraction using sulphuric acid at atmospheric pressure. After conducting bottle roll and column tests on different deposits in the region it was determined that the process could extract nickel at ambient temperatures and pressures using dilute sulphuric acid. This success coupled with laboratory test work led to the design of the Heap Leach portion of the Caldag pilot plant.

Results from column test work have determined the expected leach time for the Devolli ore to be 60 days for primary heap leaching and 140 days for secondary heap leaching. Acid consumption was determined to be 560 kilograms per tonne of ore.

The metallurgical plan in Balkan's prefeasibility study will use EN's patented (BHP Billiton) Heap Leach process which is efficient with minimal environmental impact.

# **History**

Exploration work for nickel commenced in the 1950s, consisting mainly of adits. During the late 1950s and early 1960s, exploration and mining activity increased throughout Albania. The first geological exploration work was recorded in Devolli in 1957. Outcrops of iron-nickel-bearing sediments were discovered and a resource in excess of 100 million tonnes grading 1.2 percent nickel was delineated.<sup>1</sup>

Production from the Bitinka mine began in 1980 reaching peak production in 1988 of 102,000 tonnes per annum of nickel ore. In 1991, following the fall of communism a Greek company by the name of LARCO took over control of the mine and exported 21,000 tonnes of nickel silicate ore to their ferronickel smelter in Greece. Since the withdrawal of LARCO in 2001, various different small-scale operators have mined approximately 120,000 tonnes of ore.

After the departure of LARCO, the Bitincka mine was taken over by local company ADI which was recently acquired by a Kazakh company called Alferon. No reliable data from this period exists, but it is estimated that approximately 120,000 tonnes of ore has been produced and exported to the Kavadarci smelter in Macedonia from 2001 to the end of 2007.

# **Drilling**

Historically, the Albanian Geological Survey had completed more than 42,000 metres of diamond drilling within the Kokogllave licensed area.

Prior to the JV agreement, EN had completed 9,257 metres of diamond drilling to verify the historic Albanian Geological Survey data and used this data to produce their JORC compliant resource estimate.

Balkan has received assay results from three completed confirmation drill holes on their original property totalling 1,479 metres. According to management, the intersections drilled by the Albanian government were conservative on thickness, but the grades correlated well.

Balkan have commenced a 12,000-metre confirmation drill programme to upgrade the historical resource estimate to NI 43-101 standards as part of the Devolli Project prefeasibility study.

<sup>&</sup>lt;sup>1</sup> Albanian Geological Survey, 1991

### **Resources & Reserves**

The following is the official JORC resource estimate for the Devolli licensed area:

Devolli Project November 2007 Resource summary											
	Inferred										
	Cut-Off grade	Tonnage	Grade	Metal Content							
	(%Ni)	(metric tonnes)	(%Ni)	(tonnes Ni)							
Vërniku West	0.9	21,918,000	1.19	260,824							
Kapshtica West	0.9	13,715,000	1.21	165,951							
TOTAL		35,633,000	1.20	426,775							
Source: JORC											

# **Exploration Potential**

The Devolli JV nickel deposit consists of iron-nickel and nickel-silicate mineralisation. Where iron-nickel laterite occurs over nickel-silicate laterite, it has been displaced very little or not at all.

According to the resources reported by Vukaj and Boshnijku in July 1991, the potential resources for the iron-nickel laterite are 52.5 million tonnes at an average grade of 1.10 percent nickel and for the nickel-silicate laterite 50.83 million tonnes at an average grade of 1.32 percent nickel.

Balkan is currently conducting a 12,000 metre programme of delineation drilling. The main goals of the drill programme are to delineate the known deposit to a NI 43-101 compliant resource, expand the existing mineralized zone and test further exploration targets in the general area.

A few areas of known nickel laterite occurrences belonging to Albantec and Alferon Mining and are excluded from the JV license areas.

Partially contained in some of these other licenses or within the JV exploration license are three areas of resource upside. The first is the area around the old Bitincka mine. This area is predominantly owned by Alferon Mining which is owned by the Feni Ferronickel smelter at Kavadarci in Macedonia. Some ore exists at or near the surface, but the majority of the laterite would require underground exploitation. The second area is mostly undrilled/explored and represents Verniku East. This is wholly contained within the area that was EN's exploration license. The third area is known as Kapshtica East and includes an area contained in the area contributed to the JV by Balkan Resources.

While some areas were not fully research by EN as they were outside their license area, EN estimates that these areas may contain the following resources:

- Bitincka 15 million tonnes at 1.15 percent nickel;
- Koko Gl 11 million tonnes at 1.21 percent nickel;
- Verniku East 5 million tonnes at 1.1 percent nickel;
- Kapshtica East 10 million tonnes at 1.2 percent nickel.

These estimates are only EN's opinion and do not form part of any official resource.

# **Future exploration programme**

Balkan's future exploration drilling will be determined by the results of its current programme. The drill spacing of future drill programmes for purposes of upgrading resources into the indicated category, or better, will be determined by the already completed and current drilling programmes.

Initial metallurgical test work has been conducted on a 50 kilogram sample and additional test work will be conducted on drill core as it becomes available. The results will be reported in the scoping study.

# Other relevant information

An assessment of the impact on irrigation canals, the dam and above ground water supply to farmers, villages and the Devolli river will be necessary. This is regarded as one of the key potential project impacts because the project may result in the infilling impact the ephemeral stream, which supplies drinking water to Bitincka. If this is the case, a compensatory borehole will need to be constructed for Bitincka.

In terms of air quality, during the construction phase all predicted ground level concentrations are likely to be below Albanian and WHO guidelines. Emissions from the sulphuric acid plant are likely to be below the World Bank limit of 2 kilograms per tonne and the Albanian limit of 5kg/tonne. Sulfur dioxide (SO2) has the potential to exceed WHO limits based on a worst case scenario (acid plant accident or emergency) in which case the emissions would be temporary.

Land rights and land ownership will require careful consideration as will any appropriation resulting from operation of the heaps.

The operation will result in permanent changes in the topography, but slopes will be reclaimed and the limestone quarry will be used as an on-going concern after mine closure.

The project has the potential to produce noise emissions but these should be controlled within the permitted threshold. The nearest settlement is one kilometre from the site boundary and is unlikely to experience any noise impacts. Good practice noise and vibration control measures will be implemented.

The project will have a significant positive economic impact on the local and regional community. There is the potential for short-term adverse impacts from the construction of the project service road but the long-term impact on the local community will be positive.

# Major project issues

The major issues facing Balkan with regards to the Devolli JV project are:

- due to the fact that historical data such as individual assay and drill hole survey data are unknown, the preparation of an updated mineral resource estimate may have to rely exclusively on data generated during the current and future Balkan drilling programmes;
- the Bitinçkë Property is currently at an early exploration stage and a significant amount of work is required for Balkan to prepare a NI 43-101 compliant resource estimate;
- the pre-feasibility study will require extensive drilling to bring sufficient tonnes into the measured and indicated category, and will also require engineering, mine development, planning, environmental, infrastructure and other reports to substantiate the viability of the operation.

# **Other Properties**

# Librazhd exploration license

Balkan are in the process of conducting a two-year exploration programme on the Librazhd exploration license. The company has completed the first two diamond drill holes near the Liqeni Kuq outcrops in the northwesten section of the license area. These holes were drilled as step out holes to test the extent of the mineralisation. Drill core from these two holes is very encouraging as it indicates that the mineralization extends beyond historical estimates. Core from these two holes not yet been assayed. Balkan also plan to conduct a drill programme in the eastern (No. 2) area, but no drill metrage has been budgeted. There is a nickel mine in the area called the Skroske mine, which is currently producing 600 tonnes per day. In addition, Balkan have dropped their option on the Gur-Shpati-Skroske property as 90 percent of the deposit is outside their concession area.

# Peshkopi exploration license

The Peshkopi prospecting permit license was granted in November 2008 and covers an area of 33,300 hectares. Balkan's prospecting work will target gold, copper, arsenic, zinc, lead and molybdenum zones. Once the prospecting work has been completed, Balkan will then apply for exploration licenses on the areas of economic potential.

# **Tuc exploration license**

The Tuc property is a low priority exploration target. The deposit is a steeply dipping VMS deposit located in a remote area and access is difficult. According to management, a large highway is in the process of being built which will allow for much easier access to the property.

# **Financials**

Year ending December (C\$m)	20074	2008E	2009F	2010F	2011F	2012F	2013F	2014E	2015E
Revenues	200/A	2000L	2009L	2010L	2011L	2012L	69.4	68.3	67.5
COGS	_	_	_	_	_	_	(26.9)	(27.6)	(28.3
Gross profits	_	_	_	_	_	_	42.5	40.7	39.2
Administrative Costs	(0.4)	(2.5)	(0.9)	(1.0)	(1.0)	(1.1)	(1.1)	(1.2)	(1.3
EBITDA	(0.4)	(2.5)	(0.9)	(1.0)	(1.0)	(1.1)	41.3	39.5	38.0
Depreciation & amortisation		( <b>2.</b> 5)		() —		_	(12.9)	(12.9)	(13.0)
EBIT	(0.4)	(2.5)	(0.9)	(1.0)	(1.0)	(1.1)	28.5	26.5	25.0
Interest	0.0		0.1	0.3	1.3	0.5	(3.6)	(4.7)	(2.9
EBT	(0.4)		(0.8)	(0.7)	0.3	(0.6)	24.9	21.8	22.1
Tax paid	_		0.2	0.2	(0.1)	0.2	(6.2)	(5.5)	(5.5
Earnings	(0.4)	(2.5)	(0.6)	(0.5)	0.2	(0.5)	18.7	16.4	16.6
Dividends	_			_	_	_	_	_	_
Retained earnings	(0.4)	(2.5)	(0.6)	(0.5)	0.2	(0.5)	18.7	16.4	16.6
Cashflow statement									
Year ending December (C\$m)	2007A	2008E	2009E	2010E	2011E	2012E	2013E	2014E	2015E
EBIT	(0.4)	(2.5)	(0.9)	(1.0)	(1.0)	(1.1)	28.5	26.5	25.0
Depreciation	_	_	_	_	_	_	12.9	12.9	13.0
Stock-based Compensation	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
Gains & Writedowns	_	_	_	_	_	_	_	_	_
(Increase) decrease in receivables	_	(0.0)	_	_	_	_	(10.4)	0.2	0.1
(Increase) decrease in inventory	(0.0)	(0.0)	_	_	_	_	(3.2)	(0.1)	(0.1
Increase (decrease) in payables	0.0	0.1	_	_	_	_	4.0	0.1	0.1
Net cash from Ops	(0.3)	(2.4)	(0.9)	(0.9)	(1.0)	(1.0)	31.8	39.7	38.2
Tax paid	_	_	0.2	0.2	(0.1)	0.2	(6.2)	(5.5)	(5.5)
Dividends	_	_	_	_	_	_	_	_	_
Net interest recieved (paid)	_	0.0	0.1	0.3	1.3	0.5	(3.6)	(4.7)	(2.9
New equity	2.7	5.0	5.0	4.0	50.0	_	_	_	_
New (deposits) borrowings	_	_	_	_	_	50.0	30.0	(30.0)	(20.0
Capital expenditure	(0.6)	(3.8)	_	_	_	(43.8)	(91.5)	(1.8)	(1.8
Net cash from financing	2.1	1.2	5.3	4.5	51.3	6.8	(71.3)	(42.0)	(30.3)
Net increase (decrease) in cash	1.8	(1.2)	4.4	3.6	50.3	5.8	(39.5)	(2.2)	7.9
Balance sheet									
Year ending December (C\$m)								2014E	2015E
Fixed assets at NAV	0.6	4.4	4.4	4.4	4.4	48.2	126.8	115.7	104.6
Cash	2.0		5.1	8.6	58.8	64.6	25.0	22.7	30.5
Receivables	_			0.0	0.0	0.0	10.4	10.3	10.1
Inventory	0.0	0.0	0.0	0.0	0.0	0.0	3.3	3.3	3.4
Less Payables	(0.0)	(0.1)		(0.1)	(0.1)	(0.1)	(4.1)		(4.3)
Not current accets	2.0	0.7	5.1	8.5	<b>58.7</b>	64.5	34.6	32.0	39.7
Net current assets	2.0								(30.0)
Less loans	_	_	_	_	_	(50.0)			•
	- 2.6	 5.1	9.5	— 13.0	63.2	(50.0) <b>62.7</b>	(80.0) <b>81.4</b>	(50.0) <b>97.7</b>	
Less loans <b>Capital employed</b> <i>Represented by</i>			9.5		63.2	62.7	81.4	97.7	114.3
Less loans  Capital employed  Represented by  Shares in issue	_			13.0 17.2					114.3
Less loans  Capital employed  Represented by  Shares in issue  Add retained profit	<b>2.6</b> 3.2	8.2	<b>9.5</b> 13.2	17.2	<b>63.2</b> 67.2	<b>62.7</b> 67.2	<b>81.4</b> 67.2	<b>97.7</b> 67.2	<b>114.</b> 3
Less loans  Capital employed  Represented by  Shares in issue  Add retained profit  Prior periods	2.6 3.2 (0.5)	8.2	9.5 13.2 (3.0)	17.2	<b>63.2</b> 67.2 (4.2)	<b>62.7</b> 67.2 (3.9)	<b>81.4</b> 67.2 (4.4)	<b>97.7</b> 67.2 14.3	67.2 30.6
Less loans  Capital employed  Represented by  Shares in issue  Add retained profit	<b>2.6</b> 3.2	(0.5) (2.5)	9.5 13.2 (3.0)	17.2	<b>63.2</b> 67.2	<b>62.7</b> 67.2	<b>81.4</b> 67.2	<b>97.7</b> 67.2	114.3 67.2 30.6 16.6

**Profit & Loss** 

# Appendix: Management

# **Claude Schimper – Chief Operating Officer and Director**

Claude Schimper has over 20 years of experience in senior management positions in the mining industry. He was vice-president of operations for St Andrews Goldfields Ltd in Matheson, Ontario. Previously, Mr Schimper served as mine manager for St Andrews at its Stock gold complex near Timmins. He also served as a regional manager for Redpatch contracting, and a project manager for Placer Dome.

### Menachem Ben Mashiah - Chairman

Menachem Ben Mashiah has over forty years of experience in international business, leading both private and public companies during this time.

### Eliot Kramer - Vice Chairman

Elliot Kramer is a co-founder of Balkan Resources. He received a degree in political sicence from McGill University, then attained a Master's degree in security studies from Georgetown University in Washington, D.C. Mr Kramer is based in Montreal.

# Harry Bloomfield - Director

Harry Bloomfield is the principal and managing partner of Bloomfield and Associates, a Montreal-based law firm specializing in Canadian federal and provincial corporate law, international finance, securities matters, and international taxation law. Mr Bloomfield is also active in international banking, shipping, and with financial matters, and mergers and acquisitions. He has been a practicing lawyer since 1968 and was appointed Queens Council that year. He has held active roles with many Canadian and international companies for the past 30 years. Mr Bloomfield received his LLB law degree, from the University of Montreal, and received an MBA from Harvard School of Business Administration, with emphasis on international finance.

## **ALBANIAN GEOLOGISTS**

# **Martin Legisi**

Mr Legisi has a degree in geology from the University of Tirana, where his thesis dealt with the geology of the ore deposit at Perlati. He served as head geologist for the Geological Service Enterprise in Rubik through the early 1990s, then served as expert geologist for Nebex, the first Canadian company to explore in Albania. Mr Legisi re-evaluated material from deposits in the Mirdita-Puke region.

# Dode Shtjefanaku

Dode Shtjefanaku has a geology degree from the University of Tirana. He worked as director of the Geological Service Enterprise in Rubik in the early 1990s and again from 1999 to 2006. Mr Shtjefanaku led research and survey programmes in the Rubik-R Rrëshen-Ulez regions.

# Aqif Mjeshtri

Aqif Mjeshtri has a degree in geology fromm the University of Tirana. His experience includes calculating ore reserves, development of programmes for exploiting ore deposits, implementing underground drill programmes and mine development.

We are pleased to bring you this report on **Balkan Resources Inc.** 

Objective was founded so that issuers can ensure that the market and their investors always have access to quality research through sponsoring indepth, proactive

While our research is sponsored by the companies we cover, it is always written on behalf of our readers. We offer you an objective, independently prepared view of the opportunity, the risks and what the value might be to an average investor in the companies we cover.

As we are unconflicted by corporate finance or PR/IR agendas, our analysts are always free to give their true opinion of the businesses we cover.

As always, I welcome your comments and feedback on our research!

Gabriel Didham, CFA Objective Capital

# **Will Purcell**

Will has been involved in the resource sector for 30 years in a variety of roles. Since the late 1990s, he has been active in assessed mineral resource investment projects. Will has a B. Math degree from the University of Waterloo in Ontario.

# Richard Ryan, P.Geo

Richard is a mining professional with more than 10 years of diverse mining industry experience, including production, planning, geotechnical, exploration and financial evaluations. Richard has a B.Sc., Geological Engineering from the University of Arizona, an MBA from the University of Phoenix, and is a Certified Professional Geologist.

# About our relationship with Balkan Resources Inc

Objective Capital has been sponsored by the company to provide research coverage of Balkan Resources Inc.

Objective will provide proactive, indepth coverage for a period of more than one year. The typical fee for the quality and level of coverage offered by Objective is £25,000 per annum. Objective does not accept payment in any form of equity.

Unless otherwise noted, the opinions expressed in our reports are entirely those of our analysts. Objective's analysts are contractually protected to be able to always provide their opinion on the businesses they write on.

# objective capital

# Objective Corporate Research

Call us today to find out how our sponsored research can benefit you

# **Objective Capital Limited**

Tel: +44-(0)870-080-2965 Fax: +44-(0)203-137-0076 sales@objectivecapital.com

**Internationally:** 

Phone: +44-20-7754 5994

US Toll-Free: 1-888-802-7215

For Marketing & Sales: Token House 11-12 Tokenhouse Yard London EC2R 7AS

Corporate: www.ObjectiveCapital.com Research: www.ObjectiveCapital.co.uk