

May 2, 2013

North America | Canada | Mining

DR. KALLIWODA | INTERNATIONAL

Initial Coverage

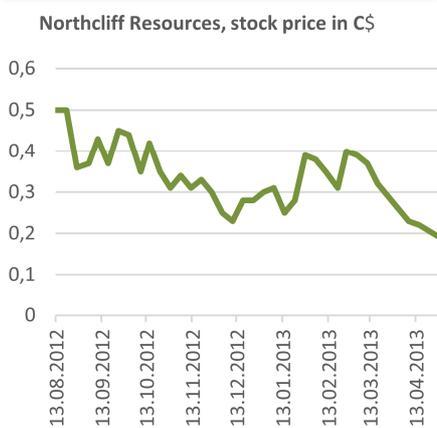
BUY

Target Price Range:
C\$0.64 to C\$1.29

	Mining
Country:	Canada
ISIN:	
Bloomberg:	NCF.CN
Reuters:	NFC.TO
<hr/>	
Last Price (CAD):	0.21
MktCap (CADm):	16.25
No. of Shares (in m)	77.40

Shareholders Structure:	
HDI & NCF Mgmt	24%
Free Float	76%

Price Performance (in %)	
1 month	-34%
3 month	-32%
12 month	-62%



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Northcliff Resources

Globally-important, long life, low-cost and near-term producer

Key investment considerations:

- Northcliff Resources Ltd. recently published positive results for a Feasibility Study on its 100%-owned Sisson Project located in New Brunswick, Canada, verifying the long-life open pit tungsten and molybdenum development as a technically and economically robust project.
- Results suggest a post-tax net present value (NPV) of Cdn\$418 million for the project at an 8% discount rate, an internal rate of return (IRR) of 16.3% and a 4.5 year payback on initial capital expenditures of Cdn\$579 million. Pre-tax NPV is Cdn\$714 million with IRR at 20.4% and a 4.1-year payback.
- Proven and Probable Mineral Reserves contain 22.2 million metric tonne units (mtu) of tungsten trioxide (WO₃) and 155 million pounds of molybdenum (Mo) at an \$8.83/t Net Smelter Return (NSR) cut-off.
- At an average annual production of 557,000/mtu to APT, Sission has the potential to produce up to 8% (based on 2010 levels) of world tungsten demand from politically stable Eastern Canada, with excellent infrastructure and logistics to connect to North American, European and Asian tungsten markets
- Very competitive cash cost for tungsten at US\$153/mtu to APT, assuming long term prices of US\$350/mtu for APT and bi-product credits from Molybdenum production priced at US\$15/lb.
- Tungsten has been identified by the US and the European Union as a strategic metal, with heightened awareness since Chinese export restrictions have pushed market prices to record highs. Currently 85% of the world's tungsten supply comes from China while only 55% is consumed domestically. Increases in forecast Chinese domestic growth is expected to put additional pressures on export quotas.
- Unique to Canada and rare for a Tungsten mine operation is the inclusion of an Ammonium Paratungstate (APT) plant, further refining the tungsten concentrate, creating an internationally marketable product on site.
- Our valuation indicates that Northcliff Resources Ltd. is significantly undervalued. The ratio EV/NAV is far below median and average for comparable tungsten development companies.
- We initiate a buy recommendation with a 12 month target price range of C\$0.64 to C\$1.29 per share.
- At its recent market capitalization of Cdn\$16.25 million, Sission delivers remarkable valuation potential based on its underlying project value and a peer group comparison.

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1 Company Profile

Northcliff Resources Ltd. is a mineral development company, based in Vancouver, Canada and associated with the Hunter Dickinson, a global diversified mining group with over twenty-five years of mineral development success. Northcliff's focus is on developing the advanced stage Sisson Tungsten-Molybdenum Project located in New Brunswick, Canada. In January 2013, Northcliff released the positive results of the Sisson Project Feasibility Study, followed by a NI 43-101 Technical Report published March 13, 2013.

The Sisson property offers a large structurally controlled, intrusion related tungsten-molybdenum deposit that is amenable to open pit mining. Tungsten and molybdenum mineralization takes place in veins, stringers and disseminations in four zones on the 18,880-hectare Sisson property.

The Sisson deposit was initially identified through exploration drilling undertaken by Kidd Creek Mines from 1979-1982. Subsequent delineation drilling was conducted by Geodex Minerals Ltd. from 2005-2009, outlining significant mineral resources in Zone 3 and the Ellipse zone, both of which are open to further expansion.

Northcliff launched into a program comprised of drilling, engineering and environmental studies in 2010 to advance the Sisson Project through feasibility and into permitting. Since that time the company has drilled 11,175 m in 66 holes. In addition to increasing its mineral resources in the measured category, this latest drilling has supplied metallurgical, geo-mechanical, geotechnical and hydrogeological data to support feasibility work.

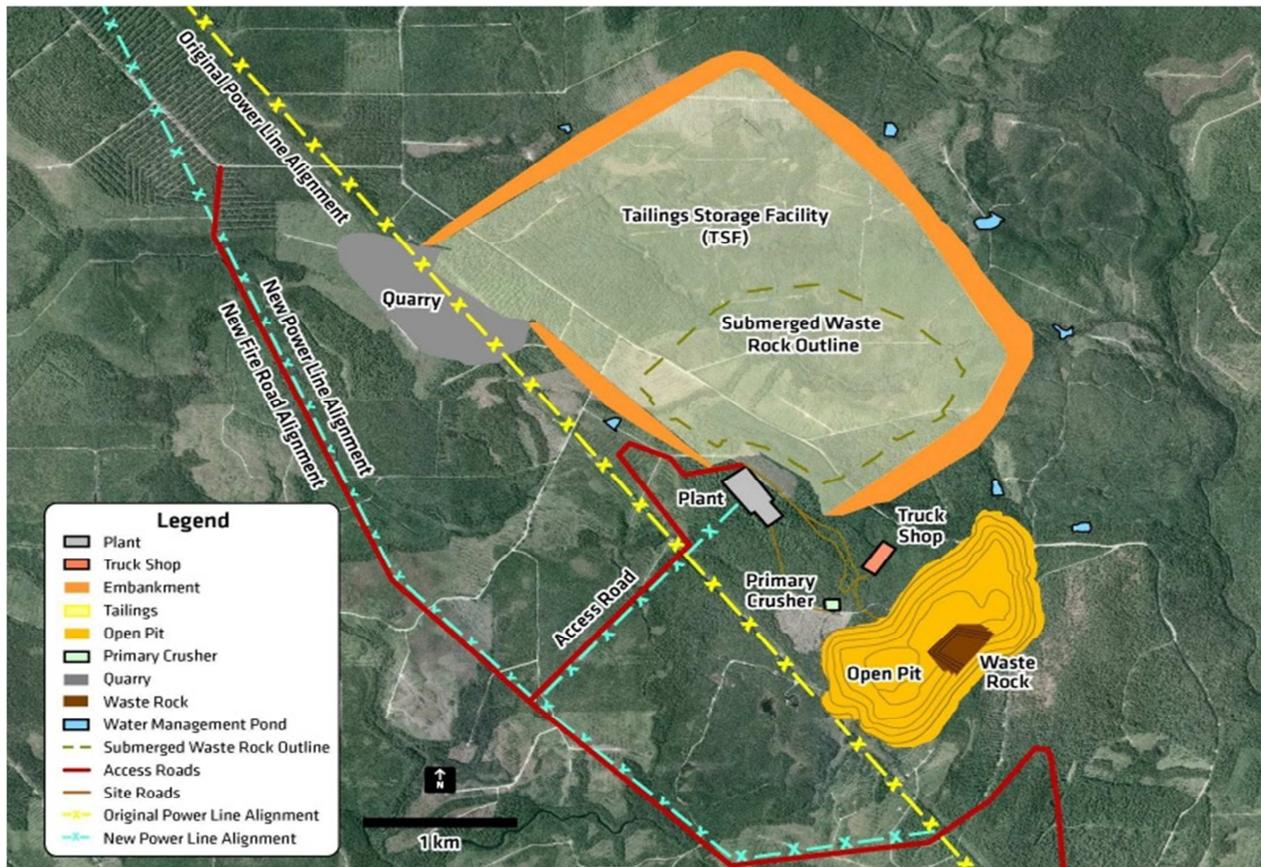
2 Location and Infrastructure

Located 100 km by road northwest of Fredericton, the capital city of the province of New Brunswick, the Sisson Project has ready access to modern transportation and power infrastructure and a skilled labor force.

Fredericton is a provincial center for business, education and government.



Situated in an area of rolling topography, the site is readily accessible by road from Fredericton, with local access provided by several secondary and forestry roads. Power lines from the regional grid cross the property. Road access as well as a rail line, located 15 km east of the deposit, both connect to deep-sea ports at Saint John and Belledune.



Source: Northcliff Resources © 2013

The Project's power needs will be satisfied by tying into the existing New Brunswick electrical grid. Although an existing 345 kV line crosses the Sisson claim block, an additional 42 km, 138 kV transmission line will be installed by NB Power alongside the existing line. NB Power will own the line and switchgear but Northcliff will own the mine site terminal station. Power costs are estimated at \$0.066 per kWh in the Feasibility Study.

3 Sisson Project Main Features

Feasibility completed.

Northcliff began working on its Feasibility Study program in October 2010 and completed the study, which confirms the project is economically viable, in January 2013.

Open pit mining

Tungsten occurs predominantly in the mineral scheelite, and locally in wolframite, with molybdenum occurring in molybdenite. The near-surface Sisson deposit is amenable to open pit mining at a very favorable life of mine strip ratio of 1:1.

Mineral Reserves.

Proven and Probable Mineral Reserves contain 22.2 million metric tonne units (mtu) of tungsten trioxide (WO₃) and 155 million pounds of molybdenum (Mo) at an \$8.83/t Net Smelter Return (NSR) cut-off .

Category	Cut-Off Grade (NSR \$/t)	Tonnes (Mt)	NSR (\$/t)	WO ₃ (%)	Mo (%)	Tungsten (Wo ₃ - mln mtu)	Contained MO (Mlb)
Proven	8.83	105.4	25.48	0.069	0.023	7.3	53
Probable	8.83	228.9	23.54	0.065	0.02	14.9	101.7
Total	8.83	334.4	24.15	0.066	0.021	22.2	154.8

Source: Northcliff Resources © 2013

Long life operation (27 years)

The 2013 Feasibility Study is based on a 60,000 tonne per day open pit mining and 30,000 tonne per day milling operation. A total of 281 million tonnes of ore is expected to be processed over a 27 year mine life.

Conventional processing

All the proposed processing methods to be used by Northcliff are conventional and widely used in the global mining industry. The process design is based on an extensive testing program undertaken by SGS Mineral Services Canada, at their well-known and highly regarded Lakefield, Ontario facility.

Ammonium Paratungstate (APT) Plant

Northcliff will be able to undertake value-added processing of tungsten concentrates on site by constructing and operating an ammonium paratungstate (APT) plant. This will add significant value to the Project and is expected to make the company cost competitive with Chinese APT producers.

Environmental Impact Assessment (EIA) near completion

Northcliff is working towards the completion and submission of an Environmental Impact Assessment (EIA) to federal and provincial regulatory agencies in QII 2013. Following submission of its EIA documentation, Northcliff will apply for the broad range of construction and environmental permits necessary to commence production at the Sisson Project in 2016.

Social and administrative advantages

The company enjoys positive government support, a stable and predictable permitting and regulatory systems and a harmonized federal and provincial environmental review process.

Construction targeted for 2014

Construction of the Sisson Project facilities is expected to commence in 2014 and take 24 months to complete.

4 Tungsten: Properties and Usage

Tungsten has many outstanding properties, including being the second strongest material after diamonds and having the highest melting point of all metals at 3,400°C. As a result, finding a substitute for key applications of tungsten is difficult and, in most circumstances, impossible.

Tungsten is an extremely important metal that faces a high supply risk. Tungsten is on the critical and strategic metal lists of many industrialized countries and is a critical raw material for the European Union. This has led to political efforts in the European Union and Non-Chinese Asian countries to secure supply by encouraging industry players to make strategic investments in non-Chinese development projects.

The bulk of tungsten production, approximately 60%, is utilized in the formation of cemented carbides, also called hardmetals. The main constituent is tungsten monocarbide (WC), which has a hardness close to diamonds. Hardmetal tools are the workhorses for the shaping of metals, alloys, wood, composites, plastics and ceramics, as well as for the mining and construction industries. Tungsten remains an important partner for steel tools as well as high speed and creep-resistant steels and alloys. Tungsten mill products include lighting filaments, electrodes, electrical and electronic contacts, wires, sheets, and rods.

5 Tungsten Market

Key characteristics:

- Global tungsten demand is forecast to grow in line with growth in global GDP, driven largely by developing countries such as China.
- Market pressure in China to supply their own domestic needs and focus processing of tungsten to final, value-added tungsten products.

- Chinese production costs have been increasing due to reserve depletion, consolidation of smaller mining operations, restrictions on the issuance of new mining licenses, increased wages and improved health, safety and environmental standards
- Tungsten prices are still in the historic high range, currently near US\$350.00 per mtu. Market fundamentals are still strong.

World Resources

China produces approximately 85% of global tungsten. The rest of the world's tungsten resources are geographically widespread. Canada, Kazakhstan, Russia, and the United States also have significant tungsten resources.

The table below presents World Mine Production and Reserves. Reserves for "Other countries" were revised upward based on company and Government data.

	Mine Production*		Reserves*
	2011	2012	*) Tonnes
United States	NA	NA	140,000
Austria	1,100	1,100	10,000
Bolivia	1,100	1,100	53,000
Canada	1,970	2,000	120,000
China	61,800	62,000	1,900,000
Portugal	820	820	4,200
Russia	3,500	3,500	250,000
Other countries	2,700	3,000	760,000
World total	73,000	73,100	3,200,000

Source: <http://minerals.usgs.gov/minerals/pubs/commodity/tungsten/mcs-2013-tungs.pdf>

Characteristics:

- China is the predominant supplier of tungsten at 62,000 tonnes in 2012.
- China's focus is on conserving domestic resources and retaining more of the tungsten related value-added processes in their own country.
- From 2004 to 2006, when production was not sufficient to meet market demand, supply was supplemented by draws from strategic stockpiles, particularly in the U.S. and European Union. These stockpiles have been substantially depleted in recent years.
- Any boosts in Chinese production capability is likely to supply domestic tungsten demand rather than the export market, causing a potentially significant supply/demand imbalance in coming

years outside of China, thus increasing the need for Western tungsten mine development projects.

As well as being the quickest growing market, China is now the biggest buyer of tungsten, accounting for over 50% of world demand, according to the International Tungsten Industry Association (ITIA). As a result, China will consume an increasing portion of its tungsten output in order to meet domestic demand, whereby exports of tungsten (particularly intermediate products) will be increasingly limited in the future.

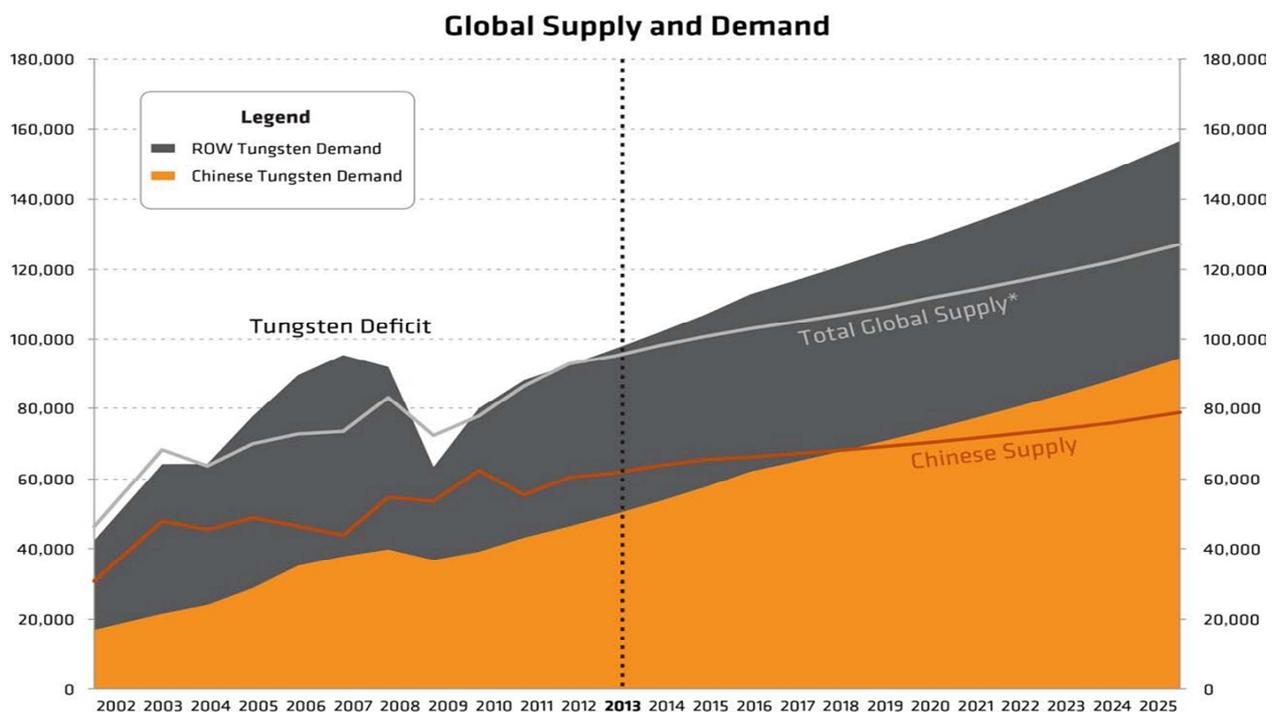
Demand

Key characteristics:

- Global tungsten demand is forecast to grow at a rate of 6-7% per annum, from 70,051t WO₃ in 2010 to 111,602t WO₃ in 2015
- Recent decline in the APT price is expected to reverse in the short term due to the absence of any new sources of significant non-Chinese supply to meet increasing demand.

Tungsten demand has historically related very strongly with common economic activity (GDP), particularly as tungsten is mostly used in industrial applications rather than in modern technologies. Recently, growth in tungsten usage has outperformed world GDP growth as the influence of China (and its high economic growth rate) has increased.

The chart below shows the impact of increasing demand from China on the global balance between demand and supply. We can clearly notice that the demand from China should be the key driver of the future shortage of tungsten.



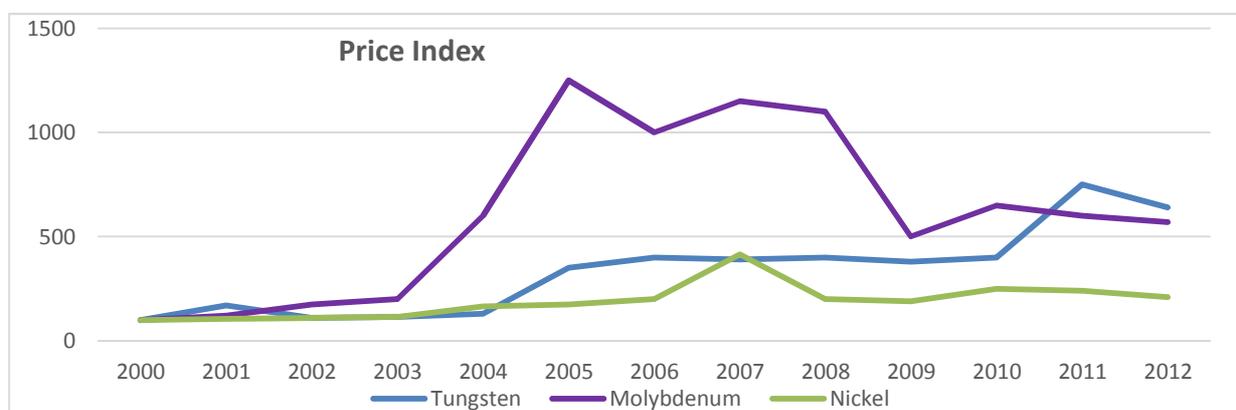
Most recently, the Chinese State Reserve Bureau announced plans to start stockpiling tungsten concentrate with an initial purchase of 10,000 tonnes. While the US and a number of European economies have been experiencing a downturn China and the other BRIC countries have been the accelerators for global economic growth in the last couple of years and this has been no different for consumption of tungsten. However, there are signs that Gross Domestic Product in these countries is also decreasing. Expansion in India, for example, has decreased from double digits to a forecast 6-6%py in 2012, while even in China, growth rate predictions are being downgraded. Gross domestic product in China grew 7.7% on a year-to-year basis in the first quarter 2013, down from 7.9% in the fourth quarter of 2012. However, the current predictions of IMF are still showing strong economic growth at 8.038 % py for 2013 compared to 7.8%py in 2012.

Trade

China remains to be the primary supplier of tungsten and tungsten products to the rest of the world, regardless of restrictions on exports of ores and intermediate products we have seen in past years. There is an ongoing shift in focus and, while new mining projects will result in new supplies of ores, concentrates and tungstate, China will move further down the value chain and turn to exporting more downstream tungsten products while becoming a net-importer of tungsten concentrate. There most recent announcement to start stockpiling tungsten concentrate is a further indication of this trend and the strategic relevance of the metal.

Prices

Tungsten metal prices have performed better than other base metal prices over the past four years, demonstrating relatively solid fundamentals. Current problems in the Eurozone have impacted economic growth in Europe and had an impact on the tungsten price. European APT prices have decreased by ~10% during 2012, in comparison to e.g. a 15% fall in nickel prices over the same period. The chart below presents market prices of the major metals which are similar to tungsten in terms of usage and economic characteristics.



Source: Dr. Kalliwoda International | Research © 2013

Ongoing fears about the Eurozone crisis have been impacting the global economy but have only been partially realized in the tungsten industry, as Chinese APT prices for export are only down by 5% during 2012. However, the current short time trend is positive. According to some sources, Chinese APT export prices increased by around US\$10/mtu in mid April 2013 to range between US\$350-360/mtu CIF Rotterdam and domestic prices also increased sharply as tungsten concentrate suppliers pulled back from offering material, forcing prices to increase.

For the foreseeable future, the most likely scenario would include a firming of tungsten prices by Q4, 2013 as demand returns to the market and with no new significant sources of tungsten supply expected to come on stream. Going forward, tungsten prices should return to an upward trend if demand firms up towards the end of the year and the beginning of 2014, as supply from new projects is unlikely to impact the market until the end of next year at the earliest and then in moderate quantities.

6 Northcliff Investment Case

Low Cost Producer – competitive with Chinese

Based on the positive Feasibility Study results, Sisson is expected to be competitive with Chinese tungsten producers in terms of production cash costs of APT, estimated at Cdn\$153/mtu. We expect long term metal prices around US\$350/mtu for APT and US\$15/lb for molybdenum.

Factors that keep operating costs low at the Sisson project include:

- Economies arising from the large scale of the operation
- Conventional processing– Crushing, Grinding and Flotation.
- Optimized tungsten recovery through an on-site APT plant built to process the lower grade tungsten concentrates
- Access to grid power at \$0.066/kwh
- No new, large scale infrastructure facilities required e.g. airstrip, power, roads, accommodation
- Access to a skilled workforce
- Politically stable, top-tier mining jurisdiction

Long Mine Life Advantage

Due to continued forecast supply constraints and growing political and economic uncertainty, tungsten buyers outside of China will seek alternate long-term, reliable product sources for this strategic metal. This is the main driver in our interest in the Sisson project. Although the capital cost represents a step change in investment for the tungsten industry, the long life potential of the project ensures overall financeability. It also underlines why the price expectation at US\$350 / mtu is reasonable and the company's cash cost at Cdn\$153 / mtu is very competitive.

Resources-based Advantage

Northcliff Resources converted the majority of its large Measured and Indicated Resource to the Proven and Probable Reserve category and confirmed an expected low 1:1 strip ratio over the life of mine (waste to ore ratio).

7 Valuation

We use a peer-comparison valuation metric based on EV/NAV to value the potential of Northcliff Resources (TSXV: NCF) relative to its peers, consider the current "risk off" sentiment in the junior mining sector and assess the company's financing strategy to conclude a projected future trading range (rather than a single target price) and a Strong Buy recommendation.

EV/NAV Peer Comparison

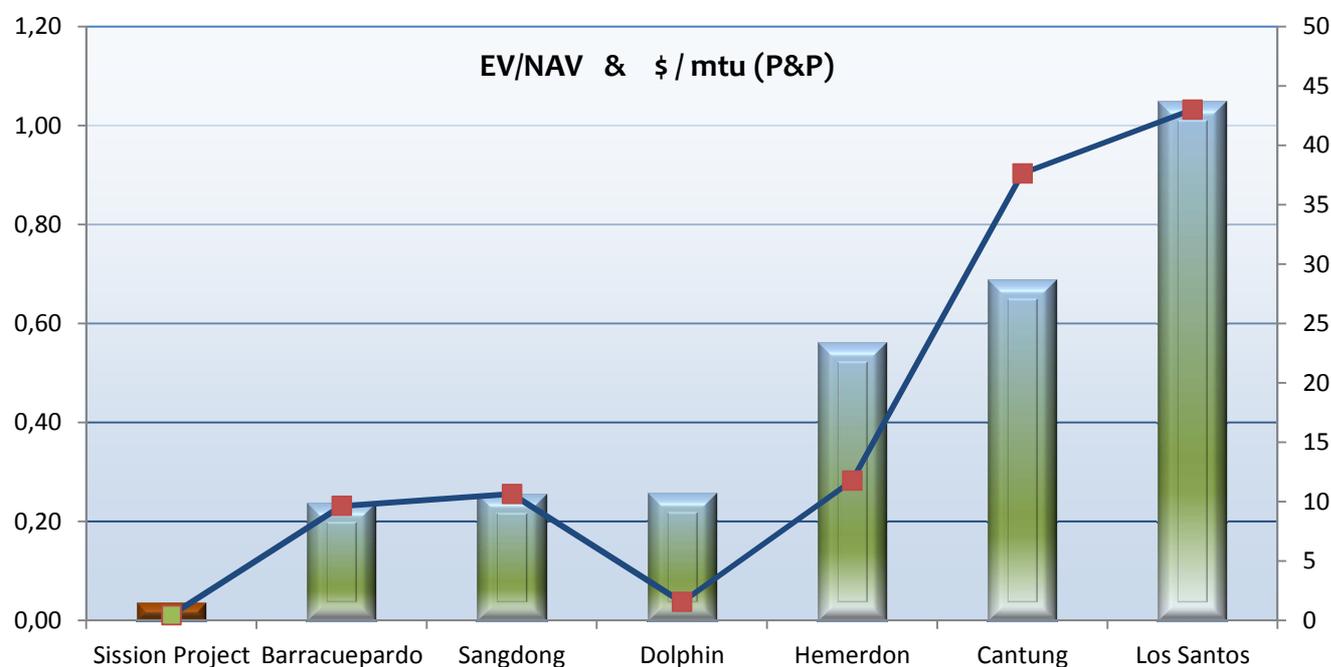
We assume NAV for single project companies to be equivalent to the project NPV (8%) and compare this with industry average discounts on respective project NPVs amongst the company's peers. As shown in the chart below, we see comparable projects, with some level of funding commitment, trading in the 25% to 55% of NPV range.

In review of the company project feasibility study, with price assumptions provided by recognized market experts, we have confidence in a long-term tungsten price of US\$350/mtu and molybdenum at US\$15/lbs. Even under conservative global demand scenario of 123,000 t W by 2025, there is a supply gap compared to current production levels of 88,400 t W per annum. A more positive view of global GDP growth at +4% could see the supply gap reach 30,000 t W annually and create strong upward price pressure. Nevertheless, we assume Northcliff will sell part of its year 2 to 5 production at a discount to market prices, due to its high production levels in those years, reducing the company's projected initial annual revenue assumptions and thus the post-tax project NPV to Cdn\$ 350 million. We have confidence in the company's operating cost assumptions.

The figures below: (1) present our peers valuation comparison and (2) graphical representation of the potential upside on the basis of an EV/NAV peer- comparison.

Phase of the Project	Company/Project	EV/NAV	\$/mtu (P&P)	MktCap	Debt	Cash	EV
Feasibility Study Tungsten Projects (FSTP)	Sission Project	0.03	0.45	17.32	0.00	5.16	12.16
	Barracuepardo	0.24	9.64	36.34	0.00	4.56	31.78
	Sangdong	0.26	10.64	52.24	4.86	1.46	50.78
	Dolphin	0.26	1.54	7.00	0.00	1.13	5.87
	Hemerdon	0.56	11.76	53.82	6.18	1.65	52.17
Tungsten Producers	Cantung	0.69	37.62	28.84	31.13	0.40	28.44
	Los Santos	1.05	43.00	38.56	0.15	1.02	37.54
FSTP Average without Sission (1)		0.33	8.39				
FSTP Median without Sission (2)		0.26	10.14				
Mean, Median Average		0.29	9.26				

Source: Dr. Kalliwoda International | Research © 2013, as at April 17, 2013.



Source: Dr. Kalliwoda International | Research © 2013

Whilst we can argue that the entire tungsten sector is undervalued due to negative sentiment towards the overall junior mining industry, Northcliff Resources appears particularly undervalued, although its low production cost and logistical advantages should justify a premium valuation. The median of EV/NAV ratio equals 0.26. Based on the median value of EV/NAV for the peer companies and actual value of EV/NAV for Northcliff Resources, and notwithstanding our financing strategy evaluation below, we calculate the potential upside of 765%.

Financing Strategy and Critical Milestones

In the current market environment for junior mining companies, including those with very advanced projects like Northcliff Resources, we see the ability to finance a project or the markets perception of the company's ability to finance a project as strong influence on valuations.

Unlike most single-asset junior companies, Northcliff benefits from its affiliation with the Hunter Dickinson group (HDI), which has a proven development track record having raised in excess of US\$ 3 billion in debt and equity over the past 30 years.

While M&A activity by majors has been curtailed over the past 24 months we do believe in the prospects of a significant vertical integration play.

We would expect one or multiple project level strategic investors (US, Asian and European) to acquire ownership in the Sisson project directly in exchange for off-take commitments at a valuation referencing the project NPV rather than the current market capitalization. Project level equity will likely be supported by non-recourse project debt from commercial banks coupled with export credit financing. Meanwhile, the company has implemented a Shareholder Rights Plan to avoid a preemptive or undervalued transaction by any hostile suitor. The company states it is seeking to finalize strategic investor and off-take agreements by end 2013.

Meanwhile, Northcliff is said to be seeking a bridge financing of US\$5 to US\$15 million for its 2013 – 2014 working capital budget, permitting activities and ongoing engineering. Given the advanced stage of the project and the financial reach of the HDI group, we anticipate that dilution will be reasonable.

The closing of such a bridge facility and publication of terms should have an important impact on the share price by QIII 2013. A stronger re-rating of the Northcliff stock, more in line with industry peers and possibly in their upper trading range (above 50% of NPV) should be achievable once off-take agreements and related strategic investors have been committed.

A further boost to the valuation should occur once the company has project finance commitments secured. Overall we expect the project CAPEX to be leveraged with no less than 60% debt.

Our target trading range for QII and QIII is C\$0.30 to C\$0.50 subject to terms of the bridge financing and any associated dilution. Assuming a competitive bidding environment amongst interested off-takers, we would anticipate project level investments to occur in the 50% - 70% range of project NPV and anticipate the company to be valued with reference hereto. Closing expected in QIV 2013.

	EV/NAV
Median without producers	0,26
Northcliff Resources	0,03
Potential Upside	765%

Assuming Northcliff will retain a 60% interest in the Sisson project, then valued at 50% to 70% of project NPV (using our conservative Cdn\$350m NPV target), the company would reach a valuation of +US\$100 million by Q1 2014. Subject to the terms of the bridge financing we see this convert to a share price target range of C\$0.64 to C\$1.29. This leaves strong upside potential on various fronts including, higher project NPV, use of APT capacity beyond own capacity utilization, lower ownership by off-takers, higher project debt leverage, and higher market appreciation of company value relative to project NPV.

8 Conclusions and Recommendation.

On the basis of the results of the NI 43-101 compliant Feasibility Study Northcliff Resources could, through its 100% owned Sisson project, produce up to 8% of world tungsten demand (based on 2010 levels) by 2017.

The project's very competitive tungsten APT cash cost of US\$153/mtu (after by-product credits from molybdenum sales) puts the project at par with established Chinese producers and provides a basis for the company to displace current Chinese APT supply. There is strong industry and political interest in securing tungsten supply from non-Chinese sources and various government agency programs exist to incentivize such a transition.

Our valuation of Northcliff Resources Ltd. indicates the company is significantly undervalued as the ratio EV/NAV is far below median and average for comparable tungsten development companies.

Solely on the basis of a peer-comparison valuation (EV/NAV) our 12 month target price for Northcliff Resources (TSXV: NCF) would be at C\$1.98. However, we must consider the current "risk off" sentiment in the junior mining sector and the companies financing strategy (outlined above) to conclude a realistic future trading range (rather than a single target price) at **C\$0.64 to C\$1.29** and a **Buy Recommendation**.

This leaves strong upside potential on various fronts including, higher project NPV, adding external tungsten concentrate feed to its APT processing facility, less ownership dilution through project-level investors, higher project debt leverage, and higher market appreciation of company value relative to project NPV.

Risks associated with the company are primarily linked to its ability to secure working capital for ongoing project permitting and engineering and until a project finance facility is in place by mid-2014. While there is conflicting information on current tungsten APT prices, in a market that lacks full transparency, any current drop below the conservative long-term price of tungsten can be seen as a short term effect that should subside by the time the company commences production.

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Analyst Dr. Peter Arendarski



Analyst Dr. Norbert Kalliwoda



BUY:	Based on our analysis, we expect the stock to appreciate and produce a total return of at least 10% over the next twelve months
ACCUMULATE:	Based on our analysis, we expect the stock to appreciate and produce a total return between 5%- 10% over the next twelve months
HOLD:	Based on our analysis, we expect the stock to produce a total return between -5% and +5% over the next twelve months
REDUCE:	Based on our analysis, we expect the stock to cause a negative return between -5% and -10% over the next twelve months
SELL:	Based on our analysis, we expect the stock to cause a negative return exceeding -10% over the next twelve months and should be sold

DISCLAIMER

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