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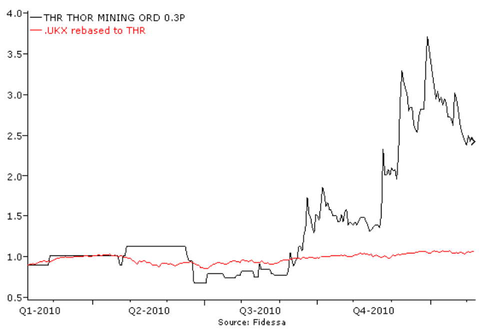
Thor Mining PLC 2.2p

New Gold, Placing & Molyhil Update

11 February 2011

Share Price: 2.2p



12m High: 3.90p

12m Low: 0.625p

Market Cap: £12m

Shares in Issue: 440,420,827

484,555,953 fully diluted

Debt:	Nil
Cash at Hand	£1.7m (31/01/11)
Current Exploration Phase	approx £650,000

LSE Code:	THR
Sector:	Mining
Market:	AIM & ASX
Website:	www.thormining.com
Broker:	Simple Investments
NOMAD:	John Simpson 02077766550

Description: Gold exploration in Australia with a fully permitted tungsten/molybdenum mine ready to finance

Analyst: Ian Falconer

Tel: 020 79293399

Email: ian@hardmanandco.com

Dual-listed Thor Mining (AIM, ASX:THR) has completed a financing aimed at advancing financing the acquisition of a new gold project in the Northern Territory, advancing the Dundas gold exploration project in Western Australia, but also funding deep exploration at its permitted tungsten/molybdenum mine, Molyhil.

The Spring Hill project, located in the well known Pine Creek Inlier around 150km south east of Darwin, contains a small but encouraging historic resource of around 274koz of gold at a grade of 2.3g/t. The real target is however a substantially larger gold resource that the model says may be found along the axis of the anticline but within a different, stratigraphically deeper, geological unit than contains the current resource. The geological model for gold in the Pine Creek Inlier is very similar to that of the Tanami Inlier and both areas have resulted in several multi-million ounce deposits, most notably Newmont's Tanami (Callie) Mine (280koz pa @ $700/oz and a head grade of ~3g/t).

The acquisition price is realistic as the resource is not currently JORC compliant. However the ground does contain gold to a previous level of JORC compliance and may contain significantly more than is already known. So this project takes its place between the greenfields Dundas project and the permitted mine at Molyhil to round out Thor's risk profile with a resource to bring into compliance and significant potential upside.

The rising tungsten price is encouraging Thor to explore below the existing mineable reserves. The current 5-year mine life could be extended by bringing additional reserves from an ore body that is known to extend well below the bottom of the planned open pit. In fact around 40% of the resources lie down dip and are not covered by the current mineable reserve as a result of economic rather than geologic factors.

The recent step in tungsten price could be as a result of less than orderly buying by American consumers to avoid a new regulatory burden that comes into force in April 2011. If this is so then the volumes involved are tiny but are having a disproportionate effect in an already tight market where long term off-take deals are the norm. We examine the Dodd-Frank Act with respect to tungsten. The news for molybdenum prices is less clear with suspicions that China has stockpiled moly in addition to several millions of tonnes of refined copper and that Henderson's increased production is holding prices back.

All in all Thor is a company that is not sitting around and waiting for the market to come to it. We believe that there is significant appetite for this type of explorer/developer and expect to see on the ground activity at all three sites over the next 12 months.

Y/E	Group Sales	Declared Profit	Adjusted Profit	Adjusted EPS	P/E ratio	Divi	Yield
	£ 000s	£ 000s	£ 000s	£/sh		£	%
2008A	0	(1,100)	(1,100)	(0.8)	N/A	N/A	N/A
2009A	0	(1,230)	(1,100)	(0.6)	N/A	N/A	N/A
2010E	0	(1,762)	(588)	(0.2)	N/A	N/A	N/A
2011E			No	Estimates			

Spring Hill Background

Historic gold mining in the Northern Territory is usually in one of three places; Tennant Creek, Tanami or Pine Creek. Both Tanami and Pine Creek share a very similar geology and bear very close comparison economically as well as scientifically. Throughout this and other literature you will see the terms Inlier, Orogen and District used interchangeably. Strictly speaking they each refer to different aspects of the geology and geomorphology but in the cases of both Tanami and Pine Creek there is no practical difference and only the most pedantic of geologists will be annoyed enough to comment if the terms are confused.

Historic mining district 150km south east of Darwin by surfaced road and rail

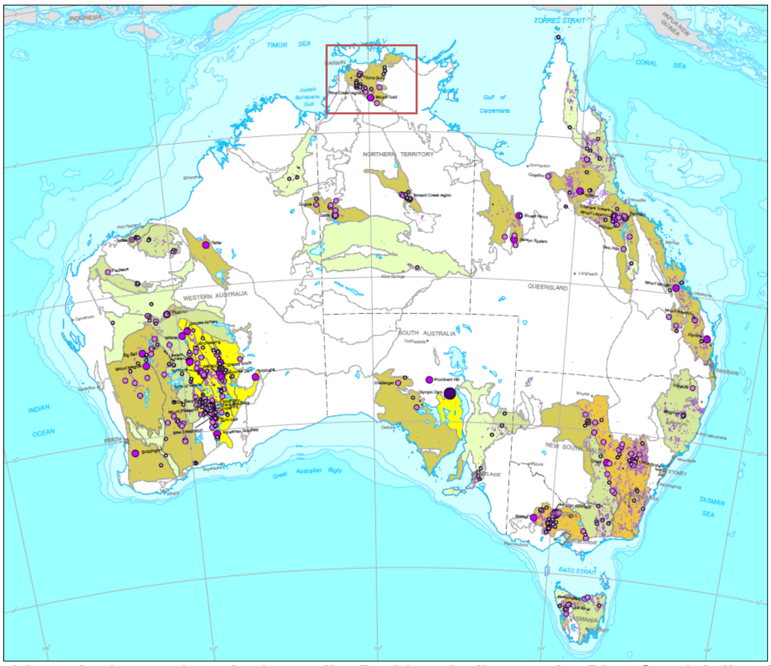
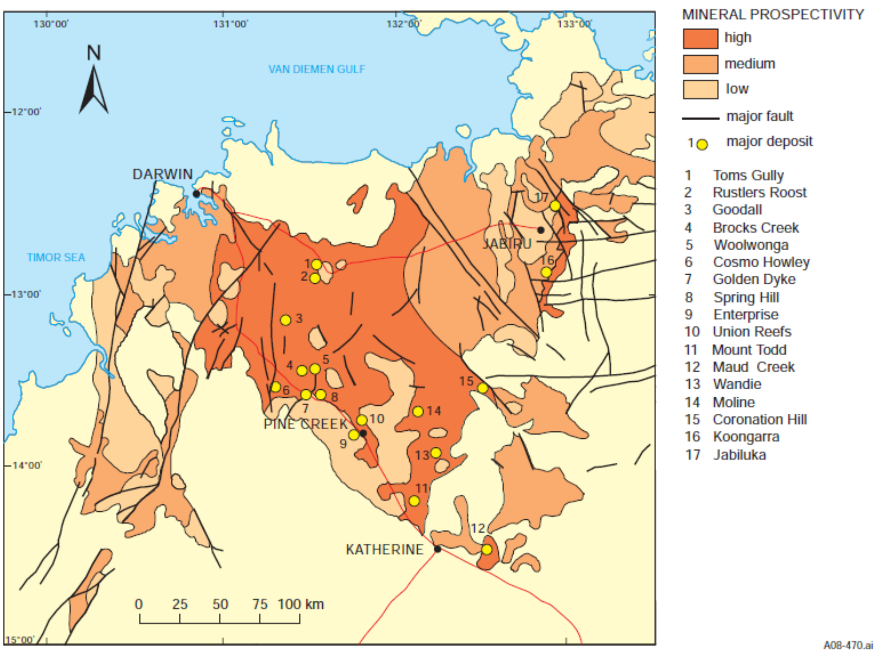


Figure 1: Gold producing regions in Australia. Red box indicates the Pine Creek Inlier. Each of the purple dots indicates a mined gold resource. Source and Copyright Geoscience Australia.



Spring Hill has been mined on and off since the 1870s

Figure 2: Regional map of the Pine Creek Inlier, its major geological structures, an assessment of gold prospectivity and gold mines. Source NT Geological Survey Gold Deposits of the Northern Territory Report 11.

There are differences between the two areas. The Tanami goldfield is further inland and more difficult logistically, but on average gold deposits tend to be larger. In fact the 50% quantile of mined deposit size (the max size of deposit that covers 50% of all gold deposits in the respective region) is 16 tonnes (514koz) vs 8 tonnes (257koz) according to Jaireth and Huston (Ore Geology Reviews, 2010). Which immediately prompts the question wouldn't it be better to explore the Tanami Inlier if the deposits are bigger ?

Geologically similar to Tanami Inlier gold deposits

Well, yes we would agree if only very large deposits were economic. However Pine Creek has a much higher total number of mined deposits (21 vs 9 in the Tanami Inlier), so it's a stronger bet that economic amounts of gold will be found in the Pine Creek district than in Tanami. It then becomes a question of how much gold is enough ? The two largest deposits in Pine Creek are the troubled Mt Todd (3.5Moz) and Union Reefs (~1Moz), and 50% of mined deposits are over 250koz.

Pine Creek deposits are smaller but more numerous

Admittedly the economics of a Pine Creek Mine will be better to the tune of 500km, an adjacent town, rail-line, gas pipeline and trans-continental road, but that is all part of the equation. If its location brings the bar down on the economic size of deposits in Pine Creek compared with Tanami then so much the better for the owners of those deposits. There is no way to move the geology from its current position to alter those factors.

Superb logistics; township, road, rail & gas

So at 274koz Spring Hill should already be economic, simply on analysis of past mining activity in the area. Which again prompts a question; why is Western Desert Resources selling it ? That is a fairly easy answer. WDR has a potential billion tonne iron ore target to focus on and selling Spring Hill to a company in which it has 11% holding will keep a portion of any upside in-house. It's also not being sold on the cheap. WDR shareholders are getting roughly $20/oz for a resource that requires work to bring it up to current standards of reporting compliance, which is not a bad deal even in this climate.

WDR sale price roughly equivalent to $20/oz

But Spring Hill is not a mine just yet, it needs boxes ticking.

- It needs metallurgy doing on the ore to make sure that the gold is extractable using standard techniques employed at local mills and compatible with the rest of the ore feed. There is no need to build a separate mill so long as the geology and metallurgy are compatible with existing throughput.
- The resource estimate needs checking and bringing into compliance with the current version of JORC. If a predator came along how else could a robust valuation be placed on the deposit ? On the flip side how else can an investor estimate the risk/reward ratio before buying the company ?
- The economics need to be checked so that the mine makes money through its life. That's a great deal easier if no advanced processing plant is needed, but a good deal needs to be struck with the local mill owners if Thor decide not to build its own plant. What is of note is that around 30% of the gold should be available through simple gravity concentration based on previous testing, so reducing the amount subject to toll treatment, though obviously any gravity-recovered gold would still require refining.

Not a shovel-ready resource

Needs new JORC resource estimate

Needs new metallurgical study and DFS

All these factors need to be considered before funding mining at Spring Hill. But this isn't really why Thor bought the property. The company hopes for a million ounces (or higher) on the basis of the known geology and experience of working in similar gold fields.

Pine Creek Orogenic Lode Gold Deposits

The gold deposits at Pine Creek belong to a class known as orogenic lode gold. This is gold that is associated with mountain building or collisional tectonics. The gold may come from basinal fluids being squeezed out of sediments as they are metamorphosed by heat and pressure or it may come from fluids associated with the emplacement of granite batholiths. Metals originating from both fluid types are found separately and co-mingled, but the dominant force is the emplacement of the granites whose heat reservoirs set up large convection cells drawing in metal-rich fluids and further enriching them before they travel upwards through fissures and faults formed by the movement of the granite through the country rock.

Mineralisation style is well known and has hosted many gold mines through Australia

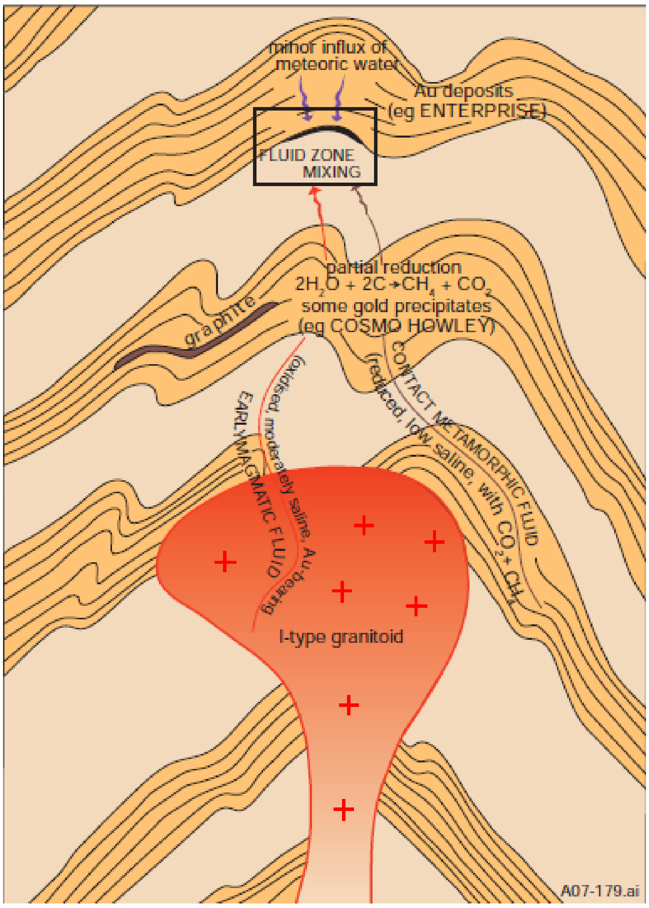


Figure 3: Schematic of Pine Creek model for ore genesis. Source Northern Territory Geological Survey Report 11 2ed 'Gold Deposits of the Northern Territory'

Gold-bearing fluids convect upwards from granite intrusions until mixing with meteoric waters of wall-rock geochemistry causes precipitation of gold

At surface the metasediments are often buckled into complex geometries expressing the underlying pressure of granite emplacement or continental collision. At Spring Hill the dominant structure is an anticline with its axis oriented NW-SE, plunging to the SE so that the metasediments are younging to the SE. The tension around the axis of the fold creates dilations running parallel to the axis and that 'ground preparation' then allows gold-bearing fluids to travel up through the rock pile and deposit their load where the geochemistry of the fluid/wall-rock interaction is favourable.

A well known plunging anticline in the USA. No equivalent photograph of Spring Hill is available

Figure 4: Sheep Mountain in Wyoming, USA. This is an archetypal plunging anticline with the axis plunging out towards the viewer. The topography in Pine Creek is much flatter. If this were Spring Hill the known gold deposits would be in the red boxes. Source Wikipedia with overlay.

Though the physical structure can be complex the mineralogy is not usually too difficult. Gold usually occurs with quartz in veins or the wall rocks of veins. Where metal sulphides are present the gold is often intimately associated with them, however free gold in quartz is not uncommon. Where veins pass through sedimentary or metasedimentary rocks the mineralogical assemblage will change in response to wall rock geochemistry. This means that gold occurrence may be restricted to a few meters or tens of meters of a larger vein system, but as long as the vein and wall rock remain in contact, gold occurrence can be assumed to continue along strike, until proven not to.

Gold often associated with particular rock strata

This can lead to some very long lived mines as they follow the plunging ore lodes down. Resource estimates tend not to be very large as the cost of converting individual intersections to a measured resource is almost as high as converting it to a practical mineable reserve once the mine has gone underground. Grade continuity is relatively low but ore body continuity is high. This gives a problem those who must estimate the size of the deposit and it is a subject that Thor shareholders will start to hear much more about as exploration of Spring Hill progresses.

Plunging lodes are expensive to explore and usually are developed before explored fully

Current Resource

The current resource was calculated according to an old version of JORC (1999) and has some atypical estimation techniques that require cross checking. However we understand that most of the resource definition drilling was on a 25m or 50m grid which is of sufficient density to be fairly sure that the resource will be reportable under the current version of JORC at a similar scale.

Rock type	Grade (g/t)	Tonnage (kt)	Resource (oz)
Oxidation Zone	2.16	1,320	92,000
Transition Zone	2.37	500	38,000
Unweathered Zone	2.47	1,820	144,000
Total	2.34	3,640	274,000

Table 1: Summary table showing non-compliant indicated historic gold resource at Spring Hill using a 1 g/t Au cut-off. Source Thor Mining

Previously JORC compliant 274koz is only one of over 20 resource estimates carried out

However Spring Hill is not a fresh new deposit. It has a been worked over the course of a century and has been subject to several resource estimations over the modern (computerised) period.

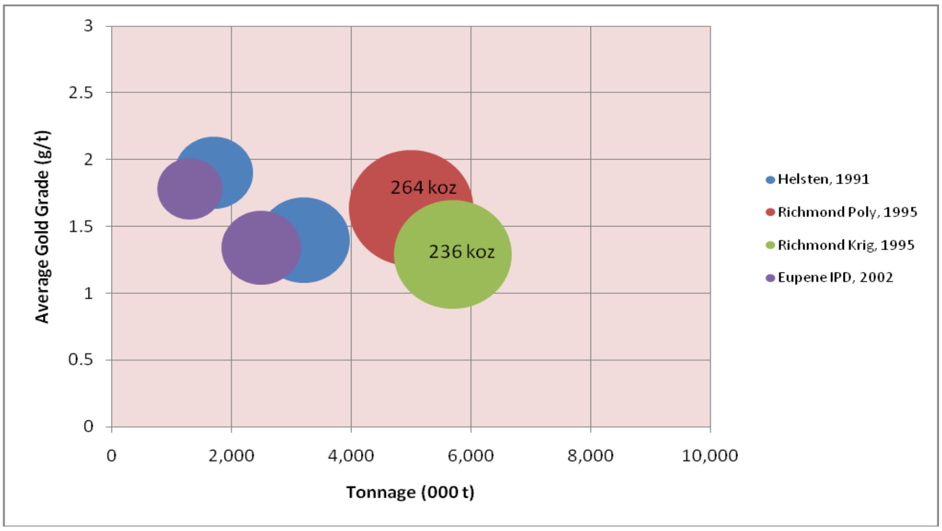


Figure 5: Summary of Historic Resource Estimations with cut off grades of 0.5 g/t Au or higher. The diameter of the bubble is proportional to the total amount of gold estimated to be present. Source Hardman & Co after Thor Mining.

Estimates from 1991, 1995 and 2002 excluding those with cut-off grades below 0.5g/t

Even the MacDonald Speijers estimate of 274 koz is actually only one of several as the geologists concerned worked to try and reach a conclusion that took all the variables into account.

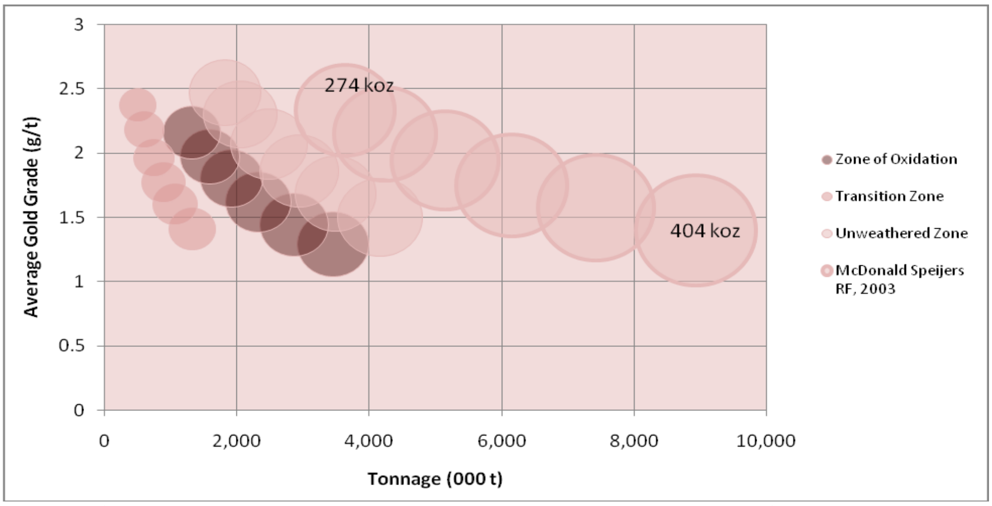


Figure 6: Summary of resource estimation results carried out by McDonald Speijers in 2003. Note that each zone was estimated separately and the 274koz total is for each zone at 1g/t Au cut-off. Source Hardman & Co after Thor Mining.

MDS resource estimates with cut-off grades of 0.5g/t or higher

Here comes the Nugget Effect

The problem with this kind of deposit is not the competence of the geologist or the optimisation of the sampling regime or even the complexity of the algorithms used to estimate grade continuity between sample points. The problem is that the mineralising system is natural and complex, so that we may never be able to estimate with a high degree of certainty what the resources in the ground are before we start to mine them. This is because mines are always statistical outliers, they lie beyond the normal trends in geology. We can say in general that X mines of Y size should be found in an area but we can't say exactly where they are or what X & Y will be.

Statistics are a means of estimation not a precise prediction this limits their usefulness in the natural world

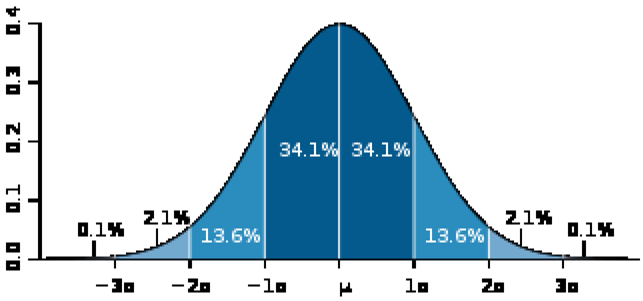


Figure 7: Graphic representation of a dataset with normal distribution showing standard deviations from the mean. Source Wikipedia.

The reports on Spring Hill show that some 30% of the contained gold is coarse and recoverable by gravity alone and that visible gold is present. As a rule of thumb visible gold equates to a grade of 10 g/t or higher but we know that the average grade of the deposit is 2.34 g/t. So how could that possibly be ? One standard deviation from 2.34 g/t is certainly not going to include grades up to 10 g/t. Even two standard deviations will struggle to get into the visible gold fraction in a normal distribution whose mean is 2.34 g/t.

If 30% of gold is coarse and some is visible grade distribution cannot be statistically normal

The reason is that high assay values are arbitrarily cut from the dataset above a value known as the 'top-cut'. This is perfectly normal practice, indeed it is essential to make sure that single super-high values do not swamp the dataset. However where that top-cut is applied is more often a matter of convention than it is of applied science.

Equally, low assay values are excluded from grade prediction because theoretically you could say that a deposit has an infinite tonnage on an infinitely low grade. Again this exclusion makes sense because gold assays have a minimum detection level that is much lower than will ever be mined in any economic deposit, but again it is often arbitrary. Above we have excluded resource estimations with a cut-off below 0.5g/t because we feel that grade control should be good enough in a vein deposit so that material is not sent to mill that is lower than 0.5g/t in grade.

Resource estimation is bounded by a series of subjective conditions

The Macdonald Speijers resource estimate of 274koz was run with 15g/t top-cut, so effectively eliminating visible gold and 30% of the recoverable gold. That is not to say that we can simply add 30% to the bottom line to compensate, though when the same estimates were run without a top-cut two out of three runs gave total resources of 392 koz and 383 koz. The third gave an estimate of 277 koz. These resources were all calculated using a gold price of AUS$550/oz (US$557 on 5 Feb 2011) and optimised to offsite processing.

Current estimate excludes the coarse fraction of gold

Our Assessment of Spring Hill

Spring Hill is a brownfield site in a prolific area for shallow gold mining. Pine Creek/Tanami style mineralisation is well known and in common with Dominion's Challenger Mine (cash cost AUS$399 and 650koz rolling resource estimate sufficient for 7 years from June 2010) and Newmont's Callie Mine (6.5Moz since 1995 and 10 years more mine life planned) a small surface footprint can belie a much larger, deeper deposit.

Good address

What shareholders will want to know is Spring Hill worth the not insubstantial cost of roughly US$20/oz ? We think that as it stands it, the property's known gold inventory is worth that, but not much more right now. There is significant work to carry out before any surface mine is started and there is time and money to spend in getting that work done. This is not a mine that is going to produce in 2011. It could produce from a moderate or several small open pits especially if further resources are found close to surface or immediately below the existing resource, but we would expect the baseline resource to grow somewhat before that becomes a preferred option.

Price supported by multiple resource evaluations of decent quality

However there is the prospect of a deeper richer and more continuous underground mine on the property. That is not to say that it is there, there has been no deep exploration, but its a very good address with a very robust geological model and statistical indications that there are million ounce mines to find in the Pine Creek area.

Good potential deeper in the system

The Big Prize

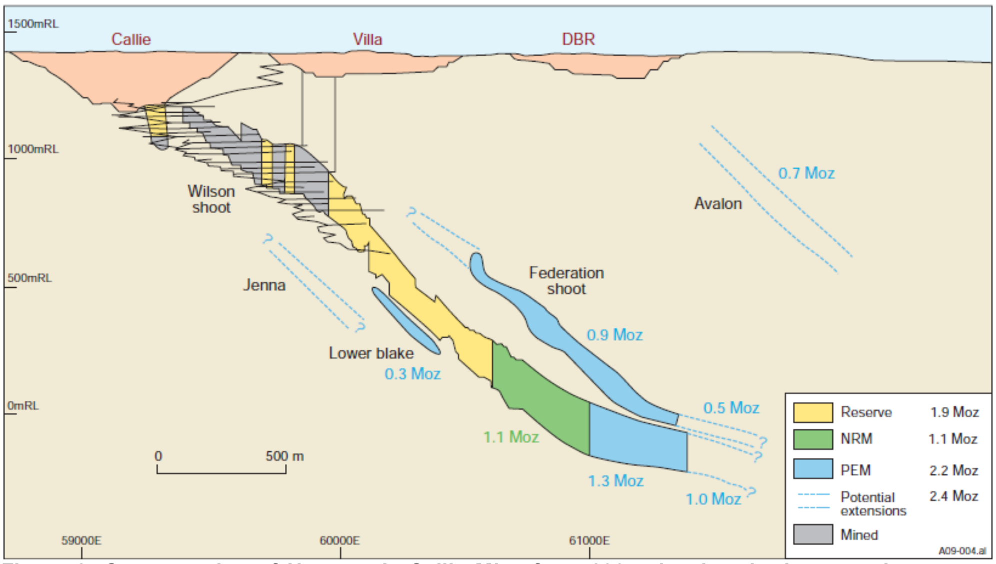


Figure 8: Cross section of Newmont's Callie Mine from 2005 showing the long continuous ore shoot and the staged resource estimate. Source Newmont via NTGS Report 11.

Thor's management are not buying Spring Hill for its existing resource. Their stated aim is to find a company-making million ounce deposit that the model says may be present deeper along the axis of the anticline. The target's closest analogy is the Cosmo Howley/Cosmo Deeps mine but Newmont's Callie Mine at >6.5Moz total resource to 1000m shows what this type of geology can produce.

Million ounce potential is there

However the nature of this kind of plunging structure means that we shouldn't expect the whole deposit to be drilled out. Its simply not economic to do so. Mining would start on a significant resource, but exploration then be an on-going task as the workings extended underground. Dominion Mining's Challenger Mine is a prime example of this style of rolling resource estimation.

Million ounce resource much more likely than multi-million

Dundas Project

Dundas soil geochemistry ongoing whilst drilling permissions are signed off

The Dundas greenfield gold project is continuing with the vast property being geochemically sampled whilst final permissions to start RAB drilling are received. The known gold anomalies are planned to be drilled to bedrock to test whether the gold is indicating potential for an in situ resource or is a transported anomaly. The existing target set will be added to by the current soil geochemistry survey.

Molyhil Mine

Molyhil Mine still waiting but under active review

It has been a while since we wrote at any length on Molyhil Mine, Thor's fully permitted tungsten/molybdenum/magnetite mine so a brief recap may be in order.

Molyhil Mine was operational in the 1970's extracting scheelite (a tungsten mineral) until 1982 when cheap Chinese exports caused the market to collapse. Records from those operations exist and so does a small open pit visible by satellite.

Underground bulk testing done

Some underground bulk sampling has been taken via a shaft sunk into the base of the old open pit. This testing provided crucial engineering data as well as geological data which suggests that the deposit is amenable to either open pit or underground mining.

All title in place and in good order

All environmental, Native Title, water, waste and mining permits are in place and being maintained in good stead until the decision is made to start mining once more.

Classification	Resource (t)	MoS2 (%)	WO3 (%)	FE2O3 (%)
Measured	540,000	0.24	0.33	29.4
Indicated	2,300,000	0.18	0.38	27.9
Inferred	900,000	0.20	0.15	27.0
Total	3,740,000	0.19	0.32	28.0

Mineable reserve is 60% of current resource

The mineable reserve is stated at 2.14Mt or roughly 60% of the known resource. The mine plan will need to be re-optimised should the resource be expanded significantly.

Processing

Processing is proposed to be a mixed wet/dry gravity and flotation circuit. The initial tests by independent consultants showed that two primary concentrates were possible; moly at 51.4% MoS2 recovering 77.8% of contained metal and tungsten at 72.9% WO3 recovering 65.4% of contained metal. The results above represent a recovery optimised solution rather than a price optimised solution. This is subject to revision as is dictated by metals prices. For example if, as is currently the case, the market wants tungsten over molybdenum then the circuit could be optimised towards tungsten preferentially losing moly to tail so that a higher proportion of tungsten may be retained.

By-products

By-product magnetite for domestic use should hedge against exchange rate variation

At present it is planned to produce a high-quality magnetite by-product whose use is mainly in coal washing. This has the added advantage of being consumed within the booming Australian coal industry so should attract robust pricing that is not directly subject to exchange rates.

However, if the tungsten price continues to rise the mine may become a tungsten mine with a moly by-product. It remains to see where the balance lies. The grade balance is not an exact science and will vary with the rock as it is extracted, indeed it may even vary with the weather if certain processing techniques are employed.

That said we believe that the deposit is robust at current metals prices and recoveries and we do not include magnetite in our valuation models.

Exploration & Finance

Adding deeper resources should extend mine life

The company has stated that it will be necessary to carry out an economic reappraisal prior to taking the decision mine. This is the right thing to do in the light of all that has passed over the last two years. It has also committed to carry out exploration below the current resource shell.

Resources known to extend at depth and may merge into a single skarn body

We know that roughly 40% of known resources are outside the planned pit shell and that the deposit is open at depth. We also know that grades are comparable if not better the deeper into the resource you go. It has always been hoped that an underground operation can continue below the open pit following the skarn body(s) down. Thor is going to drill some deep holes to provide confidence to those forward plans and if possible bring some of the deeper known resource into the reserves category for inclusion in a mine plan.

At 400,000tpa the mine life is currently around 5 years. This does not seem to be long enough to tempt financing at the current metals pricing. Providing either extra reserves to extend the open mine by 2 or more years or extra confidence that an underground operation is feasible (and likely to be profitable) should bring extra interest from both buyers looking to secure supplies and financiers looking for a good return on their investment.

Valuation

We suggest that Molyhil has a robust and positive NPV at present but would benefit from a longer minelife

We regularly revisit our published valuations in the light of metals price changes and have done so for Thor. Given that Thor has already announced that it will be revisiting its economics for Molyhil it would be unfair to pre-empt that using old figures. However, using those old figures the mine appears profitable on paper right now. Indeed it even appears profitable without production of a moly concentrate, though significantly less so and not at a margin that would be comfortable or sustainable, and we would suggest that the management's decision is right for the deeper exploration both of the deposit and its economics.

6 month tungsten price is the primary reason for the economics of Molyhil having strengthened

Figure 9: 12 month molybdenum and tungsten pricing. Source Infomine.com

Metals Markets

What has changed in the metals markets to swing things back in favour of Molyhil ?

Primarily it is the tungsten price and its policy situation, both of which are being driven by a basic shortage of supply.

Moly is not in short supply at present. While there are several large advanced moly-only and moly-copper projects in the pipeline there are no equivalents in the tungsten field. Mainly this is a quirk of geology with deposits that concentrate tungsten into mineable grades being, for the most part, relatively small. 10Mt is a large tungsten deposit that will run for more than a decade whereas 10mt is only a year or two's production at Bingham Canyon, a mine that is now a century old. Indeed Bingham Canyon is looking forward to becoming a major player in moly as it expands once more, this time into new deeper and more moly-rich deposits below the current pit floor. The venerable Climax & Henderson mines still have large moly-only reserves with Climax having recently been through a restart scoping study which was approved by the FCX board prior to the price crash and Henderson's reserves are estimated at 138Mt @ 0.18% Mo, enough for another 15 years or more. Indeed Henderson appears to be flexing its muscles by upping production by 50% in 2010 increasing the US's total production by 17% according to the USGS. This increased production seems to be keeping up with increased demand and so is squeezing out other producers in a strategic move by FCX that should help the Climax Mine maintain market share when it comes back on-stream.

Molybdenum spot prices being depressed by increased production at Henderson

Reports from China suggest that the moly price over the last year was propped up by Chinese stockpiling. We find this credible especially in the light of analysis by Brook Hunt that suggests that between 3 and 4 million tonnes of copper cathode has been stockpiled within China and outside the international market. Any seepage of moly from processed concentrate over into the open market would have suggested a disparity of production between the two, usually co-produced, metals instead we have seen a slow but steady rise in moly price from $8/lb to today's $17/lb. We are not suggesting that the Chinese have frozen or restricted moly production, more that a proportion of that production has not yet reached the open market. Given China's preoccupation with supplying its own industry those stocks may never reach the open market if domestic demand is sufficient to absorb them.

China possibly holding moly stocks off the books

We have regularly stated that it is logical to expect that moly prices will pick up with a time delay after tungsten prices start to move. Stockpiling does not change that overall analysis but it will make the time delay longer and we now believe that a relatively steady rise from $16-$20/lb can be expected for some months yet as China's economy appears to be overheating compared to the rest of the world. Simply put if China slows we need to see global oil & gas production to rise outside its borders to provoke the need for high corrosion resistance steel and allow the moly market to unwind. Until then we think that there may be some overhang on a global scale.

We expect a steady rise in price unless China dumps its stocks

Tungsten is a simpler tale. Again China is at its centre, but this time as a dominant producer. As with all its mining rationalisation, safety and efficiency are driving the closure of many smaller and artisanal operations. This is tightening mined supplies, 75% of which come from China. Allied with domestic demand for the metal this rationalisation appears to have reduced the amount available for export. Heightened awareness of metals supply chains at a policy level has seen tungsten identified by most industrialised countries as 'strategic' or critical' to economic success. The USA use it as replacement for lead in small calibre ammunition and for depleted uranium in larger ordnance.

Tungsten in fundamental supply shortage

Having inspected all the publicly traded commodities, including ags, energy and metals, we can find no other commodity that is following quite the same trace as tungsten. The closest fit appears to be cotton. So what's different about tungsten ?

- Small deposit size
- Global spread (most granite types and therefore most mountain belts or their remnants)
- Found in association with tin & tantalum in the DRC so under scrutiny as conflict minerals (Dodd-Frank Reform Act).
- Identified as strategic or critical in all major economies
- Relatively high degree of recycling for a minor metal

New Conflict Minerals Act in USA may have provoked price spike

Apart from the Dodd-Frank Reform Act nothing has changed here to provoke a price rise, so its probably worth a closer look at Dodd-Frank.

The Dodd-Frank Wall Street Reform Act

Conflict minerals legislation part of wider Wall Street reform act

The Dodd-Frank Wall Street Reform Act is a very rare beast. It is a change of SEC rules supported by both sides of the political divide, and many NGOs. It will force all US companies to disclose whether minerals originating in conflict zones in and surrounding the DRC are used in the manufacture of their goods. It was enacted in April 2010 and comes into force in April 2011. Although the DRC is a relatively small player in the world tungsten market, supplies are already tight so adding or taking away even 5% of the non-contracted tradable ore from the global market could be having an impact already as American companies rush to stockpile tungsten prior to enactment of the law.

Applies to less than 2% of legitimate world tungsten production

We will find out at the end of April whether Dodd-Frank has provoked panic buying in the notoriously opaque tungsten spot market, or not. If it has this only goes to show just how tight that market is because as we said the DRC and its surrounding areas supply a tiny proportion of the world's tungsten. USGS figures state that of 8,180 tonnes consumed in the US from Jan-Sept 2010 only 126 tonnes (1.5%) legitimately originated in countries bordering the DRC. The act is however specifically aimed at preventing smuggling and it is impossible to tell exactly how much processed or semi-processed tungsten originates in the area. The USGS estimates just under 1,500 tonnes of raw ore of unknown grade in 2007 and around 900 tonnes in 2008 originate in the war-torn east of the DRC. These figures are consistent with estimates by the NGO Global Witness. So if we assume a typical grade of perhaps 2% tungsten (hand-picked ores must have visible grades so they tend to be higher than in mechanised western mines) that would put the total amount of tungsten coming out of the DRC at around 30 tonnes a year compared with total global production of 61,000 tonnes of metal (0.05%).

May affect as little as 0.05% of world W production being smuggled or produced in conflict zones

If Dodd-Frank has induced a price step it may be that the increased admin cost is now being factored into the spot price of tungsten in which case the up-step could be relatively long lived. If it is volume related we can expect prices to trend back quite quickly. US Census Bureau figures for US consumption are currently running 4 months behind calendar, so only include data to end of September 2010 making it impossible to examine consumption volume trends through the period of the tungsten price rise. If a strong consumption signal is seen in the data from October 2010 it would add weight to the argument that the price rise will be short lived.

Effect on tungsten market volumes can only be short-lived if it is present at all

Clearly the act is needed to address both human rights and criminal activity within the metals production supply chain but there will be many companies in the US that use tungsten in tiny quantities in their manufacturing process who may feel that the additional administrative burden should be for others to take. We have some sympathy for the sheet metal worker who has no visibility over where the metals contained in his tools have come from, who chooses to buy a job lot before the Act is enforced. In the long term the amount of metal involved is so miniscule that it cannot affect tungsten pricing in any material way even having internalised the admin costs imposed. However psychologically, in a time of straightened means buying a couple of years worth of cutting disks to put in the cupboard is an understandable reaction.

This analysis does not hold for the other two T's; tin and tantalum. Those markets are much more susceptible to smuggling due to their higher value and the exceptional grade of the materials known to exist close to the borders of the DRC.

Other Policy News

EU starting to produce policy response

Late last year we wrote on Thor's potential under a raft of new policy towards 'Critical' or Strategic' minerals and we noted that the EU was the last major economic bloc to report on these economically essential mineral supply chains and that we expected to see quick action from the EU from that point on. The EU has now started to formulate its policy direction and the Commission recently published a communication (Tackling the Challenges in the Commodities Markets and on Raw Materials, 2.2.2011. COM 25) to that end.

Despite some media speculation this communication was short on substantive action. The only new action that was laid out was that it set the scene for a more transparent commodities trading environment both in terms of physical and derivatives trading and increased focus on the Extractive Industry Transparency Initiative. This may raise the heckles of some, especially in the trading community, but ultimately should be of benefit to producing miners by reducing arbitrage and so driving down price volatility.

Initially concentrating on commodities trade transparency

The most surprising revalation from the EU was that it did not rule out stockpiling of any resource or commodity. A Europe-wide stockpiling system backed up by the combined minerals intelligence capability of all the 27 geological surveys would be a formidable force to be reckoned with in every market it touched and more than a little Soviet in look and feel.

The UK' Parliament has also held a series of hearings on strategically important metals the full proceedings of which can be read on the House of Commons website; (http://www.parliament.uk/business/committees/committees-a-z/commons-select/science-and-technology-committee/inquiries/strategically-important-metals/). Written evidence from a variety of interested parties produced some interesting commonality in thinking across the industry, professional and academic bodies.

UK Commons inquiry finds in line with EU Commission

Primarily this included;
A greater focus on product design and materials science to minimise the use of valuable and rare metals and where that was not possible to design products that are easily recycled. Specifically the European WEEE (Waste Electrical and Electronic Equipment) standard was thought to be in need of revision and expansion and for its waste stream to be treated as a resource.

Industry and professional bodies focus on recycling and design to de-risk supply chains

As we previously stated this will not have substantial effect on either tungsten or molybdenum life-cycles.

Administrative Catchup

Since our last note there have been a few items of administrative news to catch up on.

New CFO/Secretary
Laurie Ackroyd has returned to his full time position with Western Desert Resources Ltd (WDR) as it approaches production with its Direct Shipping Iron Ore project, Roper Bar, in the far Northern Territory of Australia. He is replaced by Allan Burchard, an accountant with 40 years experience and focus on resources companies in Australia and Central Asia.

Office Change
Thor and its subsidiaries have all moved registered address to:
Unit 7, 60-66 Richmond Road
Keswick, SA 5035
Australia

The previous office space was leased from and shared with WDR. As it and Thor both anticipate mining in the relatively near future (WDR hopes to be in production by the end of 2012), space was getting tight and Thor have moved a few blocks down the road, but still in the same general area of Adelaide.

Options
Directors were issued a total of 10 million unlisted options at AUS$0.04 to exercise on or before 23 November 2013.
A further 1 million options were issued at AUS$0.05 to exercise on or before 21 December 2013.

Capital Raising
A total of £1.1m was raised by placement of 29,777,778 new shares at 2.25p/sh to sophisticated investors in the UK and AUS$700,000 by issuance of 20,000,000 voting CDIs (Chess Depository Interests or a warrant by any other name) at 3.5 cents/CDI.

We note with interest that the raising was carried out by Thor's new UK broker, Simple Investments of Godalming. Simple's clients include Red Rock Resources and Regency Mines both part of the stable of well known mining entrepreneur Andrew Bell and also Starvest plc, Bruce Rowan's investment vehicle.

Conclusions

Spring Hill rounds out Thor's risk profile

Adding a second, significantly more advanced, gold property to the books should help Thor capture some of current high gold price. Though not currently JORC compliant the 274koz are backed up by data and samples that have gone though at least one cycle of QA/QC in 2003 and are not simply scratched on the back of an envelope and did constitute a compliant resource under the 1999 version of JORC, so we believe that there is a reasonable degree of confidence in the scale of the current resource if not the exact numbers.

Don't expect a gold mine this year there are things to do

It is a small gold resource that is potentially economic at today's price since it is at surface and so eminently open pittable. That resource is open at depth and its possible extension represent a primary target for further exploration. The area is subject to extreme climate, both wet and dry, so exploration and operations may be sporadic. That may carry through to any mining operations but that would depend on whether the resource can be expanded significantly.

It has deeper and bigger potential

For a company like Thor, 274koz is a starter pit. There may well be US$380m of gold in the ground at current prices, the deal certainly takes that into account with a total cost of over AUS$4m and 15 million CDIs to gain 80% (estimated total at 2.25p is AUS$5.625m or roughly US$20/oz). But that's not really the point.

The prize at Spring Hill is deeper in the geological system and is a potential multi-million ounce Cosmo Howley or even a Callie analogue. Both the Pine Creek area and the area around Callie, share very similar geologies. So much so that the geological models of the two historic mining districts are effectively transferrable. The statistical distribution of resource size and grade of the two districts follow very similar curves, though Pine Creek resources tend to be more numerous but smaller. In fact on the Pine Creek resource size/frequency distribution curve the Spring Hill resource is right in the middle at between the 50th and 60th percentile of known deposits. That there is enough data to do statistical comparisons of both these goldfields shows how prolific they are.

Existing active mines and mills substantially de-risk the known deposit

Both districts are well known with ample scientific literature and historic mining data, but whereas the Tanami Inlier has been continuously mined Pine Creek fell out of favour during gold price lows allowing Crocodile Gold Corp to take a dominant land position. There have been at least 5 X one million ounce deposits found within 50km of Spring Hill and the frequency curve suggests that there may be some more. Crocodile's 4 operating mines, 2 in development and 3 gold mills in the area make a small, almost zero infrastructure mine a distinct possibility. So much so that as much as half the in-ground value of the known gold is in its risk and we suggest that in addition to Thor's literature Crocodile Gold's website will give an excellent flavour of the type of deposits being sought and the kind of deep-seated continuity that is possible in a relatively small surface footprint.

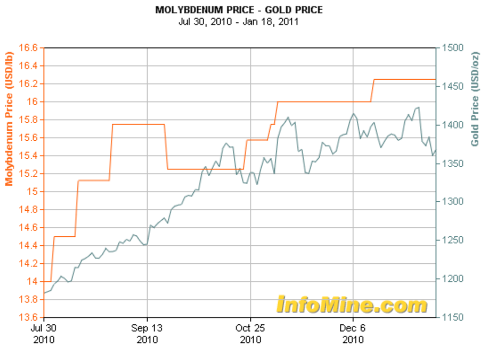
Molyhil still core to Thor's value but beware tungsten price spikes

Molyhil continues to provide core value to Thor's price and our estimates show that at current tungsten prices the current resource is NPV positive, even without a moly concentrate or magnetite by-product. However we urge an element of caution regarding that same tungsten price due to the wild card of the Dodd-Frank Act. We should know by the end of April whether any of the recent rise was due to US panic buying.

Moly prices are actually doing better than they seem to be

We may sound negative on the moly price, maybe overly so since it has been tracing roughly the same path as gold or silver over recent months, so it can hardly be seen as underperforming. The problem here, as with tungsten, is the opaqueness of the market. The LME's moly contracts will take time to become the de facto standard especially if the Chinese continue with their stated aim of breaking the LME's stranglehold on metals market-making. Its stating the obvious but until there is a de facto standard there will be margins to be made through arbitrage in a market where only a small fraction of the prices are visible. Its good for the traders but not necessarily any help to the miners especially as the traditional mechanisms around hedging are eroded by ETFs and possible blanket state intervention to curb 'excessive' commodities speculation.

We pose the questions; are the forces of global internet access, Chinese resource strategy and EU regulation combining to drive commodities traders out of the loop ? One less finger in the pie should theoretically mean better profits for the rest of the market, but what about the buffers against supply shocks that traders provide through their warehouses ? Who else is going to carry out the role of supply consolidation across multiple mines to provide for industrial consumers ? By removing arbitrage opportunities do we hand even more price setting power to the metal smelters and refineries, effectively forcing vertical integration of supply chain and increasing the risk of monopoly? and can excessive ever be defined in terms of speculation within a free market ?



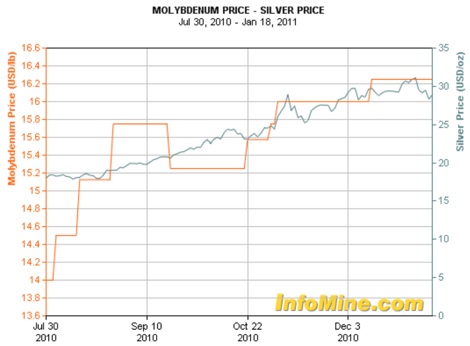


Figure 10: 6 Month molybdenum/gold and molybdenum/silver prices. Source Infomine.com

Management		Major Shareholders		
Executive Chairman	Mick Billing	Western Desert Resources Ltd	47,217,974	12.37%
CFO/Secretary	Allan Burchard	Vidacos Nominees Ltd	15,376,825	4.03%
Non-exec Director	Michael Ashton	Barclayshare Nominees Ltd	13,544,559	3.55%
Non-exec Director	Norman Gardner	TD Waterhouse Nominees (Europe) Ltd	12,338,445	3.23%
Non-exec Director	Greg Durack			
Non-exec Director	Trevor Ireland			
Exploration Mgr	Stuart Till			
Key Dates		**Key Milestones for 2011**		
Quarterly Reports	31st March, 30th September	Spring Hill Exploration		
Half Yearly Report	31st December	Dundas Project RAB drilling		
Annual Report	30th June	Molyhil Deep Hole		
Full Year Results	31st October			

Table 2: Key company data.

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Hardman & Co

4-5 Castle Court
London
EC3V 9DL
United Kingdom

Tel: +44(0)20 7929 3399
Fax: +44(0)20 7929 3377

www.hardmanandco.com