# Northern Star
# BUY

| | |
|---|---|
| Current Price: | $0.57 |
| Valuation: | $0.73 |

| | |
|---|---|
| Ticker: | NST |
| Sector: | Materials |

| | |
|---|---|
| Shares on Issue (m): | 347.5 |
| Market Cap ($m): | 198.1 |
| Net Cash ($m): | 22.5 |
| Enterprise Value ($m): | 175.6 |

| | | |
|---|---|---|
| 52 wk High/Low: | $0.60 | $0.10 |
| 12m Av Daily Vol (m): | | 1.34 |

**Key Metrics**

| | 11F | 12F | 12F |
|---|---|---|---|
| P/E (x) | 11.5 | 4.8 | 4.7 |
| EV/EBITDA (x) | 3.7 | 2.5 | 2.5 |
| **Financials:** | | | |
| Revenue ($m) | 115.9 | 131.9 | 131.9 |
| EBIT ($m) | 20.5 | 59.1 | 60.4 |
| NPAT ($m) | 17.2 | 41.3 | 42.3 |
| Net Assets ($m) | 26.5 | 59.5 | 91.5 |
| Op CF ($m) | 68.1 | 65.7 | 65.4 |
| **Per Share Data:** | | | |
| EPS (cps) | 4.6 | 11.3 | 11.6 |
| DPS (cps) | 0.0 | 0.0 | 0.0 |
| Div Yield | 0.0% | 0.0% | 0.0% |
| CFPS (cps) | 18.1 | 18.0 | 17.9 |

**Share Price Graph**


Analysts:
Troy Irvin
Patrick Chang
Tim Serjeant

**7 September 2011**

## Sharp operator

### Site visit / Initiation:

Argonaut recently visited Northern Star's (NST) 100% owned Paulsens and Mt Olympus gold projects in the Ashburton Region of Western Australia. Both projects are well accessed from the iron ore mining town of Paraburdoo.

### Impact: Positive

NST's July 2010 acquisition of the Paulsens gold mine in Western Australia has proved to be one of the sharpest transactions in the junior gold sector in FY11.

In the first 12 months NST extracted 86.5koz from the underground operation, ~10% above the previous record under former owner Intrepid (IAU), and 13% above Company guidance of 75koz. The $40m price tag was repaid from cash flow within 7 months, leaving NST debt and hedge free.

### View: Positive

Assuming cash costs of $600/oz, NST is on an EV/EBITDA multiple of 2.5x compared to a peer average of 5.2x. Given Paulsens has 2 years mine life remaining to the bottom of Voyager 1, and current drilling suggests a further 3 years potential at Voyager 2 (exploration target 100-250koz) the stock appears undervalued. The Company is pursuing further cost improvements of >$50/oz after successfully transitioning from contract to owner mining.

NST should command a re-rating as ongoing Resource definition drilling adds to the mine life and the Company executes its growth strategy. Opportunities to amplify production include a mill expansion to 650ktpa, potentially fed by additional ore sources from Paulsens upper levels, Paulsens open pit, and Ashburton (within 200km trucking distance to Paulsens mill). The Board and Management cover the core disciplines to operate and grow a successful mining business.

The Company has an aggressive $20m exploration budget ($7.5m Paulsens mine, $12.5m regional). The next Resource upgrade is anticipated in the March Q 2012.

### Recommendation: Buy

NST is trading at a 22% discount to Argonaut's valuation of 73c (assuming 85koz pa production over a 5 year mine life). At spot gold and fx of US$1,875/oz and 1.05 the valuation rises to $0.90.

| | |
|---|---|
| **Recommendation** | **BUY** |
| **Current Price** | **$0.57** |
| **Valuation** | **$0.73** |

| | |
|---|---|
| **Sector** | **Materials** |
| **Issued Capital (m)** | **347.5** |
| **Market Cap (m)** | **$198.1** |
| **Updated** | **07-September-2011** |

| Profit & Loss ($m) 30 June | 2011E | 2012E | 2013E | 2014E |
|---|---|---|---|---|
| **Sales Revenue** | **115.9** | **131.9** | **131.9** | **131.9** |
| Other income | 2.6 | 1.5 | 3.1 | 5.1 |
| Operating costs | 44.0 | 51.1 | 51.1 | 52.1 |
| Exploration expense / written off | 1.3 | 7.6 | 7.7 | 3.5 |
| Corporate / administration | 3.0 | 5.0 | 5.1 | 5.2 |
| Acquisition related royalties | 22.1 | 0.0 | 0.0 | 0.0 |
| **EBITDA** | **48.1** | **69.7** | **71.1** | **76.2** |
| D & A | 27.5 | 10.6 | 10.6 | 10.6 |
| **EBIT** | **20.5** | **59.1** | **60.4** | **65.5** |
| Finance expenses | 0.3 | 0.0 | 0.0 | 0.0 |
| **Operating Profit** | **20.2** | **59.1** | **60.4** | **65.5** |
| Tax expense | 3.0 | 17.7 | 18.1 | 19.7 |
| Impairment of assets | 0.0 | 0.0 | 0.0 | 0.0 |
| Minorities | 0.0 | 0.0 | 0.0 | 0.0 |
| **NPAT** | **17.2** | **41.3** | **42.3** | **45.9** |
| Normalised NPAT | 17.2 | 41.3 | 42.3 | 45.9 |

| Financial Summary | 2011E | 2012E | 2013E | 2014E |
|---|---|---|---|---|
| **Reported Earnings** | | | | |
| Net Profit ($m) | 17.2 | 41.3 | 42.3 | 45.9 |
| EPS (cents) | 4.6 | 11.3 | 11.6 | 12.6 |
| PER (x) | 11.5 | 4.8 | 4.7 | 4.3 |
| **Normalised Earnings** | | | | |
| Net Profit ($m) | 17.2 | 41.3 | 42.3 | 45.9 |
| EPS (cents) | 4.6 | 11.3 | 11.6 | 12.6 |
| EPS Growth (%) | | | | |
| PER (x) | 11.5 | 4.8 | 4.7 | 4.3 |
| **Cashflow** | | | | |
| Operating Cashflow ($m) | 68.1 | 65.7 | 65.4 | 72.9 |
| GCFPS (cents) | 18.1 | 18.0 | 17.9 | 20.0 |
| PCF (x) | 3.1 | 3.2 | 3.2 | 2.9 |
| **Dividend** | | | | |
| Dividend (cents) | 0.0 | 0.0 | 0.0 | 0.0 |
| Yield (%) | 0.0 | 0.0 | 0.0 | 0.0 |
| Franking % | 100 | 100 | 100 | 100 |

| Cash Flow ($m) | 2011E | 2012E | 2013E | 2014E |
|---|---|---|---|---|
| **Operating Cashflow** | **68.1** | **65.7** | **65.4** | **72.9** |
| - Capex | 10.8 | 10.1 | 10.3 | 10.5 |
| - Exploration & Evaluation | 5.0 | 22.7 | 23.1 | 10.5 |
| - Asset purchases (+ asset sales) | 0.0 | 0.0 | 0.0 | 0.0 |
| **Free Cashflow** | **52.3** | **33.0** | **32.0** | **51.9** |
| - Dividends | 0.0 | 0.0 | 0.0 | 0.0 |
| + Equity raised | 0.0 | 0.0 | 0.0 | 0.0 |
| + Debt drawndown (- repaid) | 0.0 | 0.0 | 0.0 | 0.0 |
| **Net Change in Cash** | **52.3** | **33.0** | **32.0** | **51.9** |
| Cash at End Period | 16.6 | 49.5 | 81.6 | 133.5 |

| Financial Ratios | 2011E | 2012E | 2013E | 2014E |
|---|---|---|---|---|
| **Balance Sheet Ratios** | | | | |
| Total Debt / Equity (%) | 0.0 | 0.0 | 0.0 | 0.0 |
| Interest Cover (x) | - | - | - | - |
| Acid test ratio (x) | 0.6 | 1.9 | 2.7 | 4.0 |
| **Profitability Ratios** | | | | |
| Net Profit Margin (%) | 14.9 | 31.3 | 32.1 | 34.8 |
| Return on Assets (%) | 82.2 | 104.6 | 107.7 | 117.1 |
| Return on Equity (%) | 65.0 | 69.5 | 46.2 | 32.0 |

| Balance Sheet ($m) | 2011E | 2012E | 2013E | 2014E |
|---|---|---|---|---|
| Total Assets | 41.6 | 106.0 | 137.7 | 189.4 |
| Total Debt | 0.0 | 0.0 | 0.0 | 0.0 |
| Total Liabilities | 15.1 | 46.6 | 46.2 | 46.1 |
| Shareholders Funds | 26.5 | 59.5 | 91.5 | 143.4 |

| Valuation Summary | A$m | A$/sh |
|---|---|---|
| Paulsens | 190.7 | 0.55 |
| Ashburton | 26.7 | 0.08 |
| Exploration | 20.0 | 0.06 |
| Forwards | 0.0 | 0.00 |
| Corporate | -7.2 | -0.02 |
| Unpaid Capital | 1.6 | 0.00 |
| Cash Estimate | 22.5 | 0.06 |
| Debt | 0.0 | 0.00 |
| **Total @ 7.7% discount rate** | **254** | **0.73** |

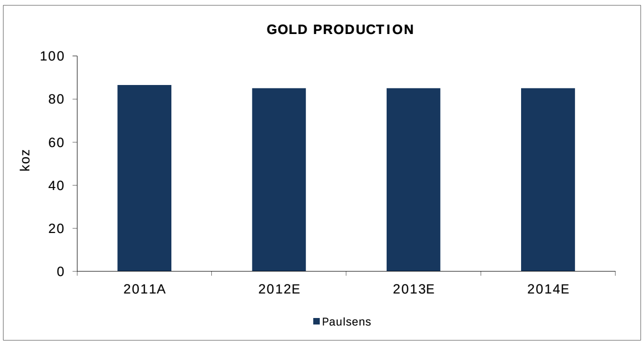
| Gold Production Summary | 2011A | 2012E | 2013E | 2014E |
|---|---|---|---|---|
| Paulsens (koz) | 87 | 85 | 85 | 85 |
| **Total Gold** | **87** | **85** | **85** | **85** |
| Gold Cash Cost (A$/oz) | 593 | 600 | 600 | 612 |
| Gold Price Realised (A$/oz) | 1367 | 1550 | 1550 | 1550 |

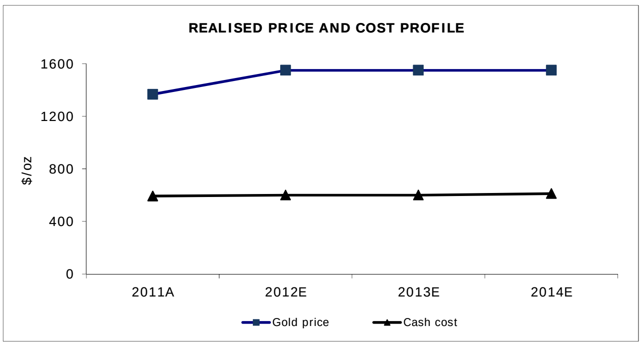
| Reserves & Resources | | | |
|---|---|---|---|
| **Resources** | **Mt** | **g/t** | **Au (koz)** |
| Paulsens | 1.3 | 5.3 | 226 |
| Murchison | 7.1 | 2.9 | 668 |
| Mt Clement | 0.2 | 1.8 | 13 |
| Golden Crown | 0.3 | 3.2 | 34 |
| **Total** | **9.0** | **3.3** | **940** |

| | |
|---|---|
| EV / Resource ($/oz) | $187 |

| Directors | |
|---|---|
| Christopher Rowe | Non-Executive Chairman |
| Bill Beament | Managing Director |
| Michael Fotios | Non-Executive Director |
| Peter Farris | Non-Executive Director |

| Substantial Shareholders | % |
|---|---|
| Investmet | 18.9% |
| Paradice | 7.6% |
| Michael Fotios | 5.5% |



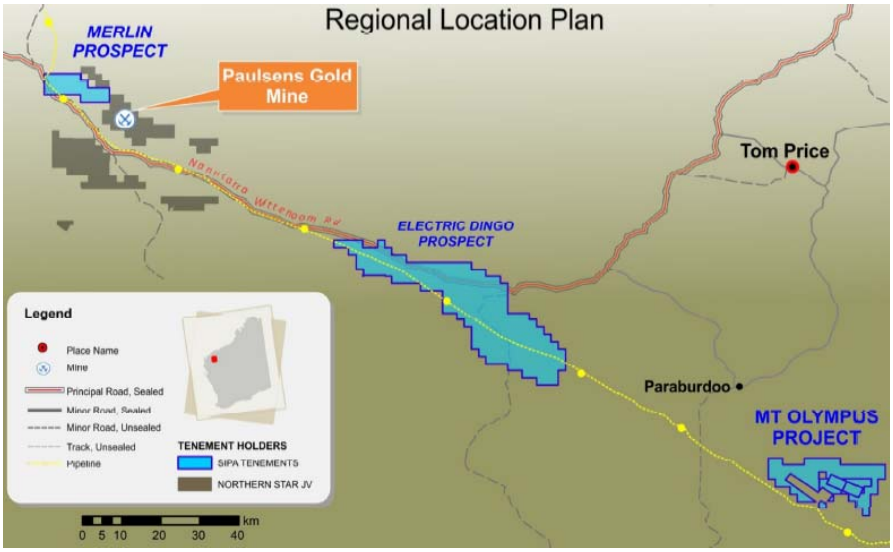



# Argonaut site visit

**Argonaut visited NST's Paulsens and Mt Olympus gold projects…**

Argonaut recently visited Northern Star's (NST) 100% owned Paulsens and Mt Olympus gold projects in the Ashburton Region of Western Australia.

Figure 1: Regional location plan




Source: NST

**…accessed from the iron ore mining town of Paraburdoo**

Both projects are well accessed from the iron ore mining town of Paraburdoo.

## Paulsens mine

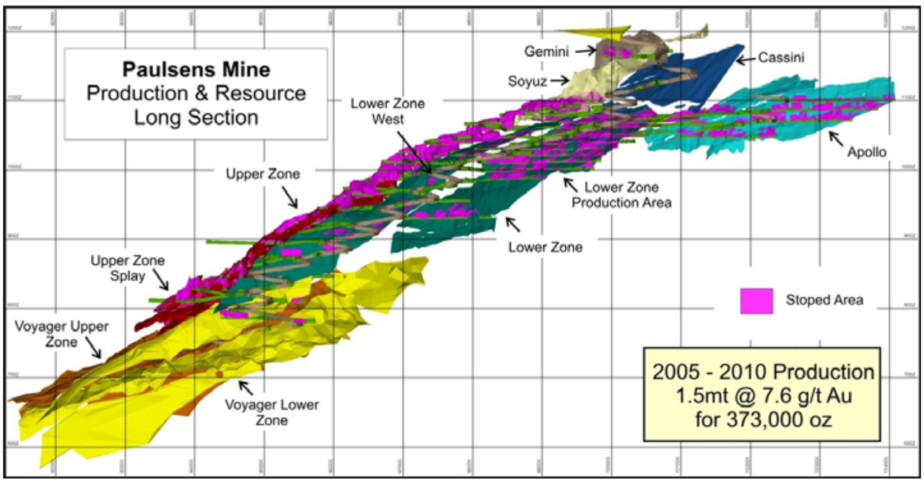
**NST acquired the Paulsens mine in June 2010…**

NST acquired the Paulsens mine in June 2010. The mine commenced operations in 2005 under Intrepid (IAU) ownership, producing 342koz down to a depth of 400m until NST assumed control.

### Production - Past and present

Production has mainly been sourced from two ore positions (the upper and lower zone).

Figure 2: Paulsens mine – Long section




Source: NST

**…executing one of sharpest transactions in the junior gold sector in FY11**

The acquisition has proved to be one of the sharpest transactions in the junior gold sector in FY11. The best year of production historically was 78.2koz at cash costs of $560/oz.

**The best year of production historically was 78.2koz**

Table 1: Paulsens mine – Historical performance

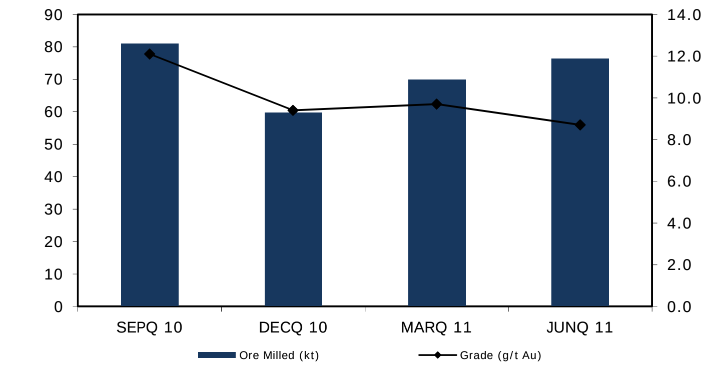
| Historical production | | |
|---|---|---|
| | Production (koz) | Cash cost ($/oz) |
| 2005 | 44 | 456 |
| 2006 | 74 | 463 |
| 2007 | 71 | 501 |
| 2008 | 78 | 560 |
| 2009 | 75 | 674 |
| **Total** | **342** | **539** |

Source: NST, Argonaut

**In the first 12 months NST extracted 86.5koz…**

In the first 12 months NST extracted 86.5koz at cash costs of $593/oz, repaying the $40m price tag from cash flow within 7 months.

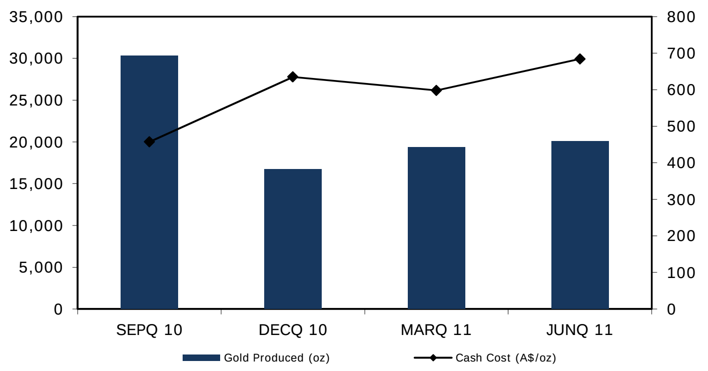
Figure 3: First 12 months - Ore milled and grade




**…at cash costs of $593/oz…**

Source: Argonaut

Figure 4: First 12 months - Production and cash costs




**…repaying the $40m price tag from cash flow within 7 months**

Source: Argonaut

## Geology

The Paulsens deposit lies within the west-northwest trending regional Wyloo anticlinal dome, and is a mesothermal, orogenic lode deposit hosted in a structurally controlled quartz vein within a sedimentary package.

Mineralisation is concentrated between a faulted gabbroic dyke. Like other orgenic lode deposits, gold is associated with quartz, carbonate and pyrite with high grade commonly associated with massive sulphide zones. The mineralisation has a ~30° plunge to the north west.

## Current Resources

**The December 2010 Resource is 226koz…**

A 226koz Resource was estimated by NST in December 2010 using lower cut-off grades of 3.0g/t for underground and 1.2g/t for open pit.

Table 2: Paulsens Resources December 2010

| Paulsens Resources | | | |
|---|---|---|---|
| | Mt | g/t | koz |
| Open Pit | 0.67 | 3.0 | 65 |
| Upper Levels | 0.13 | 7.1 | 30 |
| Voyager 1 | 0.46 | 8.1 | 120 |
| Stockpiles | 0.04 | 5.5 | 8 |
| GIC / CIT | | | 3 |
| **Total** | **1.31** | **5.3** | **226** |

Source: NST, Argonaut

**…underpinned by the Voyager 1 lode**

The estimate is underpinned by the key Voyager 1 lode that is being mined at ~1,000oz per vertical metre.

## Underground mining

**Mining and milling risk is considered low…**

Mining risk is considered low. A top down up-hole stoping method is employed. The ground conditions are excellent with no backfill required, and minimal water.

Mining recently transitioned from contract to owner operator “with a twist”. NST anticipates a cost saving of ~$50/oz by running its mining division as a separate entity, preserving client-contractor pricing tension.

NST purchased most of the mining equipment from the former Contractor. The small mobile equipment fleet includes 1x twin boom Jumbo, 1x long-hole production rig, 2x R1700 loaders and 2x Atlas Copco MT6020 trucks.

**…due to high grades and good ground conditions…**

Decline and ore drive development is well in advance of current stoping fronts, underpinning base load output of >80koz over the next 12 months.

## Milling

Milling risk is also considered low. A straight CIL process is employed, achieving ~94% metallurgical recovery over the past 12 months. Plant throughput is currently 340ktpa (v design of 250ktpa).

Figure 5: Paulsens plant – Dry (LHS) and wet (RHS) circuits

**…and the application of a straight CIL process**

Source: Argonaut

## Resource growth – Down plunge extensions

**Due to the shallow plunge…**

Due to the shallow plunge of the mineralisation at Paulsens, drilling well ahead of development is difficult. However, the structural control on the gold mineralisation is well understood. The deposit is projected to continue further down plunge from Paulsens, Voyager 1 and Voyager 2, replenishing the mine life.

**…drilling ahead of development is difficult**

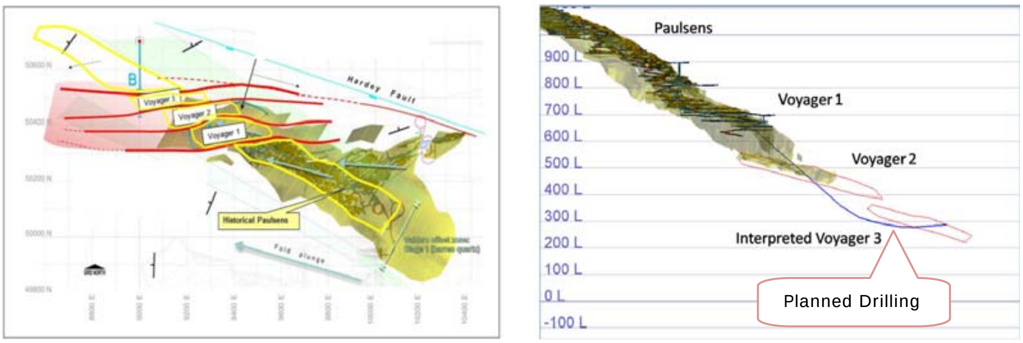
NST's Stage 2 involves defining Resource at the newly discovered Voyager 2 lode directly down plunge from the Paulsens mineralisation. Early true width results from Voyager 2 have been very encouraging (e.g. 6.0m @ 30.4g/t and 4.7m @ 6.3g/t). A 200m drilling platform on the 610 level is planned to be commissioned in early November to facilitate the Resource drill out. Voyager 2 has an exploration target of 100-250koz.

NST's Stage 3 involves the definition of Resource at the Voyager 3 target, in order to extend mine life to beyond 5 years. The potential Voyager 3 lode is the projected continuation of the Paulsens deposit down plunge and direcly below the recently discovered Voyager 2 lode. NST has been granted a $150,000 co-funded drilling grant from the State Government to test the potential Voyager 3 lode.

**However, the deposit is projected to continue further down plunge…**

**…replenishing the mine life**

Figure 6: Location of the potential Voyager 3 lode



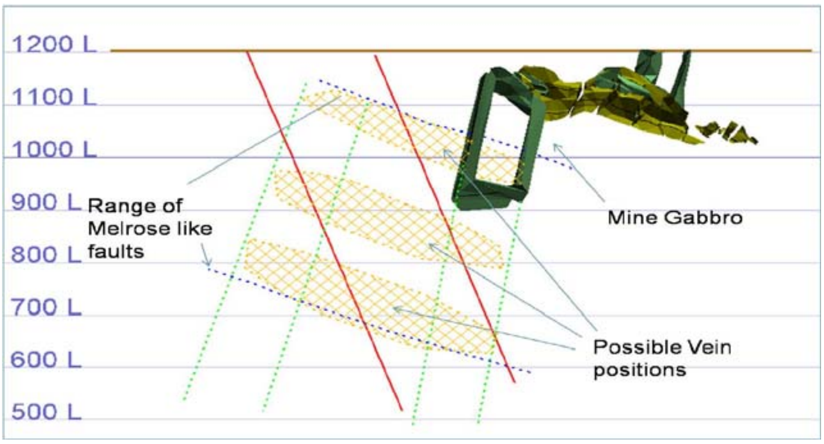

Source: NST modified by Argonaut

## Resource growth - Near mine repetitions

**A structural repetition could potentially manifest…**

NST believes that a structural repetition hosting the mineralisation at Paulsens could potentially manifest, adding near immediate mine life. This concept targets potential mineralisation being hosted between additional gabbroic offsets, a possibility never explored by previous owners. While conceptual and early stage in nature, if proven up, this target could add significant ounces and extend mine life well beyond 5 years.

Figure 7: Potential repetition of the Paulsens mineralisation




**…adding near immediate mine life**

Source: NST

## Mt Olympus project

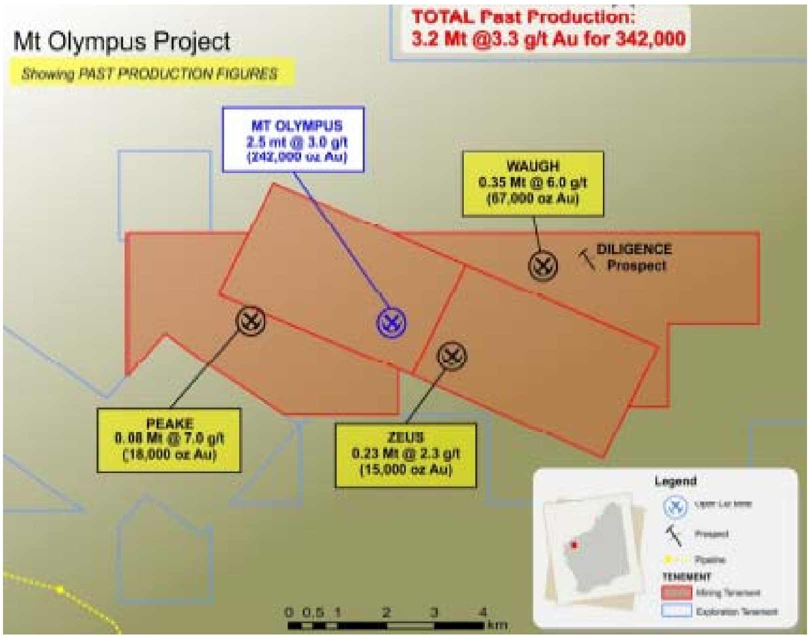
**NST's second major project is Ashburton Gold…**

NST's second major project is the 668koz Ashburton Gold Project. It comprises 961km² of mining and exploration tenements stretching ~200km north west from 50km south east of Paraburdoo to within 5km of the Paulsens mine.

Sipa Resources (SRI) discovered five deposits at Ashburton in 1996 and 1997. It produced ~340koz from 3.2Mt of ore grading 3.3 g/t between 1998 and 2004. There were five open pits on four deposits – Mt Olympus, West Olympus, Zeus, Peake and Waugh. The plant was sold in 2006 and site rehabilitation was completed in 2007.

Figure 8: Past production

**…with historical production of ~340koz grading 3.3g/t**




Source: NST

NST acquired the project from SRI in February 2011. Consideration was the replacement of tenement bonds ($0.5m) and a 1.75% NSR production royalty after the first 250koz.

### Geology

Most of the known deposits are situated within the Neerambah Complex of the Lower Proterozoic Wyloo Group, on the margins of the Diligence Dome. The Cheela Springs Basalt form the core of the Dome, and is overlain by clastic sediments. The deposits are hosted in various clastic sediments, mostly sandstone and siltstone.

### Current Resources and Reserves

**A 668koz Resource was estimated in 2004**

A 668koz Resource was estimated by SRI in 2004 using a 0.9g/t lower cut-off grade. >80% of the Resource is in sulphide mineralisation of which some is partially refractory.

Table 3: Ashburton Resources 2004

| Ashburton Resources | | | |
|---|---|---|---|
| | Mt | g/t | koz |
| Oxide and Transitional | 1.19 | 2.4 | 92 |
| Sulphide | 5.96 | 3.0 | 576 |
| **Total** | **7.15** | **2.9** | **668** |

Source: NST, Argonaut

**2004 Reserve position is 50koz**

SRI also estimated a 50koz Reserve in 2004 using a gold price of $525/oz, mostly beneath the floor of the Mount Olympus open pit that could be accessed by a pit cut-back. This Reserve was estimated from within the 92koz oxide and transitional Resource.

Table 4: Ashburton Reserves 2004

| Ashburton Reserves | | | |
|---|---|---|---|
| | Mt | g/t | koz |
| Oxide and Transitional | 0.50 | 3.1 | 50 |
| **Total** | **0.50** | **3.1** | **50** |

Source: NST, Argonaut

### Potential treatment options

**Could truck ore to Paulsens or build a standalone plant**

Options available to NST regarding the Mt Olympus inventory include trucking economic material to Paulsens for blending and processing, or the construction of a standalone processing facility at Mt Olympus.

### Resource growth - Mt Olympus

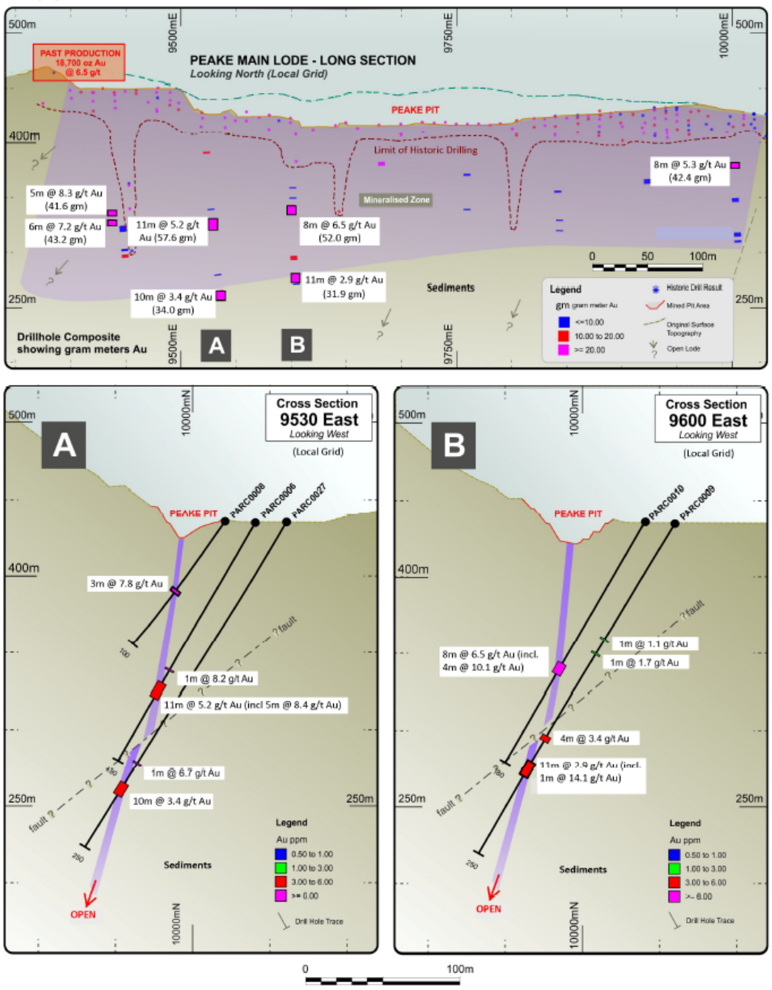
**Significant scope exists to extend the ore beyond existing open pits**

Significant scope exists to extend high grade mineralisation beyond existing open pits.

At Peake, mineralisation can be visually traced to the east of the existing pit, and early drilling has extended the strike and depth extent.

Figure 9: Peake long and cross section

**Early drilling has extended the strike and depth extent at Peake**




Source: NST

The mineralisation at Waugh can be visually traced into the east pit wall of the existing open cut, and could be accessed by further cut-backs.

**Potential for strike extensions at Waugh…**

Figure 10: Waugh open pit

Source: Argonaut

Similarly, potential exists for strike extension at Mt Olympus and Zeus.

**…Mt Olympus…**

Figure 11: Mt Olympus open pit

**…and Zeus**

Source: Argonaut

NST is ramping up exploration with plans to add 1 diamond and 2 RC rigs.

## Potential new discoveries

**Aggressive $20m exploration budget**

The Ashburton Basin shares a number of similarities with the >100Moz Carlin trend, including the presence of similar lithology, tectonic settings, alteration and geochemical signature. The implication is the potential discovery of Carlin-style deposits in the region.

NST has planned an aggressive FY12 exploration budget of $20m, of which $12.5m is for regional work.

## Valuation

**Paulsens valued at $191m…**

Argonaut values the Paulsens project at $191m using the gold price assumptions presented in Table 5, and the project parameters presented in Table 6.

Table 5: Argonaut's price assumptions

| Assumptions | | | | | |
|---|---|---|---|---|---|
| | | FY12 | FY13 | FY14 | LT |
| Gold | US$/oz | 1,550 | 1,550 | 1,550 | 1,100 |
| fx | A$:US$ | 1.00 | 1.00 | 1.00 | 0.80 |

Source: Argonaut

Table 6: Argonaut's project parameters, and valuation

| Paulsens | | |
|---|---|---|
| Key Project Assumptions | | |
| Ore mined | ktpa | 320 |
| Gold grade | g/t Au | 8.8 |
| Gold recovery | % | 94 |
| Gold production | koz | 85 |
| Mine life | yrs | 5 |
| Sustaining capex | A$m pa | 10 |
| Cash Costs - uninflated | A$/oz | 600 |
| | | |
| Fiscal | | |
| Government royalty | % | 2.5 |
| Tax rate | % | 30 |
| Discount rate | % | 8 |

*Denotes average over life of mine

| Summary Valuation | | |
|---|---|---|
| NPV | A$m | A$ps |
| Paulsens | 191 | 0.55 |
| Ashburton | 27 | 0.08 |
| Exploration | 20 | 0.06 |
| Forwards | 0 | 0.00 |
| Corporate | -7 | -0.02 |
| Unpaid Capital | 2 | 0.00 |
| Cash Estimate | 23 | 0.06 |
| | | |
| **Total @ 8% Discount Rate** | **254** | **0.73** |

Source: Argonaut

**…resulting in a summary valuation of $0.73**

A total valuation of $254m or $0.73 per share is estimated, after allowing $40/oz for the Ashburton Resource and $20m for exploration.

The sensitivity of the NST valuation to the gold price is presented below.

Table 7. Sensitivity analysis – Long term gold price

| Sensitivity to gold (US$/oz) | | | | | |
|---|---|---|---|---|---|
| | 1,200 | 1,400 | 1,600 | 1,800 | 2,000 |
| Valuation ($ps) | 0.58 | 0.73 | 0.87 | 1.01 | 1.16 |

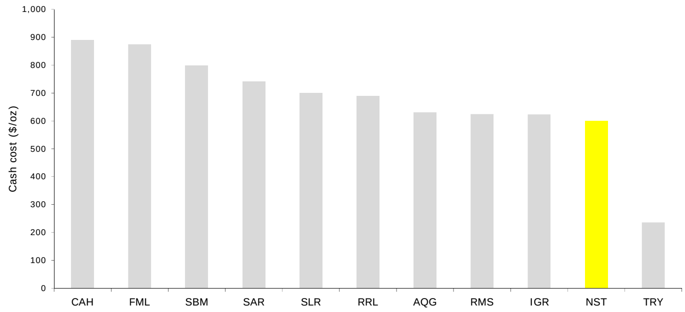
Source: Argonaut

## Peer comparisons

NST has the second lowest cash costs in Argonaut's peer group of gold producers. The Company is pursuing further cost improvements of >$50oz.

**Second lowest cash costs in the peer group**

Figure 12: Peer comparison - Cash costs

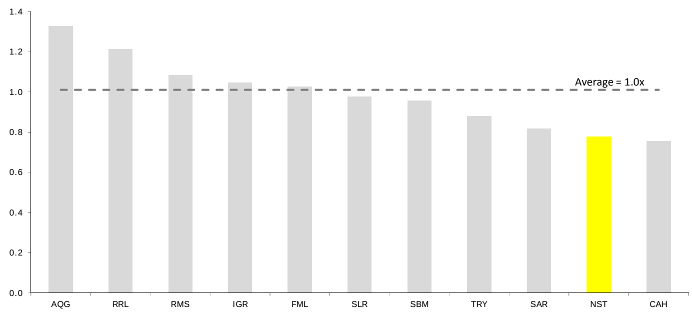



Source: Argonaut

Despite offering the high grades, low costs and a growing mine life, NST is inexpensive on P / NAV and EV/EBITDA multiples.

**Inexpensive on P/NAV…**

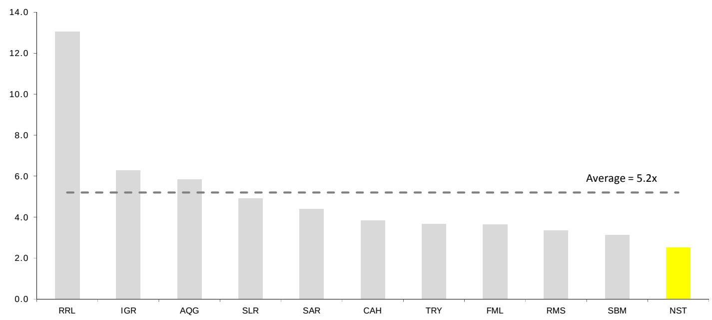
Figure 13: Peer comparison – P / NAV




Source: Argonaut

**…and EV/EBITDA multiples**

Figure 14: Peer comparison – EV / EBITDA




Source: Argonaut, based on FY12F EBITDA

NST is on an EV/EBITDA multiple of 2.5x compared to a peer average of 5.2x. Given Paulsens has 2 years mine life remaining to the bottom of Voyager 1, and current drilling suggests a further 3 years potential at Voyager 2 (exploration target 100-250koz) the stock appears undervalued. The Company is pursuing further cost improvements of >$50/oz after successfully transitioning from contract to owner mining.

## Risks

### Mine life

**Stock specific risks include mine life…**

The shallow plunge of the Paulsens deposit makes it challenging to define a long mine life ahead of the production front. However, the geological control over the mineralisation is well understood and the ore is projected to continue down plunge from Paulsens, Voyager 1 and Voyager 2.

NST's $20m FY12 exploration budget and attractive geological tenure substantially mitigates potential mine life issues, with the identification of additional ore sources likely.

### Resource estimation

**…challenging Resource estimations…**

Due to a high nugget effect, Resource estimation is challenging. Run of mine (ROM) ore has been consistently running at higher grades (~20-30%) than predicted.

### Metallurgy

**…refractory material at Mt Olympus…**

Carbonaceous shale is sometimes found in close proximity to the Paulsens ore, potentially affecting the metallurgical recovery. However, this material is highly visual and can be separated by good grade control practice. This risk is further mitigated as the mill routinely saturates the shale using diesel, therefore preventing the gold from being attached to the shale. The average recovery using this technique is >90%.

Some of the sulphide material at Mt Olympus is expected to be refractory. NST has commenced a metallurgical study in order to assess treatment options. This risk is somewhat mitigated by the high grade nature of the sulphides and the presence of high grade oxide and transitional material (currently 92koz).

The Paulsens mill currently does not have a gravity circuit. In the event that additional ore types are found in the region, a gravity circuit might be needed for enhanced gold recovery and optimal cost performance.

### Mt Olympus access

**…the use of RIO's private haul road for access to Mt Olympus…**

Access to the Mt Olympus Project is through Rio's private haul road. NST has agreement in place with RIO to use this road for its activities. Additional haul roads might need to be constructed under a production scenario.

### Single mine risk

**…and single mine risk**

NST has the disadvantage of only one production source (Paulsens). This lack of production flexibility increases the operational risk.

## Growth driven re-rating

NST is trading at a 22% discount to Argonaut's valuation of 73c (assuming 85koz pa production over a 5 year mine life). At spot gold and fx of US$1,875/oz and 1.05 the valuation rises to $0.90.

**Growth in production and mine life…**

The stock should command a re-rating as ongoing Resource definition drilling adds to the mine life and the Company executes its growth strategy.

Opportunities to amplify production include a mill expansion to 650ktpa, potentially fed by additional ore sources from Paulsens upper levels, Paulsens open pit, and Ashburton (within 200km trucking distance to Paulsens mill).

The Board and Management cover the core disciplines to operate and grow a successful mining business (refer to Appendix A).

**…should drive a re-rating**

The Company's other projects are discussed in Appendix B.

# Appendix A: Board and management

**The Board…**

## Board

- Bill Beament – Managing Director (Mining Engineer)

  Former General Manager Operations for 12 mines across WA, including 3.5 years involvement at Paulsens overseeing the incumbent mining contractor. Established over 15 new mining operations across Australia.

- Chris Rowe – Non Executive Chairman (Barrister and Solicitor)

  Previous Chairman or Director of a number of public listed mining and oil and gas related companies in both Australia and North America.

- Michael Fotios – Non Executive Director (Geologist)

  Chairman of InvestMet Limited. Former Managing Director of Galaxy Resources. Held senior positions with Homestake and Sons of Gwalia. Involved in the discovery of 4Moz of gold.

- Peter Farris – Non Executive Director (Business/Corporate Advisory)

  Extensive experience in the Perth real estate industry and corporate advisory services.

**…and Management…**

## Senior management

- Bernie Sostak – General Manager of Geology

  Geologist with over 20 years in the Gold industry with extensive experience in mine geology, Resource estimations, planning and general operations management in underground and open pit. Held senior management roles with WMC, Broken Hill Metals and Coolgardie Gold, and most recently as Barrick's Director of Resource / Reserve Strategy managing Reserve replacement programs on 4 continents.

- Ray Parry – General Manager Finance and Commercial

  Experienced Finance Executive with over 25 years experience in the mining and banking industry. Previously held the position of Commercial Manager with St Barbara Ltd overseeing the recommencement of mining and processing at the company's Gwalia, Tarmoola and Southern Cross operations.

- Craig Jones – General Manager (Paulsens)

  Mining Engineer with previous roles at Barrick's Lawlers Gold Mine and Western Metals' Lennard Shelf Operations. Experience in numerous mining methods and contract mining.

- Brook Ekers – Geology Manager (Paulsens)

  Has held the Geology Manager position at Paulsens for 7 years. Held a senior management position at Normandy's Bronzewing Operation.

- Mike Burns – Process Manager (Paulsens)

  Metallurgist with experience in operating, commissioning, development and research of milling operations to increase extraction and recovery, improved throughput capacity and reduced operating costs.

**…cover the core disciplines to operate and grow a successful mining business**

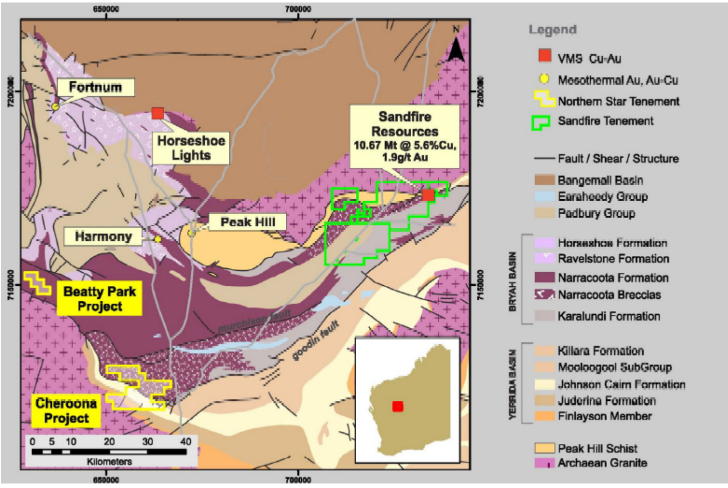
# Appendix B: Other projects

## Cheroona

**Other projects include Cheroona…**

The Cheroona project is located 70km north of Meekatharra and 80km south west of Sandfire Resources' (SFR) high-grade copper-gold DeGrussa project. Cheroona straddles the Bryah-Padbury and Yerrida basins, which host gold and gold-copper mines. Within the Bryah Basin, both Cheroona and Beatty Park lie on the Upper Narracoota Volcanic formation, which also hosts DeGrussa and the Horseshoe Lights copper-gold mine.

Figure 15: Regional geology and project location




Source: NST

**…considered prospective for VMS…**

Cheroona / Beatty Park is considered prospective for VMS style mineralisation. Target generation (following a VTEM survey) is nearing completion.

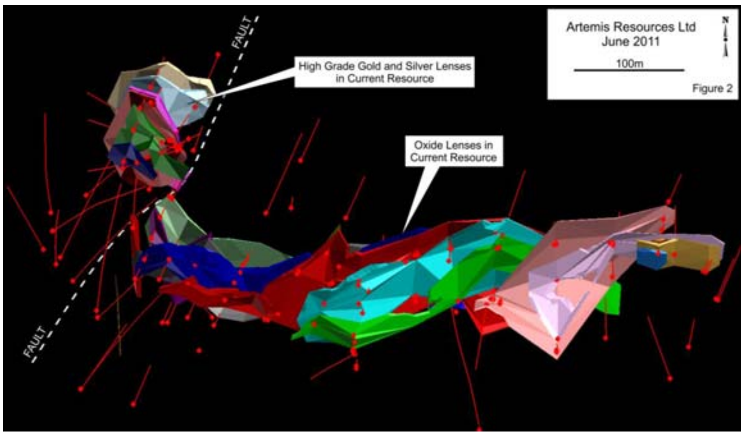
## Mt Clement JV (NST 20% / Artemis Resources 80%)

**…and the Mt Clement JV….**

Artemis Resources' (ARV) Mt Clement gold project is located 35km from the Paulsens Mine.

In July 2011 the Resource was updated to 1.1Mt @ 1.8g/t Au and 17g/t Ag for 64koz Au and 620koz Ag (Inferred).

Figure 16: Current Resource blocks




Source: ARV

**…with a 64koz gold Resource 35km from Paulsens**

ARV has identified numerous targets to expand the Resource, which includes a high grade component of 125kt @ 2.7g/t Au and 76g/t Ag for 11koz Au and 304koz Ag. A VTEM survey is planned to cover the whole of the Mt Clement project area.

ARGONAUT

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