

Warren Kreyzig | Research Analyst
wkreyzig@mpsecurities.com.au

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BUY

Key Information

ASX Code	NMG
Share Price	\$0.43
Price Target	\$0.61
Expected Return	42%

Investment Data

Ordinary Shares	304m
Fully Diluted Shares	535m
Market Cap	\$148m
Cash (incl. placement)	\$55m
Total Debt	\$32m

Source: Bloomberg

Figure1: Bibiani's Processing Plant



Source: Noble

Figure2: Share Price Performance (2Yrs)



Source: Bloomberg

West African Gold Producer in 2011

The recent Bibiani Gold Mine acquisition has propelled Noble from a West African explorer to imminent producer in less than a year. Noble expects to significantly expand its 2Moz resource over the next 18 months.

- 2 Moz JORC resource
- 2.7Mtpa plant to be re-commissioned in Q2 2011
- Production expected to ramp up to +150koz per year in 2012
- Cash costs expected below US\$530/oz
- Extensive drilling program to commence on priority targets
- Open pit mining was last conducted with gold at ~US\$400/oz
- Structural targets coinciding with soil anomalies in the north
- Recent drill intercepts included 6m @ 16.2g/t

The opportunistic acquisition of the Bibiani Gold Mine in Ghana last July has established Noble as the latest imminent ASX listed producer in West Africa. The current mine plan is to extend the existing main pit at depth, however much of the final plan will depend on the recently commenced drilling program. Production is expected in the second half of 2011, ramping-up to a rate of +150koz per annum in 2012.

Bibiani remains remarkably underexplored. MPS believe substantial potential exists to delineate surface mineralisation along strike and down dip from the existing pits, situated within the granted mining lease. We expect Noble to add 610koz to the existing reserves over the next 18 months.

In our view Noble is currently undervalued with the market failing to attribute an adequate value for the substantial exploration and resource potential held within the Bibiani tenements. MPS expect Noble's share price to appreciate as they progress their drilling program and project development over the coming 6 months.

Table 1: Summary Valuation Forecast

	2009 A	2010 A	2011 E	2012 E	2013 E	2014 E
Gold Production (koz)	-	-	-	60	152	165
C1 Cash Cost (US\$/oz)	-	-	-	865	500	471
Sales Revenue	-	-	-	76	191	204
EBIT	(2)	(3)	(39)	(25)	61	82
Net Income	(2)	(2)	(38)	(27)	47	56
EPS (c)	(0.5c)	(0.4c)	(6.9c)	(4.9c)	8.6c	10.2c
EBIT/Sales %	-	-	-	(33%)	32%	40%
Return on Assets %	(445%)	(29%)	(45%)	(39%)	64%	104%
PER (x)	(51.7x)	(58.5x)	(3.4x)	(4.8x)	2.7x	2.3x
CFPS (c)	(0.2c)	(0.1c)	(7.2c)	0.2c	10.2c	15.3c
Price / Cash Flow (x)	(121.0x)	(325.4x)	(3.2x)	140.6x	2.3x	1.5x

Source: Company accounts, Bloomberg, MPS estimates.

Martin Place Securities | Research

AFSL 247 404 ABN 30 094 927 947

General Phone: +61 2 9222 9111

Corporate Fax: +61 2 8224 9699

Trading Fax: +61 2 9221 9680

GPO Box 5263 Sydney, NSW 2001

Level 3, 14 Martin Place, Sydney, NSW 2000

Email: info@mpsecurities.com.au

Web: www.mpsecurities.com.au

Investment Case

Although Bibiani has a 2Moz gold resource, much of the surrounding tenements are underexplored and retain significant exploration potential.

2Moz JORC resource.

Noble Mineral Resources was listed on the ASX in 2007 to explore its Ghanaian tenements in the Ashanti Gold Belt. In early 2009, the company bid for the Bibiani Gold Mine after the operator, Central African Ghana Gold (CAG), experienced financial difficulties and lost control of the project. Noble's plan to mine Bibiani as an open-pit operation, as opposed to their competitors' preference for underground mining, underpinned their successful acquisition.

4Moz mined since 1903.

Bibiani has produced approximately 4 million ounces of gold since 1903, with much of the tenements remaining remarkably under-explored. Mining and exploration to date, excluding the confines of the main pit, have focused on shallow outcropping oxide deposits. Subsequently, considerable potential exists to extend the existing pits both along strike and at depth. The immediate targets are well positioned within the mining lease and adjacent to the 2.7Mtpa processing plant.

Substantial potential exists to extend surface mineralisation.

A extensive drill program has commenced.

Noble recently commenced an aggressive drill program to increase Bibiani's 2Moz JORC resource, including 605koz in reserves. The program is aimed at identifying near-mine surface deposits prior to plant re-commissioning in mid 2011. Production is expected to exceed 150koz in financial year 2013 at an average cash cost of US\$527/oz.

We value Noble at 61 cents a share.

MPS value Noble at \$333 million, or 61 cents a share, 42% above the current 43 cent share price. Our research indicates the market is underestimating Bibiani's exploration potential, including the ease of encompassing new reserves into the mine plan. Based on the mining consultants (SEMS) report and the latest drill results, MPS conservatively estimate Noble will add 610koz of reserves to the current mine plan over the next 18 months.

The market is underestimating Bibiani's exploration potential.

In our view, Bibiani is a company making project for Noble, with near-term production and access to cash flows. The project possesses significant exploration potential and the following nine months should prove to be an exciting time for the company.

Timeline

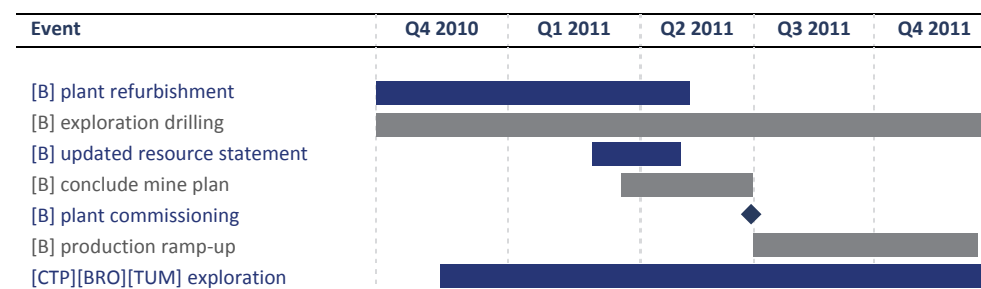
Bibiani is a company making project for Noble.

The drilling program at Bibiani is expected to ramp-up through December, with a second purchased drill rig arriving during the month. From early December 2010, assay results will commence and a steady news flow should continue through into Q2 next year.

Steady news flow through to Q2 2011.

At Cape Three Points the follow-up exploration and drilling program will commence in December, building on the successful intersections that were encountered earlier in the year.

Table 2: Event Timeline



[B]=Bibiani; [CTP] = Cape Three Points; [BRO]=Brotet; [TUM]=Tumentu

Source: MPS

Valuation

In our view, the market is undervaluing Bibiani's potential to delineate new reserves and we expect exploration results to have a substantial effect on the company's value.

Bibiani is the primary asset.

304 million shares and 161 million in-the-money options.

Discount rate of 11.5%

Project finance related debt of \$32 million

Ashanti Gold Belt tenements valued at \$25 million.

Equity valued at 61 cents per share.

A simple peer comparison confirms Noble's undervaluation.

The valuation of Noble Mineral Resources is primarily driven by its Bibiani Project, located in Ghana. Although the project is 100% owned, MPS have assumed a 90% interest for valuation purposes. This is in accordance with other Ghanaian mines in which the Government takes a 10% stake.

Noble is valued on a fully diluted basis, including 304 million ordinary shares and 161 million options exercisable at 30 and 35 cents. The company recently completed a \$30 million placement (71 million shares @ 39c) in order to scale-up and accelerate the exploration program. We have allowed for contract mining; however additional project finance is likely should the company elect to mine on an owner-operator basis. Furthermore, 73 million short dated options, exercisable in July 2011 at 30 cents, are likely to provide the company with \$22 million within the next 9 months.

Sum of the Parts

MPS value Noble at \$333 million or 61 cents per share on a fully diluted basis. The sum of the parts valuation uses a range of methodologies and includes a weighted average cost of capital (WACC) of 11.5%.

As at 30 September 2010, a net debt of \$7 million included cash and cash equivalents totalling \$25 million, and \$32 million in project finance related debt. The \$30 million from the share placement is included under the share and option proceeds.

Table 3: Noble Mineral Resources Value

Description	Page Ref	Valuation (\$ millions)	Notes
Bibiani Project (90% equity assumed)	7	263	AUD/USD: 1.02
Exploration Assets	6	25	
Corporate Related Costs	16	(30)	
Enterprise Value		258	
Adjusted net assets/(debt)	16	(7)	
Share/Option Proceeds	16	82	
Equity Value		333	
Equity Value per Share (fully diluted)		\$0.61	548m shares

Source: MPS

Peer Comparison

Our undervalued status for Noble is supported by a peer group comparison of ASX listed imminent producers in Ghana. The company is heavily discounted on an enterprise value to cash flow (EV/CFO) basis. In our opinion, the market is underestimating Noble's project status and potential, as evidenced by its low enterprise value per resource ounce, which at \$56/oz represents a +50% discount to Perseus, Azuma and Adamus.

Table 4: Comparative Valuation

Parameters (Equity)		Noble ASX:NMG	Perseus ASX:PRU	Azuma ASX:AZM	Signature ASX:SBL	Adamus ASX:ADU
Market Cap	\$Am	148	1,336	154	52	327
Resource Grade	g/t	1.9	1.1	2.0	2.0	1.8
Resources	koz	1,985	7,604	1,106	891	1,949
Reserves	Koz	605	1,931	-	-	962
Production (e)	Koz	135	270	70	14	86
Cash Cost (e)	\$/oz	519	508	533	641	483
EV/CFO	x	1.2	5.5	2.5	5.0	4.2
EV/oz	\$/oz	56	159	126	55	156

Source: MPS, Bloomberg, Intierra

Bibiani Project Valuation

The Bibiani project is the company's main enterprise value contributor. To value the asset MPS conducted 5,000 different scenarios using a simulated discounted cash flow (DCF) model. Our net present value's (NPV) 95% confidence interval ranges between \$48 million and \$514 million, with an estimated mean valuation of \$222 million. Future cash flows exhibit an annual volatility of 53% and are discounted at a weighted average cost of capital (WACC) of 11.5%.

Noble has a 90% interest in Bibiani

95% confidence interval of \$48m to \$514m

Bibiani's revenue and costs are denominated in USD and have been converted using an AUD/USD exchange rate of 1.02

Table 5: Bibiani Project Value

Description	Page Ref	Valuation (\$ millions)
Bibiani Open-Pit Operations	10	222
Option Value	15	41
Bibiani Project Enterprise Value		263

Enterprise value of \$270m

Source: MPS

In addition to the DCF valuation, we have calculated the main option values inherent in the project at \$41 million¹. The option value includes the option to commence underground mining which is valued at \$23 million; the timing of the operation will be largely dependent on the ability of management to expand the open-pit reserves.

Option value calculated at \$41m

Value driven by gold price and mineable resources

Bibiani's value is driven primarily by the gold price and amount of mineable resources. Based on the exploration consultants report and latest drilling results, we expect Bibiani to add 610koz to existing open-pit reserves over the next 2 years. Potential remains to substantially exceed that amount.

We expect Bibiani to add 610koz to existing reserves over the next 2 years

Table 6: Bibiani Open-Pit Forecasted Cash Flow (FY)

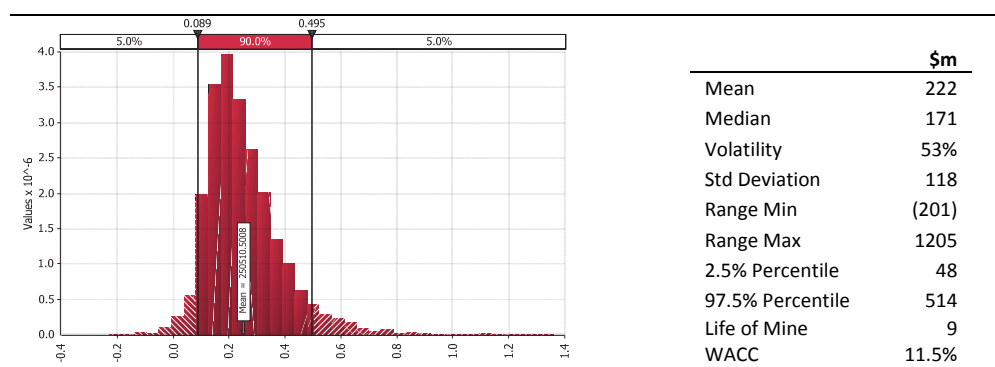
		2010 A	2011 E	2012 E	2013 E	2014 E	Mine Life
Gold Produced	Koz	-	-	60	152	165	1,060
Cash Cost	\$/US/oz	-	-	865	500	471	527
Mining Revenue	\$m	-	-	76	191	204	1,332
Operating Costs	\$m	-	-	(55)	(85)	(87)	(631)
Operating Cash Flow	\$m	-	-	22	106	117	702
Depreciation	\$m	(1)	(34)	(35)	(31)	(24)	(164)
Taxation	\$m	-	-	-	(13)	(28)	(161)
CFAT	\$m	-	-	22	93	89	541
Change In Working Capital	\$m	0	-	(3)	(4)	(1)	-
Exploration	\$m	(1)	(6)	(2)	(2)	(2)	(22)
Capital Expenditure	\$m	(0)	(34)	(16)	(30)	(3)	(111)
Net Cash Flow	\$m	(0)	(40)	1	56	84	408

Source: MPS

Our base model assumes an open-pit mineable resource of 1,215koz, with a maximum mill throughput of 2.7Mpta and 9 year mine life. Total gold production is expected to be 1,060koz at an average cash cost of US\$527/oz.

1,060koz produced at an average cash cost of US\$527/oz

Figure3: Bibiani Project OP NPV Distribution²



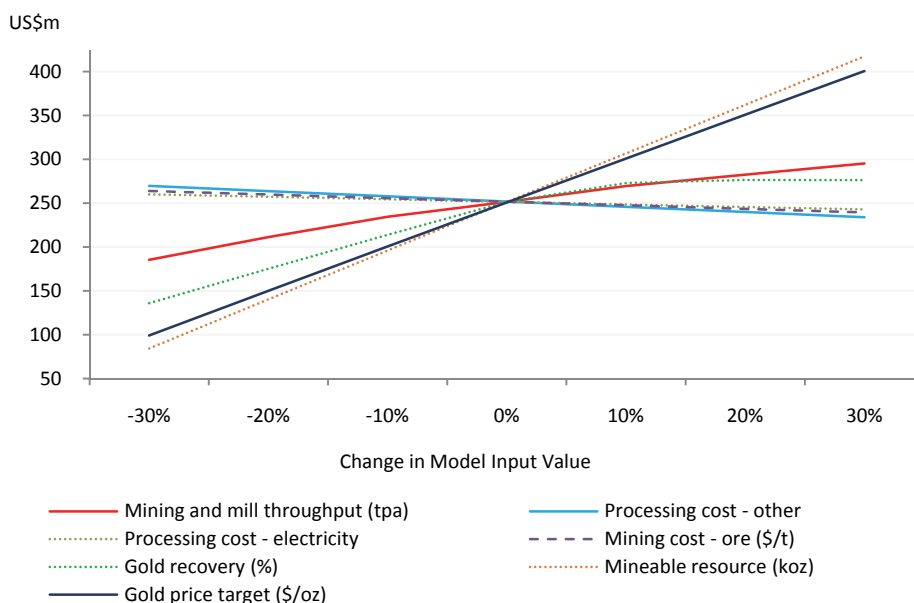
Source: MPS

¹ Methods include the Black-Scholes formula and binomial option pricing model.

² Distribution graph denominated in USD at 100% interest.

Our sensitivity analysis results are summarised below. The chart illustrates the impacted project’s NPV as a result of a ±10% change in an input parameter’s value. The analysis indicates the value of the project is most sensitive to changes in the gold price, mineable resources, mill throughput and recoveries.

Figure4: Bibiani Project NPV³ Sensitivity Analysis



Source: MPS

Exploration success in delineating near mine resources will be a key value driver for the project. Assuming no change in grade, a 10% increase in the 1,216koz of surface mineable resources will result in a 22% increase in the projects’ value.

A 20% change in reserves results in a 44% change in NPV

A 10% change in the gold price results in a 20% in NPV

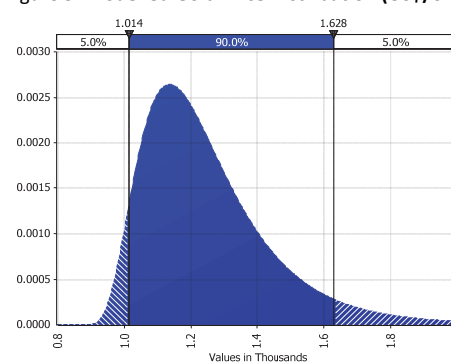
Gold Price

As with any gold mine the valuation is highly correlated with the price of gold. Our sensitivity analysis determines that an increase of 10% to the price of gold results in a 20% increase in the valuation.

Gold has performed strongly over the last 5 years, rising from US\$455/oz to US\$1,373/oz at the latest close. In our view, the fundamentals underpinning the demand for gold are likely to persist over the medium term, supporting gold’s recent gains.

In modelling Bibiani’s revenues MPS have assumed a long-term gold price of US\$1,250/oz with an implied annual volatility of 20%. Our 90% confidence interval determines a future price target between US\$1,014 and US\$1,628 per ounce, with a minimum price floor of US\$850/oz.

Figure 5: Modelled Gold Price Distribution (US\$/oz)



Source: MPS

90% confidence interval future gold price is between US\$1,014 - 1,628/oz with a floor of US\$850/oz

Table 7: Gold Price Forecast

	2011	2012	2013	2014	2015	Price Target
Gold Price (US\$/oz)	1,390	1,302	1,269	1,257	1,253	1,250

Source: MPS

³ The NPV represents the model’s raw output and is based in USD and assumes 100% ownership

Risks

Our valuation is susceptible to country, project, geology, currency and commodity risks.

There are a significant number of potential risks to be considered before investing in a mining project. Our assumptions are susceptible to country, project, currency, geology and commodity risks that could adversely affect our valuation.

As discussed, the project valuation is sensitive to changes in the gold price and would be adversely affected should the gold price fall substantially below US\$1,250/oz. Noble's future earnings are denominated in US dollars, and as such, are at risk to movements in the AUD/USD exchange rate.

The Bibiani Project is located in Ghana. Despite a history of military governments, the country has progressed its democracy through several peaceful electoral cycles since 1992. The country has a strong mining history particularly in gold and is the second largest producer on the continent after South Africa. The Ghanaian government generally hold a 10% interest in all mining projects with the right to acquire an additional 10% at market value. This is uncommon. In our view the risk of projects being nationalised or otherwise being confiscated are unlikely.

There are risks specific to the project and operations that could impact on our valuation of Bibiani.

- A failure to increase reserves will reduce our valuation.
- Future scoping and feasibility studies prior to the commencement of mining may modify ore to waste ratios and ore grade, which may negatively affect the expected mining costs and gold recoveries.
- The operations are to commence via an open-pit development which is at risk to geology and engineering failure, as well as weather disruptions.

The above risks are by no means exhaustive and additional risks beyond those stated remain.

Other Tenements

Noble holds additional tenements in Ghana, which were the focus of the company prior to the Bibiani acquisition. Promising intersections have been reported at Cape Three Points which remains very prospective, while Brotet and Tumentu are at early stages of exploration. Our valuation of these properties is \$25 million which is consistent with the enterprise value of Noble over the previous 2 years prior to the purchase of Bibiani.

Other Ghanaian tenements valued at \$25m

Corporate

Noble's corporate costs have not been incorporated into the company's mining assets. They include head office expenses for administration, occupancy and other overheads. These costs have been capitalised at \$30 million. An accumulated tax loss which can be offset against future income tax is valued at \$0.6 million.

Table 8: Noble Mineral Resources Corporate Value

Description	Page Ref	Valuation (\$ millions)
Corporate Value	15	(30)
Tax Losses	15	1
Noble Mineral Resources Corporate Value		(30)

Source: MPS

Bibiani Project

The main pit was last mined by AngloGold Ashanti in 2005 when gold was US\$400/oz. The optimised pit has been calculated using a gold price of US\$1,100/oz.

Bibiani is located in the Western Region of Ghana, 80 kilometres southwest of the Ashanti capital, Kumasi.

The mine was redeveloped by AngloGold in 1998 as an open-pit operation using carbon-in-leach (CIL) processing. The mine ran between 1903 and 1968 as an underground operation which included minor surface quarrying activities. A total of 1.8Moz were recovered between 1998 and 2005, after which the project was sold to Central African Ghana Gold (CAG).

CAG's persistence with AngloGold Ashanti's underground development plan was plagued by prolonged development periods and a deteriorating financial position. The events culminated with the project financier issuing CAG a default notice and eventually on-selling the project to Noble.

Historically, exploration and mine development has, for the most part, been centred on the main pit, leaving much of the 105.6km² tenements relatively underexplored.

Geology

The Bibiani gold deposit lies within Birimian metasediments and related rocks which occur in the Proterozoic Sefwi-Bibiani belt of southern Ghana. The ore body is a mesothermal lode type deposit similar to the Konongo-Axim belt that hosts the Obuasi gold mine. Gold and gold-bearing sulphide mineralisation is primarily hosted within high grade quartz veins and stockworks, as well as lower grade altered phyllite zones and intrusive porphyry shear zones. The full strike length of the Bibiani structure is at least 4 kilometres. There are three main metallurgical ore types; primary, transition and oxide.

Reserves and Resources

Noble released a 2Moz resource (JORC) in their pre-feasibility study to re-commence mining the main pit. The mineral estimation includes a 605koz reserve at a 0.7 g/t cut-off with the pit outline calculated on a US\$1,100/oz gold price. Additional resources are expected to be converted to reserves at current gold prices.

Table 9: **Bibiani Mineral Resource Statement** (March 2010)

	Tonnes (t)	Grade Au (g/t)	Contained Gold (oz)
Measured	6,560,000	2.05	430,000
Indicated	13,370,000	1.77	760,000
Inferred	13,060,000	1.89	790,000
Total	32,980,000	1.87	1,980,000

Global Mineral Resource Estimate based on a cut off grade of 0.5 g/t

Source: Noble Minerals

Figure 6: **Bibiani location map**



1.8Moz recovered
between 1998 – 2005

The ore body is a
mesothermal lode
type deposit

2Moz JORC resource

605koz reserve @
0.7g/t cut-off

Table 10: **Bibiani Open Pit Cutback Ore Reserves (March 2010)**

	Tonnes (t)	Grade Au (g/t)	Contained Gold (oz)
Proven	3,454,000	2.29	254,000
Probable	4,946,000	2.21	351,000
Total	8,400,000	2.24	605,000

Global Mineral Resource Estimate based on a cut off grade of 0.7 g/t

Source: Noble Minerals

Table 11: **Bibiani Underground Mineral Resource Statement (March 2010)**

	Tonnes (t)	Grade Au (g/t)	Contained Gold (oz)
Measured	980,000	3.08	100,000
Indicated	1,770,000	3.34	190,000
Inferred	3,770,000	3.90	470,000
Total	6,530,000	3.62	760,000

Underground Mineral Resource Estimate based on a cut off grade of 2.0 g/t

Source: Noble Minerals

At current gold prices the underground resources at the base of the pit are likely to be converted to open-pit reserves.

Mineralisation continues at depth from the base of the optimised pit. At the current gold price it is likely that a portion of the underground resources at the base will be converted to open-pit reserves.

Table 12: **Open Pit Gold Reserve Model Parameters**

Depth	90% Confidence Interval			Mean	
Tonnage	Mt	7.3	to	9.7	8.4
Grade	g/t	2.1	to	2.4	2.2
Gold	Moz	0.5	to	0.7	0.6

Source: MPS

Resource Potential

SEMS⁴ estimated the total historic gold production from Bibiani to be approximately 4Moz. In their assessment of the distribution of gold at depth (Table 14) they said "This does not necessarily preclude significant opening up of the shear system and the reoccurrence of prolific (similar to the uppermost 10 levels of the mine) gold mineralisation at depth or possibly further along strike, particularly to the north."

Table 13: **Historical Production**

Period	Mined Gold (oz)
Pre 1927	215,000
1927 – 1973	1,800,000
1997 – 2005	1,800,000
2007 – 2008	53,000
Total	3,888,000

Source: SEMS Exploration

Table 14: **Historical Production**

Depth	Mined Gold (oz)	Avg. per 100m (oz)
0 – 300m	3,000,000	1,000,000
300m – 400m	400,000	400,000
400m – 800m	600,000	150,000
+ 800m	-	-
Total	4,000,000	500,000

Source: SEMS Exploration

4 high priority targets within 6km of the Bibiani mine

SEMS defined four high priority targets within 6km of the Bibiani mine (Pamunu North, Pamunu South, Bibiani West and Asepanyeye). All four prospects are identified by significant soil anomalies coinciding with identified major shear zones and NNE trending structures.

Initial focus on prospective targets within the mining lease

In addition to the above mentioned prospects, prospective targets have been identified within the mining lease itself, adjacent to the processing plant and existing pits. Potential mineralisation at these targets can rapidly be incorporated into the existing mine plan with limited regulatory requirements. As a result, the immediate exploration program will focus on the following prospects:

⁴ SEMS, *Independent Mineral Resource Estimation-Bibiani Gold Mine*, March 2010, Meadows Smith & Amanor

Western Wall of the Bibiani Pit

Recent drill results from underground workings, 300m below surface, intersected significant mineralisation to the west of the southern section of the existing pit, some 85-125m from the pit wall. The intercepts included:

- 6.0m @ 16.2 g/t
- 5.0m @ 4.06 g/t
- 12.4m @ 3.25 g/t
- 31.0m @ 2.16 g/t

No drilling from surface has been conducted along the west wall or above these new intersections, which is now the focus of the current exploration program.

The current pit optimisation is 775m wide and management are confident that any additional resources identified in this region can be encompassed into an expanded pit model.

Significant intersections from below surface drill program

Elizabeth warrants serious consideration as a potential source of short-term oxide ore

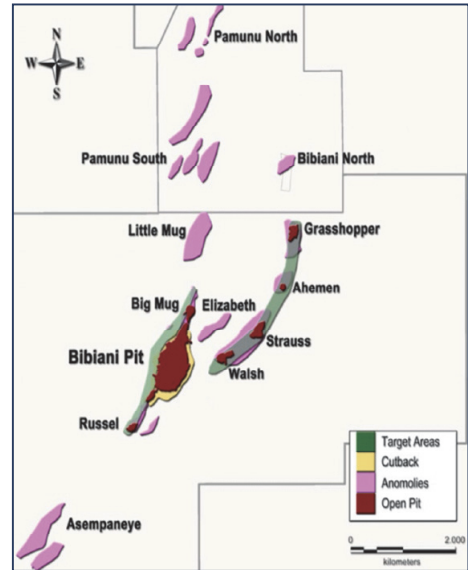
Shallow pits have little exploration drilling below 50m

4g/t from trench sampling

The potential to define new ore reserves is high

We conservatively assume an increase of 610koz to reserves

Figure 7: Identified Exploration Targets



Source: Noble

Elizabeth prospect

Elizabeth is adjacent to, and north east of, the main pit and overlies an interpreted ENE trending structure. Soil anomalies suggest the existence of a porphyry dyke, similar to that exposed in the main pit. No recorded drilling has been identified for the prospect, prompting SEMs⁵ to state it warrants serious consideration as a potential source of short-term oxide ore.

Walsh to Grasshopper prospects

Walsh, Strauss, Ahemen and Grasshopper are shallow open pits that lie on an eastern structural trend. Previous exploration was confined to targeting shallow oxide ores, with little exploration drilling below 50m or between the prospects themselves. Prior drilling linking Walsh-Strauss appears somewhat erratic and incomplete, due perhaps to the proximity of the ROM pad. Trench sampling results at 4 g/t have established it as top priority for drilling. Ahemen-Grasshopper remains a high priority.

All the existing pits were excavated when the gold price was less than US\$500/oz. In 2008, a CAG management assessment of the existing pits identified the potential for 200koz (3.4Mt @ 1.86 g/t).

Other prospects

Previous exploration consultants SRK, estimated that the underground south region of the main pit could contain an estimated 16Mt of ore. Infill drilling of approximately 30,000 metres would be required to convert this tonnage into resources, with the grade determined upon assay completion. The current tailings dumps are estimated at 50koz (1.5Mt @ 1 g/t) and are being verified for re-treatment and plant commissioning purposes.

The potential for Noble to add new ore reserves is high. Our modelling conservatively assumes the proposed drilling programs will add 610koz (9.5Mt @ 2 g/t) to the current open pit reserves. This figure will continue to be monitored in accordance with future exploration success. In respect to our modelled scenarios, the table below illustrates that for all possible potential outcomes MPS are 90% confident the actual outcome is between 220koz and 1,543koz.

Table 15: Potential Gold Reserve Model Parameters

		90% Confidence Interval			Mean
Tonnage	Mt	4.0	to	20.0	9.5
Grade	g/t	1.7	to	2.4	2.0
Contained Gold	Moz	0.2	to	1.5	0.6

Source: MPS

⁵ SEMS, *Independent Mineral Resource Estimation-Bibiani Gold Mine*, March 2010, Meadows Smith & Amanor

Mining Operations – Open Pit

At current gold price cash flows from the cut-back far exceed the \$40m capex spend

In tendering for the Bibiani Project, rival bidders unanimously proposed continuing the underground mine development. In contrast, Noble and SEMS planned a surface operation by undertaking a 40Mt cut-back of the existing main pit. Surface mining reduces the project risk while increasing the production rate, improving mill recoveries and lowering costs. Our analysis confirms that at current gold prices the increase in cash flows as a result of the cut-back will far exceed its \$40m capital cost.

Cut-back will lower the pit floor by 100m

The cut-back is expected to be staged over 2 years, and will facilitate the lowering of the pit floor from 200m to 300m below surface by pit completion. Modelled on a gold price of US\$1,100/oz, the optimised pit design has a mineable reserve of 605koz. The final pit outline will be dependent upon the results of the adjacent drilling program and changes in the gold price.

Table 16: Modelled OP Mining Cost Parameters

Year Ending 30 June		2010 A	2011 E	2012 E	2013 E	2014 E	Mine Life
Ore mined	Mt	-	-	1,857	2,814	2,602	17,899
Ore milled	Mt	-	-	1,857	2,700	2,700	17,899
Gold milled grade	g/t	-	-	1.2	2.0	2.2	2.1
Gold recovery	%	-	-	83%	87%	88%	87%
Gold produced	Koz	-	-	60	152	165	1,060
Capital expenditure	\$m	(1)	(40)	(18)	(32)	(5)	(111)
C1 cash cost	\$US/oz	-	-	865	500	471	527
C2 production cost	\$US/oz	-	-	1,467	705	621	632
C3 total cost	\$US/oz	-	-	1,532	769	684	695

Source: MPS

Operations commencing in Q3 2011 with output exceeding 150koz in 2013

Mill commissioning is expected to be serviced by existing tailings and waste dumps prior to mining operations commencing in the second half of 2011. Production is expected to ramp up to capacity in 2012, with output exceeding 150koz in 2013. MPS have assumed a strip ratio of 3.4:1 and mining rate of 11Mtpa to supply the 2.7Mtpa mill. Our mining costs are based on a contractor performing the drill, blast and haul work. Cash costs⁶ are expected to average US\$527/oz over an estimated 9 year mine life. The key to operational success at Bibiani rests on delineating sufficient surface mineable ore to sustain high mill throughput over the mine's life.

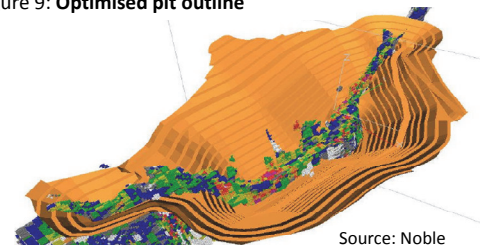
Cash costs to average US\$527/oz

Figure 8: Existing versus new pit design



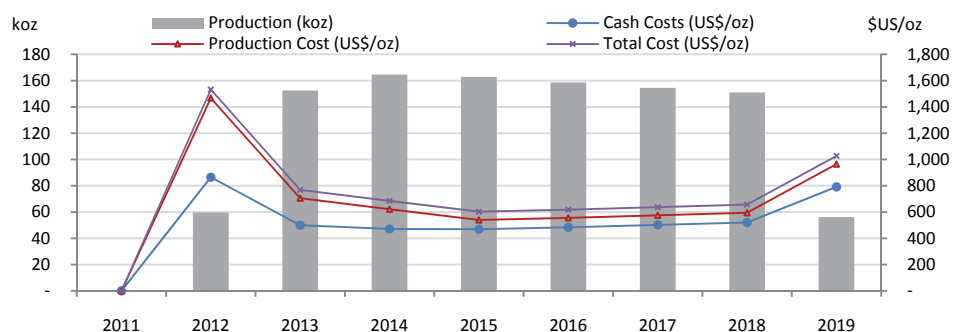
Source: Noble

Figure 9: Optimised pit outline



Source: Noble

Figure 10: Production Profile OP



Source: MPS

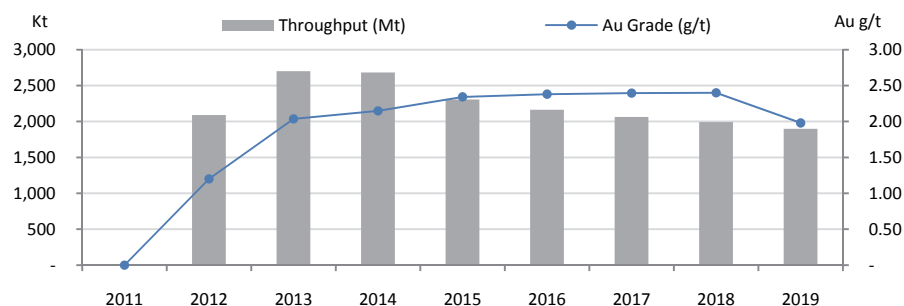
⁶ **C1 cash cost** represents the costs for mining, processing, administration, including accounting movements for stockpiles and gold-in-circuit. It does not include capital costs for exploration, mine development or processing mill capital works. It includes net proceeds from by-product credits. It does not include the cost of royalties. **C2 production cost** reflects C1 costs plus depreciation and amortization. This brings in the capital cost of production. **C3 total cost** reflects C2 plus interest, other indirect costs and royalties. Total cost represents all costs attributable to gold production over the same period. It represents a full production cost.

Table 17: Modelled OP Mining Cost Parameters

		90% Confidence Interval		Mean
General & Administration	US\$m/yr	9.00	to 11.00	10.0
Mine Ore	US\$/t	2.30	to 2.70	2.40
Mine Waste	US\$/t	2.10	to 2.40	2.20
Control Work ⁷	US\$/t	2.30	to 2.60	2.40

Source: MPS

Figure 11: Plant Throughput Profile OP



Source: MPS

Mining Operations - Underground

After the open pit wall failure in 2005, AngloGold Ashanti commenced underground exploration and development. They identified long-hole stoping as the preferred mining method due to the steep dip of the ore-body (80°-90°).

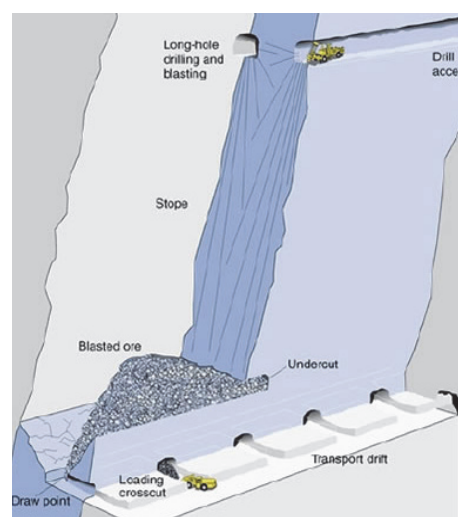
CAG's underestimation of the project costs and scheduling for the underground development, during the GFC, was a major contributor to the eventual default notice.

The commencement of underground mining is uncertain at present, dependent on the final pit outline and success in defining adjacent surface deposits. For these reasons, MPS have chosen to model the underground operations as an option available to management and not within the base valuation model.

Timing of underground mining is uncertain

We have modelled the u/g operations as an option available to management

Figure 12: Long-Hole Stope Mining Method



Source: Atlas Copco

MPS have modelled⁸ a modest 9 year operation based on mining 750kt per year from the current underground resources of 760koz (6.5Mt @ 3.62g/t). The underground operation's core value-add in our model is to sustain high mill feed rates to maximise processing efficiencies.

Table 18: Modelled UG Mining Cost Parameters

Activity		90% Confidence Interval		Mean
Mining Ore	US\$/t	31.00	to 42.70	37.00
Decline Development	US\$/t	2,900	to 4,000	3,200
Fixed Expenditure ⁹	US\$m/yr	5.45	to 6.60	6.0
Sustaining P&E Capex	US\$m/yr	3,500	to 4,500	4,000

Source: MPS

Historical production at Bibiani (Table 12, page 7) indicates 1Moz has been mined below 300m, the majority of which occurred before 1973. Over the medium term there remains considerable potential to increase underground resources by infill drilling known mineralised zones not included in the resource statement. We have not included these potential resources in our model.

1Moz has been mined below 300m, the majority before 1973

⁷ Grade control, dewatering, rehandling, general pit work.

⁸ See Mining Options: Option to Defer Underground Operations on page 15 for valuation.

⁹ Geo, power, dewatering, communications, etc.

Milling and Processing Plant

2.7Mtpa plant was constructed by Lycopodium in 1996

The 2.7Mtpa processing plant was constructed by Lycopodium in 1996. The plant is designed to treat oxide and sulphide ore by conventional milling and carbon-in-leach (CIL) gold extraction technology.

Figure 13: Bibiani CIL Processing Plant



Source: Noble Minerals

Ore from the ROM pad is crushed to 150mm in a jaw crusher and then conveyed to the semi-autogenous mill (SAG). The target grind (80% less than 74 microns) is produced by a ball mill. The ore is then thickened before entering the CIL circuit, where cyanide and oxygen are added to dissolve the gold. After absorbing the dissolved gold, the suspended carbon is screened out, and sent for regeneration and electrowinning before being smelted into dore bars.

Noble currently refurbishing plant at a cost of \$10m

Noble are currently refurbishing and upgrading the plant at a cost of \$10 million including:

- Refurbishing CIL processing tanks
- Adding a new primary ore crusher
- Implementing new process control methods

Table 19: Modeled Processing Cost Parameters

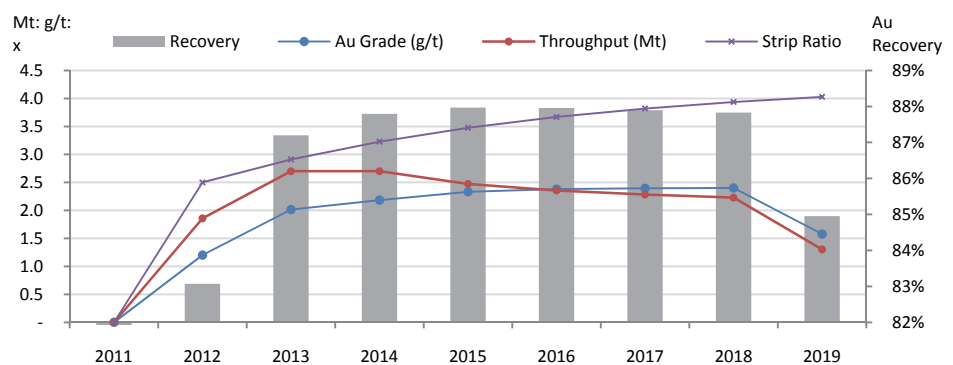
Activity	90% Confidence Interval			Mean
Plant	US\$/t	2.72	to 3.30	3.00
Electricity	US\$/t	3.09	to 3.74	3.40
Consumables	US\$/t	3.60	to 4.40	4.00
Recovery Rate	%	75%	to 92%	85%

Source: MPS

Recovery rates are likely to improve with the mill modifications

MPS expected the mill throughput to taper off after 2014 as operations move deeper into harder sulphide ores. The metallurgical recovery rate is estimated to be 87% and will vary depending on the ore's sulphide content and the mill throughput level. Historical recovery rates varied from 93% for oxides to 73% for the high sulphide mineralisation associated with underground ores. Noble believe improved recovery rates are likely as a result of the current mill modifications. The benefits of further grind size optimisation are also being assessed.

Figure14: Production Profile



Source: MPS

Capital Expenditure

In June 2010, the company successfully raised \$40 million through a share placement at 30 cents and issued 30 cent options exercisable in June 2011 worth \$22 million. The funds will be used to meet capital expenditures over the next 2 years.

The majority of the capital expenditure will be allocated to the plant refurbishment and cut-back to the west wall of the main pit. Exploration success along the western pit wall may reduce the amount of capital expenditure required for the cut-back. At \$40 million the cut-back includes relocating an existing road and additional infrastructure requirements.

Table 20: Capital Expenditure Estimates

Activity		90% Confidence Interval			Mean	Timing
Plant Refurbishment	US\$m	8.0	to	10.0	10.0	10 months
Plant Maintenance	US\$m	3.5	to	4.5	4.0	Annually for Life of Mine
Main Pit Cut-back	US\$m	25.0	to	40.0	40.0	18 – 24 months
Exploration Program	US\$m	5.0	to	7.0	6.0	10 months
Annual Exploration	US\$m	1.5	to	2.5	2.0	Annually

Source: MPS

Recently purchased 2
drill rigs

\$9m drilling program
to be expensed over
12-18 months

The company purchased 2 drill rigs during the year, at a combined cost of approximately \$2 million, in an effort to overcome the rig availability issues occurring in Ghana, and West Africa in general. After their recent \$30 million placement, management have announced their intention to purchase a further 2 rigs. As a result, the \$9 million in exploration that was originally to be allocated over the next 3 years will now be expensed over the next 12-18 months.

Other Items

Taxation

The corporate income tax rate in Ghana is 25% and a withholding charge of 10% applies to dividend payments. As there is no tax treaty between Australia and Ghana MPS have assumed a rate of 30%.

Depreciation

Assets relating to the minerals and petroleum industries in Ghana are depreciated at a rate of 80% in the first year, and 50% in each year thereafter.

Royalties

Ghana's royalty rates are 5%.

Working Capital

Conditional upon the Bibiani acquisition, Noble was required to assume the liabilities of CAG's existing trade debtors for \$12 million. This figure has been added to the capital expenditure requirements for the 2011 financial year.

Re-Structuring Fee

A restructuring fee of A\$2 million or 6 million shares is payable to Investec by no later than 20 May 2011. We have included the 6 million shares as an expect share placement, accounting share dilution without proceeds.

Mine Closure and Rehabilitation

The salvage and disposal of surplus plant and equipment is expected to cover the mine closure costs. An additional provision of \$5 million has been made to cover additional environmental impacts.

Management & Options

The company has built and experienced project team over the last 6 months. There is scope to add executives with project management experience to the Board.

Noble have had a quick transition from junior explorer to imminent producer over the last 9 months. The Board is transitioning also and MPS believe there is scope to add non-executives with project management and engineering experience. The company has recently built an experienced project team, the most of who are based in Ghana. Ghana has a well skilled and educated workforce with many attending the well respected Tarkwa School of Mines.

Board & Management

Non Executive Chairman:
Jan 2009 **Tunku Naquiyuddin** - has extensive experience at board level on both government and business levels. Chairman of Alliance Francaise in Malaysia for over 18 years and head of the Malaysia-France Economic and Trade Association for 8 years. Other prominent former positions include committee positions with the Kuala Lumpur Stock Exchange, WWF (Malaysia) and Business Council for Sustainable Development in Geneva. He is currently the chairman of the Board of Kian Joo Can Factory Berhad.

Non Executive Director:
Apr 2007 **Wayne Norris** - Mr Norris has been involved at a senior management level for numerous projects, more recently on the Bootu Creek manganese project in the NT and the successful Sally Malay nickel sulphide plant in WA. His extensive metallurgical knowledge has included the training of nationals in Ghana at the Damang mine site for two years for Goldfields Ghana Ltd.

Non Executive Director:
Apr 2010 **Brian Thomas** - is a geologist with over 20 years experience across a broad range of commodities, and 12 years in the Australian financial services sector.

Chief Financial Officer:
Jun 2010 **David Leavy** – n/a

Group Geologist:
Jun 2010 **Phillip Schiemer** – has 20 years wide-ranging experience in exploration, resource definition and mine geology, both in open-pit and underground scenarios. From 1992 to 2006, he worked on a contract and consulting basis exploring for precious and base metals. During 2006 to 2010, he worked within the uranium sector which included positions as an exploration manager for Newera Uranium Ltd and Uran Ltd.

Mining Options

Option values can significantly enhance a project's value

As the price of gold price changes into the future, management have options available to them to either take advantage of, or alleviate the impact of the change. These options, termed 'real' options because they apply to real assets, can significantly enhance a project's value above those calculated using the DCF method. To calculate these values we have used the Black-Scholes formula and the binomial option pricing model.

Table 21: Noble Mineral Option Values

Description	Page Ref	Valuation (\$ millions)	Notes
Option to Abandon Bibiani		3.4	
Option to Defer UG Mining		22.7	\$14.0m NPV + \$8.7m ROV ¹⁰
Option to Expand Plant Capacity		14.8	\$12.2m NPV + \$2.6m ROV
Value		40.9	

Source: MPS

Although there are many, MPS has attributed value to the 3 main options available to management at Bibiani.

Option to Abandon the Project

Option to abandon project: \$3.4m

The option to abandon is virtually embedded in every project and provides management with the option to sell the project in the event it becomes unprofitable. Noble paid \$48 million for Bibiani on the 25 November 2009 which included a 1.6Moz resource at a gold price of US\$1,192/oz. A current gold price of US\$1,390/oz together with the new mine plan, refurbished plant and a 2Moz resource have in our opinion, increased the project's abandonment value to \$70 million.

The option to abandon the project for \$70 million¹¹ over the next 5 years is valued at \$3.4 million.

Option to Defer Underground Operations

Option to defer u/g mining: \$22.7m

After 2 years of open pit mining, management will have the option to commence underground operations. The decision will depend on the gold price, exploration success and the optimised mine plan. We have estimated \$20 million in capital expenditure is required to establish a 750ktpa operation with a 10 year mine life. Based on a 760koz resource (6.5Mt @ 3.2 g/t), underground mining increases the net operational cash flows of our base model by \$36 million.

MPS value Noble's option to defer underground mining for up to 5 years at \$22.7 million.

Option to Expand Plant Capacity

Option to expand plant capacity: \$14.8m

Based on the quality of the refurbishment program, management believe the current plant capacity of 2.7Mtpa could be expanded to 3.2Mtpa at minimal cost. We expect the capital expenditure required for the expansion would be \$10 million, inclusive of upgrading related infrastructure and additional fleet purchases.

The option to expand plant capacity to 3.2Mtpa over the next 4 years will largely be dependent on the success of the exploration program. Based on our modelled resource base, our analysis indicates the expansion has the potential to increase net present cash flow by \$24 million. MPS value the option to expand at \$14.8 million.

¹⁰ Real Option Value

¹¹ The salvage value is expected to decrease by 5.56% per year, such that in the 5 year the value is only \$53m

Corporate

Noble assumed a \$32million debt when it acquired Bibiani. All future production remains unhedged.

Corporate Valuation

Corporate tax rate of 30%

Noble's corporate costs have been expensed separately from their mining assets. Corporate taxation rates in Ghana are 25% and a 10% withholding on dividend payments. Therefore any profits repatriated back to Australia will be taxed at 10%. Head office expenses for administration, occupancy and other overhead charges have been capitalised at \$30 million. We have used a corporate taxation rate of 30% as there are no tax treaties between Australia and Ghana.

Debt

As part of the Bibiani acquisition, Noble assumed a \$32 million debt associated with the operations with no payment required for 2 years. Repayments (to Investec) are only to be made out of production at an interest rate 4% above LIBOR. Additional debt funding is likely should Noble choose to mine on an owner-operator basis.

Production is unhedged

Hedging

Production from Bibiani is unhedged.

Tax Losses

As at June 2010, the company had \$1.2 million in accumulated tax revenue losses, against which future payable taxation can be offset. MPS value the net present value of the loss at \$0.6 million based on the amount realisable over a maximum of 4 years at a 25% discount rate.

Valuation is on a fully diluted bases

Shares on Issue

As at 5 October 2010, Noble had 304 million fully paid shares on issue, 548 million on a fully diluted basis. In the money options include 74 million option exercisable at 30 cents on 21 July 2011, 74 million listed options exercisable at 35 cents on 21 July 2013, and 6 million unlisted options exercisable at 20 cents on 8 July 2014.

Table 22: Shares on Issue

Class	Expiry	Qty (m)	Price (\$)	Total (\$m)	In Money
Ordinary Shares		303.8	-	-	n/a
Listed Options (NMGO)	Jul 2011	74.4	0.30	22.3	Yes
Listed Options (NMGOA)	Jul 2013	74.4	0.35	26.0	Yes
Unlisted Options	Jul 2014	6.0	0.20	1.2	Yes
Unlisted Options	Aug 2014	6.3	0.40	2.5	Yes
Investec Option	May 2011	6.0	-	-	Yes
Upcoming Placement		77.0	0.39	30.0	n/a
Total Shares (Fully Diluted Basis)		547.9			

Source: MPS

Net Assets

As at 30 June 2010, Noble's net debt position was \$6.6 million. The recent \$30 million share placement will provide a net cash position of \$36.6 million.

Table 23: Net Cash (Debt) Position

Depth	\$m	Notes
Cash & Cash Equivalents	25.4	
Total Debt	(32.0)	
Net Debt	(6.6)	
Adjustments	30.0	Recent share placement (2 tranches)
Adjusted Net Cash Position	36.6	

Source: MPS

Consolidated Financials

Table 24: Consolidated Cash Flow (\$m)

	2009 A	2010 A	2011 E	2012 E	2013 E	2014 E
Receipts	-	-	-	76	191	204
Payments	(2)	(2)	(11)	(69)	(101)	(99)
Net Interest	0	0	1	(1)	(1)	1
Tax Paid	-	-	-	-	(13)	(28)
Operating Cash Flow	(1)	(2)	(10)	7	76	78
Capex	(0)	(0)	(34)	(16)	(30)	(3)
Other	-	(7)	(3)	-	-	-
Investing Cash Flow	(0)	(7)	(36)	(16)	(30)	(3)
Equity Raised	-	44	30	22	-	26
Borrowings	-	(3)	1	-	(15)	(17)
Other (GUP's, Leases)	(0)	-	-	-	-	-
Financing Cash Flow	(0)	41	31	22	(15)	9
Net Cash Flow	(2)	32	(16)	12	30	84
Cash at End of Year	4	36	21	33	63	147

Source: MPS

Table 25: Consolidated Income Statement (\$m)

	2009 A	2010 A	2011 E	2012 E	2013 E	2014 E
Sales Revenue	-	-	-	76	191	204
Operating Costs	-	-	-	(57)	(89)	(87)
Corporate/Admin	(1)	(2)	(5)	(9)	(10)	(10)
EBITDA	(1)	(2)	(5)	10	92	107
D&A	(1)	(1)	(34)	(35)	(31)	(24)
EBIT	(2)	(3)	(39)	(25)	61	82
Asset Sale Income (Losses)	-	-	-	-	-	-
Other Income (Expenses)	(0)	1	-	-	-	-
Net Interest	(0)	(0)	1	(1)	(1)	1
Pre-Tax Profit	(2)	(2)	(38)	(27)	60	84
Tax	-	-	-	-	(13)	(28)
NPAT	(2)	(2)	(38)	(27)	47	56

Source: MPS

Table 26: Consolidated Financial Position (\$m)

	2009 A	2010 A	2011 E	2012 E	2013 E	2014 E
Trade & Other Receivables	0	0	-	3	8	8
Inventories	-	-	-	10	14	15
Trade Payables	(0)	(1)	-	(10)	(15)	(15)
Working Capital (Operations)	(0)	(1)	-	3	7	8
Other Assets (Liabilities)	0	0	-	-	-	-
Net Working Capital	(0)	(0)	-	3	7	8
Mine PPE	0	0	72	57	57	37
Other Assets	0	7	8	8	8	8
Derivatives	-	-	-	-	-	-
Exploration	1	1	4	1	1	1
Provisions	(0)	(0)	-	-	-	-
Capital Employed	1	8	84	69	73	54
Total Debt	(3)	-	(33)	(33)	(18)	(1)
Cash	4	36	21	33	63	147
Shareholder's Funds	2	44	72	69	118	200

Source: MPS

Table 27: Consolidated Financial Ratios

	2009 A	2010 A	2011 E	2012 E	2013 E	2014 E
Balance Sheet Ratios						
Total Debt / Equity %	140%	-	46%	48%	15%	0%
Interest Coverage (x)	(4x)	(5x)	-	(12x)	29x	71x
Earnings Profitability						
Net Profit Margin %	-	-	-	(35%)	25%	27%
EBIT/Sales %	-	-	-	(33%)	32%	40%
Return on Assets %	(445%)	(29%)	(45%)	(39%)	64%	104%
Return on Equity %	(136%)	(5%)	(53%)	(39%)	40%	28%
EPS (c)	(0.5c)	(0.4c)	(6.9c)	(4.9c)	8.6c	10.2c
PER (x)	(51.7x)	(58.5x)	(3.4x)	(4.8x)	2.7x	2.3x
Cash Flow Profitability						
EBITDA/Sales %	-	-	-	13%	48%	52%
CFPS (c)	(0.2c)	(0.1c)	(7.2c)	0.2c	10.2c	15.3c
Price / Cash Flow (x)	(121.0x)	(325.4x)	(3.2x)	140.6x	2.3x	1.5x

Source: MPS

MANAGEMENT

Barry Dawes
Managing Director
bdawes@mpsecurities.com.au

RESEARCH

Warren Kreyzig
Research Analyst
wkreyzig@mpsecurities.com.au

CORPORATE

David Grimes
Corporate Advisor
dgrimes@mpsecurities.com.au

Tim Allen
Consultant
AFSL: 225 994
tallen@mpsecurities.com.au

Joseph Lee
Corporate Advisor
jlee@mpsecurities.com.au

RETAIL DEALING

Jonathon Howe
Head of Trading
jhowe@mpsecurities.com.au

Anthony Hung
Client Advisor
ahung@mpsecurities.com.au

Ryan Hoffman
Client Advisor
rhoffman@mpsecurities.com.au

John Athanasiou
Client Advisor
jhowe@mpsecurities.com.au

Andrew McLeod
Client Advisor
amcleod@mpsecurities.com.au

Jonathan Feil
Client Advisor
jfeil@mpsecurities.com.au

Ryan Bradshaw
Client Advisor
rbradshaw@mpsecurities.com.au

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- Martin Place Securities Pty Ltd participated in the recent share placement for Noble Mineral Resources Ltd, raising \$1 million and earning commissions on the transactions.
- The analyst, Warren Kreyzig, holds shares in Noble Mineral Resources Ltd.