



January 23, 2012

## Operations Update

- ***Significant new drilling results to generate further resource upgrades***
- ***Onsite Laboratory operational***
- ***Additional mining fleet mobilised and operating***
- ***Process plant due to start wet commissioning***

Noble Mineral Resources (ASX: NMG) is pleased to announce significant assay results for recent drilling at its Bibiani project in Ghana, West Africa. These drilling results are confirmatory and extensional to the current mineralisation and are expected to lead to an upgrade to the Bibiani's 2.26 Moz resources and 958,000 oz reserves.

Following the commissioning of the onsite Performance Laboratory (PL) in December 2011, the faster turnaround on assay results will accelerate results from drilling programs and hence resource-reserve calculations. Additional mining equipment has been mobilised to site to boost mining production ahead of the imminent wet commissioning of the process plant. Production is expected to ramp up to the 150,000 oz pa rate in 2012.

### Recent results from resource definition and infill drilling

Some significant intercepts include:

- Elizabeth
  - **4m @ 12.05 g/t from 76m**
- Grasshopper
  - **8m @ 1.42 g/t from 56m**
- Main Pit
  - **14m @ 4.13 g/t from 174m**
  - **32m @ 1.48 g/t from 16m**
  - **13m @ 2.73 g/t from 119m**
- Strauss
  - **4m @ 3.91g/t from 10m**
  - **11m @ 1.88 g/t from 10m (including 3m @ 4.3 g/t)**
- Walsh
  - **6m @ 11.15 g/t from 35m (including 1m @ 37.62 g/t)**
  - **20m @ 3.79 g/t from 36m**
  - **6m @ 4.12 g/t from 38m**
  - **6m @ 2.40 g/t from 46m**



### **Elizabeth**

The Elizabeth prospect lies along a quartz porphyry which splays out from the NE section of the Main pit in 040° magnetic direction. Exploratory drilling at Elizabeth prospect has uncovered two near surface oxide sub-parallel mineralised zones grading 5m @ 2.01g/t (15-20m) and 7m @ 4.32g/t (24-31m) including 1 metre of 23.7g/t shoot. Further RC drilling is in progress to delineate the strike extensions of this intercept which occurred in hole number EL11\_028. Hole EL11\_053, 40m further on strike intercepted 4.0m @ 12.05g/t (76-80m). RC drilling is in progress to delineate the strike extensions of these intercepts.

### **Walsh-Strauss**

In preparation for mining, infill grade control drilling at Walsh pit on a 10m X 10m grid has been completed with currently 30% of results outstanding. Strauss grade control drilling is now 90% completed and awaiting 20% of results. The backlog of assay results will be quickly cleared with the new onsite assay lab.

Grade control and extensional drilling for the Gap Pit located between Walsh and Strauss is in progress and further demonstrating the potential to link the pits together.

Prestrip mining has commenced at Strauss removing previous backfill and old waste dumps adjacent to the pits.

### **Aheman - Grasshopper**

Drilling is in progress to investigate the full 500m strike length between the Aheman and Grasshopper pits. Two other near surface sub parallel mineralised oxide trends were intercepted with two fences of RC drilling 300m apart. These average 5m wide and grade up to 2.3 g/t. Initial structural interpretation infers that the mineralised corridor encompassing these two prospects might have been laterally displaced by the valley in between which could be the trace of the causative fault.

Mining has commenced at Aheman with the first ore grading ~1.3 g/t taken to the ROM pad to provide the commissioning material for the process plant crusher.



### Main Pit

Big Mug lies to the North of the Bibiani Main pit. MP11\_013 recorded 13m @ 2.73g/t (119-132m) including 9m @ 3.8g/t and MP11\_016 recorded 8.0m @ 1.02g/t (18-26m). These holes boost the resource potential of the prospect.

South Hill is the continuation of the Bibiani Main pit to the South. MP10\_015, 018 and 023 had intersections, 4m @ 1.15g/t, 2.0m @ 1.78g/t and 32m @ 1.48g/t respectively. These are infill holes in the provisional resource model.

### Levee Material (Historic Tailings)

Mining of the Levee Material at Dam1 is continuing. Grade control samples taken at the mining face reported an average grade of 1.42g/t, which is encouraging compared to the 0.74g/t reserve grade recorded during exploration for Dams 1 & 2.



*Reclaiming Tails in Dam 1*

### Cape Three Points

Elevated assay values far above background numbers have been observed in geochemical soil sampling from the Nkroba prospect. These include Cr, Co, V, Ni, Mn, Fe, Cu and Al. Recent received assays point to elevated Chromium grades.



The other prospects at Tumentu, Morrison, Bartie and Satin have all tested positive for gold in soils and programs are being planned to conduct further soil tests and drilling.

### **Assay Laboratory**

Since commissioning of the laboratory in December, the Performance Laboratory has reported 8,700 samples averaging 360 samples per day working a single dayshift. Nominal design capacity was achieved within one month of commissioning and with continuous process optimisation, laboratory staff training and skills transfer for all the various areas of the laboratory, it is expected that third party samples could also be processed thus potentially lowering the unit rates paid by Noble.

### **Mining Equipment**

Noble has mobilised additional mining equipment consisting of five (5) Komatsu 785-5 trucks, a Cat D9R Dozer and a Cat 16G Grader. This equipment adds to the Company's existing fleet as it prepares to ramp up mining production.



*Mining at Aheman and Cutback of Strauss Pit*

### **Plant Update**

As reported on 11 January, Noble has begun dry commissioning of the process plant with wet commissioning expected shortly.

### **Authorised by:**

**Wayne Norris**  
*Managing Director*



#### **Competent Person's Statement**

The information in this announcement that relates to Mineral Resource and Ore Reserve estimates is based on information compiled by Mr Mark Laing (BE (Hons) Mining) who is a Corporate Member of the Australasian Institute of Mining and Metallurgy. Mr Laing is employed by Noble Mineral Resources Ltd, and has sufficient experience which is relevant to the style of mineralisation being reported herein as Mineral Resources, Ore Reserves and Exploration Results to qualify as a Competent Person as defined in the 2004 edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' (JORC Code). Mr Laing consents to the inclusion in this announcement of the matters based on his information in the form and content in which it appears.

#### **About Noble Mineral Resources Limited**

**Noble Mineral Resources Limited** listed on the Australian Stock Exchange on 26<sup>th</sup> June 2008 with a focus on exploring for large-scale gold deposits in the world-class Ashanti Gold Belt in Ghana, West Africa. In November 2009, the Company entered into an agreement for the acquisition of the **Bibiani Gold Mine**, a project located in the Sefwi-Bibiani Gold Belt in Ghana, host to over 30 Million Ounces of gold. On July 20<sup>th</sup> 2010 the final Share Transfer Form was executed to consummate the purchase.

Noble's other primary gold concessions are Exploration Licences at **Cape Three Points, Brotet and Tumentu**, which cover some 141.3km<sup>2</sup> and all are located within the world-class Ashanti Gold Belt in south western Ghana. Ghana is the second largest gold producer in Africa and is the 10<sup>th</sup> largest gold producing nation in the world, with annual production of approximately 2.9 Million Ounces. Noble's on-going focus will be to expand the drilling program at Bibiani to target new shallow resources near the Bibiani Mine and adjacent tenements while still progressing the **Cape Three Points, Brotet and Tumentu** concessions within the Southern extension of the Ashanti Gold Belt. Initial exploration at Cape Three Points will be targeted towards the **Satin Mine Project** and the **Morrison Project**, both of which lie in an area of historic underground gold exploration. Noble believes that there is significant potential for the delineation of additional high-grade gold mineralisation relating to the down-plunge and strike extension to these zones. When added to the potential now available at Bibiani it will place Noble in a strong position to achieve its goal in building Australia's next major gold mining house.

The Company recognises the **Bibiani, Cape Three Points, Brotet and Tumentu** concessions are relatively under explored, highly prospective projects and aims to rapidly redefine JORC-compliant resources for development.

**ASX Code: NMG**

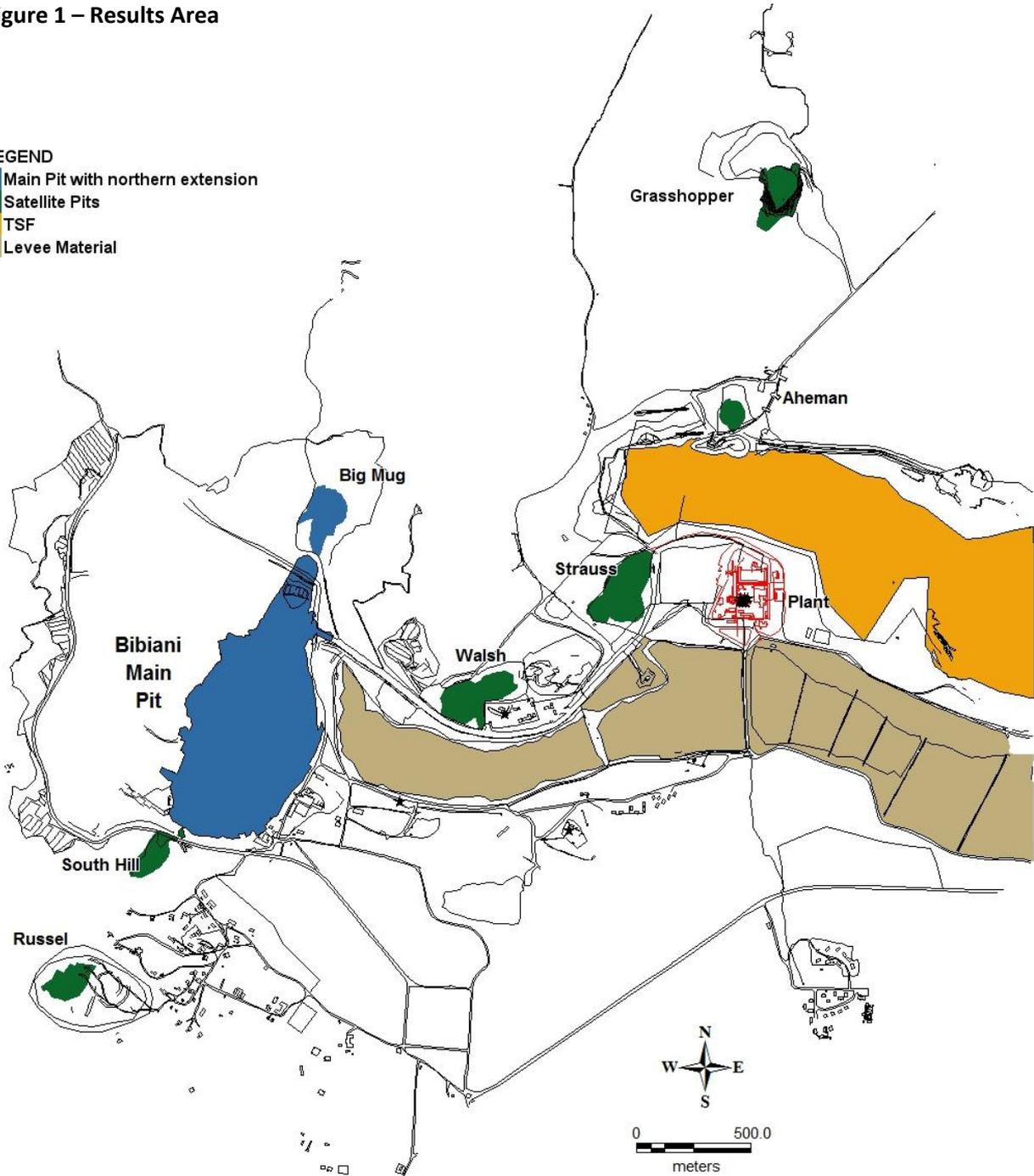
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**Figure 1 – Results Area**

**LEGEND**

- Main Pit with northern extension
- Satellite Pits
- TSF
- Levee Material





## Appendix 1 – Recent Drilling Results

Area	Interval	Au g/t	Hole	From	Including	Comments
Elizabeth	4.0m	12.05	EL11_053	76		Elizabeth
Grasshopper	8.0m	1.42	AMGR11_001	56		Grasshopper South Extension
Main Pit	14.0m	4.13	MP11_014	174		Big Mug; Infill hole for Resource definition in Big Mug model
	13.0m	2.73	MP11_013	119	9m @ 3.8g/t	Big Mug; Infill hole for Resource definition in Big Mug model
	8.0m	1.02	MP11_016	18		Big Mug; Infill hole for Resource definition in Big Mug model
	4.0m	12.00	MP11_007A	204		Main Pit; Confirming downdip extension mineralisation at eastern wall
	4.0m	3.66	MP11_007A	224		Main Pit
	32.0m	1.48	MP10_023	16		Main pit; South Hill
	4.0m	1.15	MP10_015	4		Main Pit, South Hill; Infill hole for Resource definition in Big Mug model
	2.0m	1.78	MP10_018	10	1m @ 3.0g/t	Main pit; South Hill
Strauss	11.0m	1.88	STGC_100	10	3m @ 4.30g/t	Strauss grade control
	5.0m	1.29	STGC_054	17		Strauss grade control
	4.0m	1.03	STGC_056	15		Strauss grade control
	4.0m	1.34	STGC_057	37		Strauss grade control
	4.0m	2.39	STGC_064	27		Strauss grade control
	4.0m	3.91	STGC_111	10		Strauss grade control
	5.0m	1.29	STGC_054	17		Strauss grade control
	3.0m	1.26	STGC_101	15		Strauss grade control
	3.0m	1.21	STGC_098	34		Strauss grade control
	3.0m	2.50	STGC_099	14	1m @ 5.97g/t	Strauss grade control
Walsh	20.0m	3.79	WAGC_033	36		Walsh grade control
	18.0m	1.28	WAGC_064	13		Walsh grade control
	12.0m	1.60	WAGC_054	26		Walsh grade control
	19.0m	0.66	WAGC_117	2	5m @ 1.01g/t	Walsh grade control
	6.0m	11.15	WAGC_187	35	1m @ 37.62g/t	Walsh grade control
	6.0m	4.12	WAGC_001	38		Walsh grade control
	6.0m	2.4	WAGC_029	46		Walsh grade control
	6.0m	4.12	WAGC_001	38		Walsh grade control
	6.0m	2.40	WAGC_029	46		Walsh grade control
	4.0m	9.73	WAGC_022	19		Walsh grade control
	4.0m	1.15	WAGC_047	2		Walsh grade control
	4.0m	1.32	WAGC_063	35		Walsh grade control

*All assays are bottle roll cyanide leach on a 1kg charge and do not include any fire assays of non-Cyanide soluble residue. Analysis has been undertaken by Performance Laboratory at Bibiani and Intertek Laboratories Ltd at their Tarkwa laboratory.*



**Appendix 2a – March 2010 JORC Mineral Resource Estimate**

	0.5 g/t cut-off	TONNAGE	GRADE	CONT'D GOLD
		Tonnes	(Au g/t)	Ounces
<b>BIBIANI MAIN PIT</b>	Measured	6,560,000	2.05	430,000
	Indicated	13,370,000	1.77	760,000
	Total M&I	19,920,000	1.86	1,190,000
	Inferred	13,060,000	1.89	790,000
	<b>Total</b>	<b>32,980,000</b>	<b>1.87</b>	<b>1,980,000</b>

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

**Appendix 2b – November 2011 JORC Resource Estimate**

SATELLITE AREAS	0.4 g/t cut-off	TONNAGE	GRADE	CONT'D GOLD
		Tonnes	(Au g/t)	Ounces
<b>AHEMAN</b>	Measured	-	-	-
	Indicated	607,500	0.73	14,300
	Inferred	-	-	-
<b>WALSH-STRAUSS PRELIMINARY</b>	Measured	1,748,000	1.68	94,400
	Indicated	2,430,000	1.12	87,500
	Inferred	6,000	1.69	300
<b>GRASSHOPPER</b>	Measured	-	-	-
	Indicated	433,200	1.25	17,400
	Inferred	4,800	1.20	200
<b>OLD TAILINGS*</b>	Measured	-	-	-
	Indicated	2,860,200	0.70	64,000
	Inferred	-	-	-
	<b>Total</b>	<b>8,089,700</b>	<b>1.07</b>	<b>278,100</b>

Global Mineral Resource Estimate based on a cut-off grade of 0.4g/t

\* Cut-off grade 0.0g/t

**TOTAL RESOURCES = 41.1Mt @ 1.71 g/t (2.26Moz)**



**Appendix 3a – Bibiani Main Pit Proved and Probable Ore Reserves as at June 2011**

<b>Bibiani Main Pit Proved and Probable Ore Reserves – June 2011</b>												
	Oxide			Fresh			Fill			Total		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	Kt	g/t	Kozs	Kt	g/t	Kozs	Kt	g/t	Kozs	Kt	g/t	Kozs
Proved	-	-	-	5,020	2.17	349	-	-	-	5,020	2.16	349
Probable	360	1.34	16	6,280	2.02	407	340	1.73	19	6,980	1.97	441
<b>Total</b>	<b>360</b>	<b>1.34</b>	<b>16</b>	<b>11,300</b>	<b>2.08</b>	<b>756</b>	<b>340</b>	<b>1.73</b>	<b>19</b>	<b>12,000</b>	<b>2.05</b>	<b>790</b>

Derived from Measured and Indicated Mineral Resources using a cut-off grade of 0.6g/t

**Appendix 3b – Walsh to Grasshopper Satellite Pits Proved and Probable Ore Reserves as at October 2011**

<b>Bibiani Walsh to Grasshopper Satellite Pits Proved and Probable Ore Reserves – October 2011</b>												
	Oxide			Transition			Sulphide			Total		
	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	Kt	g/t	Kozs	Kt	g/t	Kozs	Kt	g/t	Kozs	Kt	g/t	Kozs
Proved	181	1.30	8	132	1.70	7	753	2.22	54	1,065	2.00	69
Probable	448	1.39	20	172	1.71	9	102	2.05	7	722	1.56	36
<b>Total</b>	<b>628</b>	<b>1.36</b>	<b>28</b>	<b>303</b>	<b>1.70</b>	<b>17</b>	<b>855</b>	<b>2.20</b>	<b>61</b>	<b>1,787</b>	<b>1.82</b>	<b>105</b>

Derived from Measured and Indicated Resources using a cut-off grade of 0.5g/t

**Appendix 3c – Tailings Deposits Probable Ore Reserves as at November 2011**

<b>Bibiani Tailings Deposits Probable Ore Reserves – November 2011</b>			
Deposit	Tonnes	Grade	Cont'd Gold
	Kt	Au (g/t)	Kozs
Dams 1 & 2	850	0.74	20
Levees 6 & 7	2,030	0.65	43
<b>Total</b>	<b>2,880</b>	<b>0.68</b>	<b>63</b>

**TOTAL RESERVES = 16.7Mt @ 1.79 g/t (958,000oz)**