

Hits of up to 197gpt pave way for significant resource upgrade at Bibiani

Mineralisation initially viewed as satellite deposits now emerging as a substantial source of high-grade ore

Noble Mineral Resources (ASX: NMG) is pleased to advise that drilling along a stretch of satellite deposits at its Bibiani Gold Project in Ghana has returned more wide, high-grade intersections, providing firm evidence that this tract of land could contain substantially more gold than initially thought.

The results include:

- 21m @ 12.14g/t Au including
 - o 6m @ 39.11g/t Au and
 - o 1m @ 196.9 g/t Au
- 16m @ 6.14g/t Au including
 - o 5m @ 17.24g/t Au
- 15m @ 2.40g/t Au
- 29m @ 1.31q/t Au
- 12m @ 1.46g/t Au
- 2m @ 5.39g/t Au
- 6m @ 2.16q/t Au

These results will be used to help calculate a maiden resource estimate for the stretch of land containing this mineralisation, which includes the Walsh, Strauss and Aheman deposits.

The results also raise the distinct prospect that the mineralisation which forms these deposits could be continuous and therefore may become the subject of one extensive single open pit, though Noble emphasises that further drilling is needed to establish the extent of this potential.

These deposits are currently not included in the existing JORC resource at Bibiani of 1.98 million ounces, including 605,000oz in reserves (*JORC code compliant;* see *Appendix 1: Ore Reserves, Appendix 2: Resource estimate*). This resource and reserve estimate is based solely on the Bibiani main pit.





The latest results come from drilling around the shallow Walsh pit (see figure 1 and 2), which is located 400m south of the Strauss deposit, and follow the first round of high-grade intersections in the area announced to the ASX on December 14, 2010. Results are pending from subsequent drilling undertaken around Aheman and drilling is now taking place at Strauss.

The rapidly emerging potential of the satellite deposits at Bibiani is highly significant because as well as providing substantial scope for a resource upgrade, these areas are expected to be the first source of primary ore feed for the refurbished mill. Commissioning of the 3Mtpa plant is scheduled to occur in May, with the first primary ore feed set for July.

Noble plans to ramp up production at Bibiani to an annualised rate of more than 150,000 ounces.

In the meantime, drilling is about to start at the Bibiani pit as part of a strategy to extend the known limits of the mineralisation on the western side of the existing pit, towards the geologically significant Chirano trend. Exploration to date has led Noble to believe there is strong potential for significantly more resources and reserves to be added by drilling into what is currently the west wall of the pit.

Success in this program would mean that the planned pit cutback, which is currently aimed at accessing ore below the floor of the pit, would in effect become a mining, rather than a waste removal, operation.

When this program starts, Noble will have three rigs operating at Bibiani with two more on the way. It aims to incorporate as many results of this aggressive drilling schedule as possible in the impending resource upgrade, which is expected to be released by the end of the March quarter.

"The latest drilling results again highlight the enormous potential to grow the gold inventory at Bibiani," Noble Managing Director Wayne Norris said. "The exploration around the satellite deposits is still in its early days, but this area is already emerging as a far more substantial source of primary ore than initially thought."

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 Phillip Schiemer (BSc (Hons), Geology and Geophysics), who is a Corporate Member of the Australasian Institute of Mining and Metallurgy and a member of the Australian Institute of Geoscientists. Mr Schiemer 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 Schiemer 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 is an ASX-listed company (ASX Code: NMG) that is exploring for and developing large-scale gold deposits in the world-class goldfields of Ghana, West Africa. Production is set to commence at the Company's flagship Bibiani Gold Project during the second quarter of 2011, ramping up to a stable production rate of +150,000ozpa by 2012 and propelling Noble into the ranks of West Africa's mid-tier gold producers.

The Bibiani Project is located in the Sefwi-Bibiani Gold Belt in Ghana, which boasts a total gold endowment of more than 30 million ounces and hosts the world-class Ahafo (16Moz) and Chirano (5Moz) gold mines. **The Bibiani Project** has a current JORC-compliant mineral inventory of 2.0Moz of resources, including 605,000oz of reserves, and a 2.7Mtpa Carbon-in-Leach (CIL) Gold Processing Facility. The Project has a 10-year mine life based on current mining parameters.

An aggressive exploration program is also underway to add substantially to the existing resource base at Bibiani, with recent drilling returning spectacular high-grade results from near mine targets.

In addition to the Bibiani Project, Noble holds the **Cape Three Points and Tumentu** Gold Projects, both located within the southern extension of the Ashanti Gold Belt.

ASX Code: NMG

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Figure 1 – Area of Initial Drilling

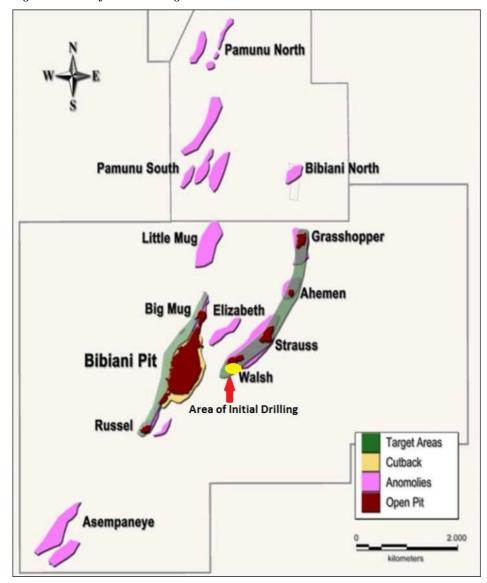
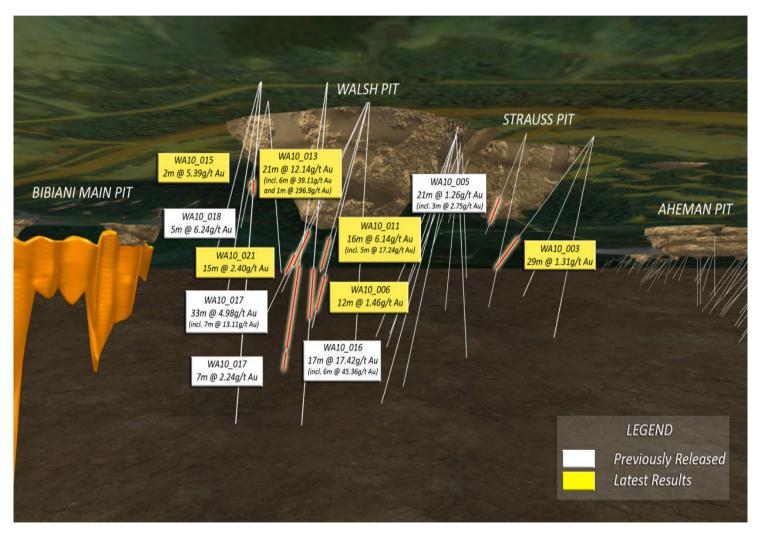




Figure 2 – Oblique Long Section showing intercepts







Appendix 1 – Proved and Probable Ore Reserves as at March 2010

Bibiani Open Pit Detailed Design Cutback Proved and Probable Ore Reserves – March 2010												
	Oxide		Fresh		Fill		Total					
	Tonnes	Grad	Ounces									
	Mt	e G/t	Mozs									
Proved	-	-	-	3.45	2.29	0.254	-	-	-	3.454	2.29	0.254
Probable	0.30	1.45	0.014	4.40	2.28	0.323	0.25	1.79	0.014	4.946	2.21	0.351
Total	0.30	1.45	0.014	7.85	2.28	0.577	0.25	1.79	0.014	8.400	2.24	0.605
Derived from Measured and Indicated Mineral Resources using a cut-off grade of 0.7a/t												

Appendix 2 – March 2010 JORC Mineral Resource Estimate

	TONNAGE	GRADE	METAL	CONT'D GOLD
	Tonnes (M)	(Au g/t)	(tonnes Au)	Ounces (M)
Measured	6.56	2.05	13.44	0.43
Indicated	13.37	1.77	23.66	0.76
Inferred	13.06	1.89	24.61	0.79
Total	32.98	1.87	61.7	1.98



Appendix 3 – Re-splits above 0.2 g/t Au

Assays are BLEG bottle rolls on 12 hour roll with accelerant. Intercepts have been calculated with a cut-off of 0.5g/t and an inclusion of at most one metre of internal waste material. All samples have been riffle split from recovered drill cuttings of approximately 25kg.

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Hole ID	From (m)	To (m)	Au g/t	Hole ID	From (m)	To (m)	Au g/t
WA10_003	68	69	0.76	WA10_003	101	102	0.92
WA10_003	69	70	1.17	WA10_003	102	103	2.28
WA10_003	70	71	6.24	WA10_003	103	104	1.45
WA10_003	71	72	4.08	WA10_003	104	105	1.58
WA10_003	72	73	2.16	WA10_006	25	26	1.14
WA10_003	73	74	0.88	WA10_006	26	27	0.68
WA10_003	73	74	0.74	WA10_006	27	28	0.67
WA10_003	77	78	0.96	WA10_006	28	29	2.16
WA10_003	78	79	0.5	WA10_006	29	30	0.26
WA10_003	79	80	2.52	WA10_006	30	31	0.99
WA10_003	80	81	1.36	WA10_006	31	32	0.16
WA10_003	81	82	3.41	WA10_006	32	33	2.85
WA10_003	82	83	1.75	WA10_006	32	33	2.92
WA10_003	83	84	1.25	WA10_006	33	34	2.66
WA10_003	84	85	0.41	WA10_006	34	35	2.17
WA10_003	85	86	1.73	WA10_006	35	36	0.88
WA10_003	86	87	0.84	WA10_010	78	79	0.94
WA10_003	87	88	0.73	WA10_010	79	80	1.33
WA10_003	88	89	0.63	WA10_010	80	81	0.79
WA10_003	89	90	1.22	WA10_010	81	82	0.56
WA10_003	90	91	1.56	WA10_010	82	83	1.86
WA10_003	91	92	0.98	WA10_010	83	84	3.21
WA10_003	92	93	0.65	WA10_010	84	85	1.37
WA10_003	93	94	1.26	WA10_010	84	85	1.37
WA10_003	93	94	1.06	WA10_011	72	73	0.2
WA10_003	94	95	1.19	WA10_011	73	74	11.33
WA10_003	95	96	1.25	WA10_011	74	75	1.86
WA10_003	96	97	1.79	WA10_011	77	78	2.03
WA10_003	97	98	1.46	WA10_011	78	79	0.83
WA10_003	98	99	1.24	WA10_011	79	80	1.97
WA10_003	99	100	0.79	WA10_011	80	81	1.5



WA10_003	100	101	1.16	WA10_011	81	82	0.5
Hole ID	From (m)	To (m)	Au g/t	Hole ID	From (m)	To (m)	Au g/t
WA10_011	82	83	0.94	WA10_013	71	72	0.79
WA10_011	83	84	0.28	WA10_013	72	73	1.02
WA10_011	84	85	0.54	WA10_013	72	73	1.11
WA10_011	84	85	0.55	WA10_013	73	74	196.9
WA10_011	85	86	6.7	WA10_013	74	75	12.88
WA10_011	86	87	4.44	WA10_013	75	76	6.02
WA10_011	87	88	54	WA10_013	76	77	4.06
WA10_011	88	89	16.26	WA10_013	77	78	7.89
WA10_011	89	90	4.8	WA10_013	78	79	6.92
WA10_011	90	91	2.37	WA10_013	79	80	2.9
WA10_011	91	92	0.54	WA10_013	80	81	1.32
WA10_012	61	62	7.78	WA10_013	81	82	1.89
WA10_012	62	63	3.54	WA10_013	82	83	1.22
WA10_012	63	64	1.31	WA10_013	83	84	0.65
WA10_012	64	65	0.57	WA10_013	84	85	0.44
WA10_012	65	66	0.93	WA10_013	85	86	1.8
WA10_012	66	67	0.73	WA10_013	86	87	1.14
WA10_012	67	68	0.8	WA10_013	87	88	0.84
WA10_012	68	69	0.82	WA10_013	107	108	1.01
WA10_012	77	78	2.07	WA10_013	108	109	0.48
WA10_012	78	79	1.05	WA10_013	109	110	1.82
WA10_012	79	80	7.72	WA10_014	58	59	0.56
WA10_012	84	85	0.09	WA10_014	59	60	0.6
WA10_012	85	86	1.44	WA10_014	60	61	2.61
WA10_012	86	87	0.58	WA10_014	61	62	4.36
WA10_013	40	41	2.09	WA10_014	62	63	2.63
WA10_013	40	41	1.61	WA10_014	63	64	0.55
WA10_013	58	59	1.58	WA10_014	64	65	0.53
WA10_013	59	60	6.95	WA10_014	65	66	0.51
WA10_013	60	61	1.55	WA10_015	37	38	1.51
WA10_013	68	69	0.68	WA10_015	38	39	9.26
WA10_013	69	70	0.72	WA10_021	63	64	3.83
WA10_013	70	71	3.66	WA10_021	64	65	3.26





Hole ID	From (m)	To (m)	Au g/t
WA10_021	65	66	2.13
WA10_021	66	67	6.23
WA10_021	67	68	0.75
WA10_021	68	69	2.03
WA10_021	69	70	0.73
WA10_021	70	71	1.36
WA10_021	71	72	1.44
WA10_021	72	73	1.35
WA10_021	73	74	1.43
WA10_021	74	75	8.32
WA10_021	75	76	0.66
WA10_021	76	77	0.72
WA10_021	77	78	1.83
WA10_021	79	80	1.72
WA10_021	80	81	1.82
WA10_021	81	82	0.55