



December 14th, 2010

Bibiani drilling returns spectacular high-grade results of up to 84gpt

Intersections highlight huge potential to rapidly increase 2Moz inventory in lead-up to start of production next year

Noble Mineral Resources (ASX: NMG) is pleased to advise that the aggressive exploration strategy it has devised to substantially grow resources and reserves at its Bibiani Gold Project in Ghana has struck immediate and outstanding success, with the first round of drilling returning grades of up to 84.15gpt.

The drilling is part of a program which is focusing on near-mine targets at Bibiani, where resources stand at 1.98 million ounces, including 605,000oz in reserves (*JORC code compliant; see Appendix 1: Ore Reserves, Appendix 2: Resource estimate*).

Highlights from the first nine holes of the program include:

- **1m @ 84.15g/t Au**
- **17m @ 17.42g/t Au – including 6m @ 45.46g/t Au**
- **33m @ 4.98g/t Au – including 7m @ 13.11g/t Au**
- **5m @ 6.24g/t Au**
- **7m @ 2.24g/t Au**
- **21m @ 1.26g/t – including 3m @ 2.75g/t Au**

The first phase of the program, comprising 27 RC holes, is focused around the Walsh pit (see *Figure 1*). Importantly, these initial results indicate that the Walsh mineralisation remains open in all directions.

Samples for the drilling completed were taken every one metre with four metre composite spear samples submitted for assay. All composites returning grades of greater than 0.2gt Au were then riffle split at one metre intervals and submitted for assay and these results are from individual metre sampling.

Results from a further nine holes at Walsh are pending, as are the results from an additional 26 holes completed at the nearby Aheman deposit at Bibiani.

Drilling at Walsh will re-commence upon completion of drilling at the shallower, more oxidised Ahemen target. Ahemen and Walsh are priority areas because Noble believes they can be brought into production rapidly and at low cost.



To assist with this ambitious exploration program, a second rig owned by Noble has arrived on site (see *Figure 2*) and will start drilling this week. It will focus on the western side of the main pit to establish additional resources and reserves within the shell of the planned pit cut-back with more than 28,000m planned for the first phase. The current pit optimisation is 775m wide and Noble is confident that, with further success in definition drilling, this known mineralisation can be brought within an expanded optimisation.

A contract rig is due to arrive on site later this month. This rig will focus on resource definition drilling between Walsh and Aheman. A further two, 100 per cent-owned multipurpose rigs are being sourced from the USA and will arrive in the first Quarter of next year.

Noble Managing Director Wayne Norris said the latest drilling results were outstanding and showed the upside which existed at Bibiani.

"We believe we have only scratched the surface surrounding the Bibiani area," Mr Norris said. "The recent drilling highlights the immense potential this project offers.

"Noble stands to become a significant mining house in West Africa and a lot of this will stem from the fact that we are able to develop and grow our resource and reserve base.

"With two company-owned rigs already mobilised onsite, an additional contract rig due this month and two new multi-purpose rigs arriving in the first quarter of 2011, Noble has now taken control of its own destiny and will aggressively pursue opportunities in and around the existing operations."

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 listed on the Australian Stock Exchange on 26th 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. On July 20th 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 141.3km² 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 10th largest gold producing nation in the world, with annual production of approximately 2.9 Million Ounces. Noble's ongoing 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 – Area of Initial Drilling

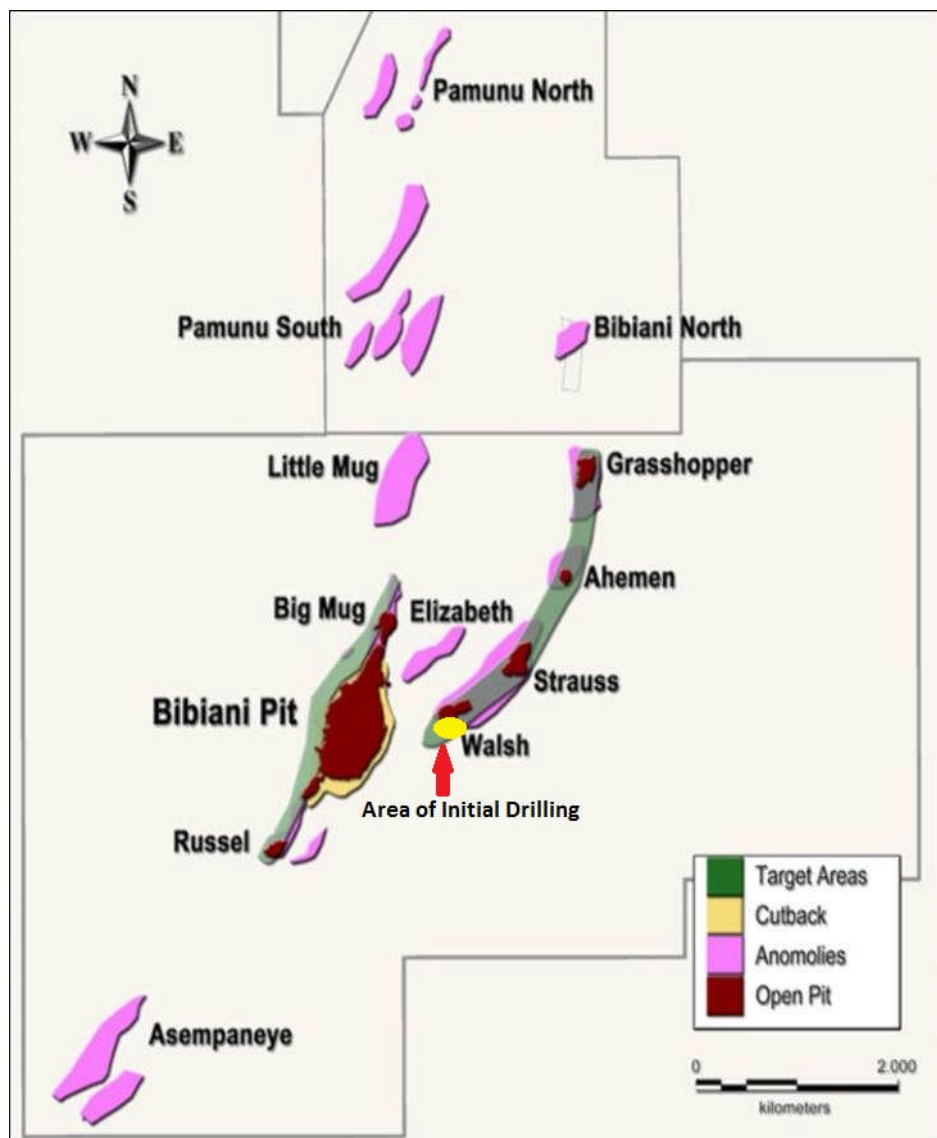


Figure 2 – Second Company owned multi-purpose drilling rig



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	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces	Tonnes	Grade	Ounces
	Mt	G/t	Mozs	Mt	G/t	Mozs	Mt	G/t	Mozs	Mt	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
<i>Derived from Measured and Indicated Mineral Resources using a cut-off grade of 0.7g/t</i>												

Appendix 2 – March 2010 JORC Mineral Resource Estimate

	TONNAGE	GRADE	METAL	CONT'D GOLD
	Tonnes (million)	(Au g/t)	(tonnes Au)	Ounces (million)
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	61.70	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.

Hole_ID	From	To	Au g/t
WA10_001	88	89	0.51
WA10_001	89	90	0.6
WA10_001	90	91	0.62
WA10_001	91	92	0.06
WA10_001	92	93	0.61
WA10_001	93	94	0.88
WA10_001	94	95	1.155
WA10_001	95	96	0.23
WA10_001	96	97	0.4
WA10_001	97	98	0.18
WA10_001	98	99	0.07
WA10_001	99	100	0.12
WA10_002	72	73	-0.01
WA10_002	73	74	1.09
WA10_002	74	75	3.06
WA10_002	75	76	2.26
WA10_002	76	77	0.19
WA10_002	77	78	0.36
WA10_002	78	79	0.12
WA10_002	79	80	0.08
WA10_002	80	81	0.26
WA10_002	81	82	0.18
WA10_002	82	83	0.37
WA10_002	83	84	0.62
WA10_002	84	85	2.215
WA10_002	85	86	0.81
WA10_002	86	87	0.63
WA10_002	87	88	0.35
WA10_002	88	89	0.28
WA10_002	89	90	0.11
WA10_002	90	91	0.2
WA10_002	91	92	0.27
WA10_002	92	93	0.16

Hole_ID	From	To	Au g/t
WA10_004	48	49	0.13
WA10_004	49	50	0.52
WA10_004	50	51	0.48
WA10_004	51	52	0.03
WA10_004	72	73	0.24
WA10_004	73	74	0.21
WA10_004	74	75	0.21
WA10_004	75	76	0.43
WA10_004	76	77	0.51
WA10_004	77	78	0.27
WA10_004	78	79	0.16
WA10_004	79	80	0.17
WA10_005	44	45	0.1
WA10_005	45	46	1.01
WA10_005	46	47	0.89
WA10_005	47	48	2.53
WA10_005	48	49	3.575
WA10_005	49	50	2.13
WA10_005	50	51	4.33
WA10_005	51	52	0.31
WA10_005	60	61	0.79
WA10_005	61	62	0.88
WA10_005	62	63	0.39
WA10_005	63	64	0.75
WA10_005	64	65	0.29
WA10_005	65	66	0.53
WA10_005	66	67	0.66
WA10_005	67	68	0.82
WA10_005	68	69	0.38
WA10_005	69	70	0.81
WA10_005	70	71	0.44
WA10_005	71	72	1.32
WA10_005	72	73	2.36

WA10_002	93	94	0.34
WA10_002	94	95	0.03
WA10_002	95	96	0.05
WA10_002	96	97	0.01
WA10_002	97	98	0.2
WA10_002	98	99	0.06
WA10_002	99	100	0.05
WA10_002	100	101	0.06
WA10_002	101	102	0.24
WA10_002	102	103	0.15
WA10_002	103	104	0.15
WA10_002	104	105	0.12
WA10_002	105	106	0.17
WA10_002	106	107	0.46
WA10_002	107	108	0.36
WA10_002	108	109	0.45
WA10_016	67	68	0.92
WA10_016	68	69	34.825
WA10_016	69	70	33.09
WA10_016	70	71	41.28
WA10_016	71	72	57.24
WA10_016	72	73	21.6
WA10_016	73	74	84.15
WA10_016	74	75	9.515
WA10_016	75	76	4.09
WA10_016	76	77	2.13
WA10_016	77	78	0.94
WA10_016	78	79	1.14
WA10_016	79	80	1.03
WA10_016	80	81	2.11
WA10_016	81	82	0.26
WA10_016	82	83	0.7
WA10_016	83	84	1.09
WA10_016	84	85	0.13
WA10_016	85	86	0.49
WA10_016	86	87	0.1
WA10_016	87	88	0.06

WA10_005	73	74	1.31
WA10_005	74	75	0.36
WA10_005	75	76	0.34
WA10_005	76	77	0.31
WA10_005	77	78	0.28
WA10_016	52	53	-0.01
WA10_016	53	54	-0.01
WA10_016	54	55	0.19
WA10_016	55	56	3.175
WA10_016	60	61	0.56
WA10_016	61	62	0.11
WA10_016	62	63	0.17
WA10_016	63	64	0.3
WA10_016	64	65	0.08
WA10_016	65	66	0.16
WA10_016	66	67	0.43
WA10_017	75	76	1.26
WA10_017	76	77	4.22
WA10_017	77	78	3.55
WA10_017	78	79	0.78
WA10_017	79	80	4.79
WA10_017	80	81	3.86
WA10_017	81	82	1.05
WA10_017	82	83	0.66
WA10_017	83	84	4.19
WA10_017	84	85	2.09
WA10_017	85	86	6.88
WA10_017	86	87	1.79
WA10_017	87	88	4.37
WA10_017	88	89	4.45
WA10_017	89	90	3.15
WA10_017	90	91	3.31
WA10_017	91	92	3.41
WA10_017	92	93	3.42
WA10_017	93	94	0.62
WA10_017	94	95	4.26
WA10_017	95	96	2.42



WA10_016	92	93	0.89
WA10_016	93	94	0.12
WA10_016	94	95	0.38
WA10_016	95	96	1.875
WA10_016	96	97	0.2
WA10_016	97	98	0.05
WA10_016	98	99	0.16
WA10_016	99	100	3.425
WA10_016	108	109	0.15
WA10_016	109	110	0.07
WA10_016	110	111	0.26
WA10_016	111	112	1.21
WA10_016	112	113	0.58
WA10_016	113	114	0.46
WA10_016	114	115	0.89
WA10_016	115	116	0.25
WA10_016	116	117	0.27
WA10_016	117	118	1.29
WA10_016	118	119	0.44
WA10_016	119	120	0.75
WA10_016	120	121	1.39
WA10_017	68	69	25.8
WA10_017	69	70	16.1
WA10_017	70	71	16.61
WA10_017	71	72	4.32
WA10_017	72	73	16.7
WA10_017	73	74	6.05
WA10_017	74	75	6.22
WA10_018	74	75	0.03
WA10_018	75	76	0.12
WA10_018	108	109	-0.01
WA10_018	109	110	-0.01
WA10_018	110	111	1.37
WA10_018	111	112	0.39
WA10_019	36	37	0.13
WA10_019	37	38	-0.01
WA10_019	38	39	0.17

WA10_017	96	97	2.12
WA10_017	97	98	1.99
WA10_017	98	99	1.04
WA10_017	99	100	2.07
WA10_017	100	101	0.77
WA10_017	101	102	0.16
WA10_017	102	103	0.1
WA10_017	103	104	2.6
WA10_017	104	105	4.28
WA10_017	105	106	1.47
WA10_017	106	107	1.26
WA10_017	107	108	1.35
WA10_017	108	109	3.04
WA10_017	109	110	1.68
WA10_018	36	37	-0.01
WA10_018	37	38	2.78
WA10_018	38	39	0.15
WA10_018	39	40	0.48
WA10_018	40	41	24.4
WA10_018	41	42	3.39
WA10_018	42	43	0.51
WA10_018	43	44	-0.01
WA10_018	44	45	0.05
WA10_018	45	46	0.07
WA10_018	46	47	0.67
WA10_018	47	48	0.28
WA10_018	72	73	0.84
WA10_018	73	74	0.14

WA10_019	39	40	0.77
WA10_019	60	61	0.35
WA10_019	61	62	-0.01
WA10_019	62	63	0.03
WA10_019	63	64	-0.01
WA10_019	84	85	-0.01
WA10_019	85	86	0.01
WA10_019	86	87	0.16
WA10_019	87	88	0.63
WA10_019	88	89	2.375
WA10_019	89	90	1.53
WA10_019	90	91	-0.01
WA10_019	91	92	-0.01
WA10_019	92	93	0.01
WA10_019	93	94	-0.01
WA10_019	94	95	0.01
WA10_019	95	96	0.75
WA10_020	56	57	0.05
WA10_020	57	58	0.04
WA10_020	58	59	0.68
WA10_020	59	60	0.66
WA10_020	72	73	0.69
WA10_020	73	74	0.07
WA10_020	74	75	0.4
WA10_020	75	76	0.18
WA10_020	80	81	0.01
WA10_020	81	82	-0.01
WA10_020	82	83	0.01
WA10_020	83	84	2.1