

# ASX ANNOUNCEMENT

15 August 2014

01

## FY2014 RESERVES AND RESOURCES STATEMENT

Resolute Mining Limited (ASX: RSG, "Resolute" or the "Company") is pleased to announce the updated Group Reserves and Resources Statement as at 30 June 2014.

The appended Reserves and Resources Statement showed that total Proved and Probable Reserves increased by **30%** over the preceding 12 months to **5.06 million ounces** of gold, after allowing for mining depletion.

These reserve additions are largely attributed to:

- An independent Underground Pre-Feasibility Study (ASX announcement 28 March 2014) completed by Snowden Mining Industry Consultants delivering a 54% increase in reserves or 1.10 million ounces of gold at the Syama gold mine in Mali, which will provide long term production beyond 2025
- At the Mt Wright gold mine in Queensland, Australia, underground diamond drilling, modelling and mine design providing a 46% increase in ore reserves and delivering a further 137,000 ounces of gold (ASX announcement 20 February 2014)

Total Resources (exclusive of Reserves) increased by **20%** during the financial year to **10.41 million ounces** of gold despite the substantial conversion of resources to underground reserves at Syama.

These resource additions are largely attributed to:

- A significant new 1.28 million ounce resource defined at Buck Reef West, adjacent to the Ravenswood gold operation in Queensland (ASX announcement 20 June 2014)
- An underground resource of 15.3Mt @ 3.4g/t Au for 1.70 million ounces of gold estimated for the Bibiani mine in Ghana. This estimate is based upon an independent geological block model, prepared by Coffey Mining Pty Ltd, for the prior owners Noble Mineral Resources Limited in 2012 (Refer to Table 1 appended).



PETER SULLIVAN  
*Chief Executive Officer*

### About Resolute:

Resolute is an unhedged gold miner with two operating mines in Africa and Australia. The Company is one of the largest gold producers by volume listed on the ASX. Resolute's flagship Syama project in Mali is on track for an increase in production to 270,000oz of gold a year following an approved expansion to be undertaken through FY2016. At its Ravenswood mine in Queensland Resolute is investigating a number of opportunities to add value by increasing gold production and lowering operating costs. In Ghana, the Company is now the owner and operator of the advanced Bibiani gold project where work is being undertaken on an underground feasibility study including a 20,000m drill program. The Company controls an extensive footprint along the highly prospective Syama Shear and Greenstone Belts in Mali and Cote d'Ivoire. Resolute has also identified a number of highly promising exploration targets at its Ravenswood operations and holds a number of exploration projects in Tanzania surrounding its now completed Golden Pride mine.

**RESOLUTE GROUP RESERVES and RESOURCES**

Reserves and Resources comply with the Australian code for reporting of Mineral Resources and Reserves (The JORC Code 2004 and JORC Code 2012)

Reserves and Resources Statement as at 30 June 2014						As at 30 June 2013					Comments on Differences
Gold Reserves (includes stockpiles)	Project	Gold	Project	Group	Group	Project	Gold	Project	Group	Group	
	Tonnes	grade	Contained	Share	Share		Tonnes	grade	Contained	Share	
		(g/t)	Ounces	%	Ounces			(g/t)	Ounces	%	Ounces
<b>RESERVES</b>						<b>RESERVES</b>					
<i>Reserves ( Proved )</i>						<i>Reserves ( Proved )</i>					
Australia											
Mt Wright (insitu) <sup>3</sup>	2,655,000	2.7	226,000	100%	226,000	3,271,000	2.8	290,000	100%	290,000	Depletion due to annual production offset by reserve extension (February 2014) - JORC 2012
Sarsfield (insitu) <sup>2</sup>	28,450,000	0.8	747,000	100%	747,000	28,450,000	0.8	747,000	100%	747,000	No change
Mali											
Syama (insitu)	9,026,000	2.9	856,000	80%	685,000	11,191,000	3.0	1,077,000	80%	862,000	Depletion due to annual production
Stockpiles	196,000	3.2	20,000	80%	16,000	249,000	2.6	21,000	80%	17,000	Movement in operating stockpiles
Syama Satellites (insitu)	3,122,000	2.2	224,000	80%	179,000	3,122,000	2.2	224,000	80%	179,000	No change
Tabakoroni (insitu)	1,335,000	3.1	133,000	85%	113,000	1,335,000	3.1	133,000	51%	68,000	Increase in Group share due to ownership change
<b>Total (Proved)</b>	<b>44,784,000</b>	<b>1.5</b>	<b>2,206,000</b>		<b>1,966,000</b>	<b>47,618,000</b>	<b>1.6</b>	<b>2,492,000</b>		<b>2,163,000</b>	Decrease in Proven Reserves mainly due to MTW & Syama annual production
<i>Reserves ( Probable )</i>						<i>Reserves ( Probable )</i>					
Australia											
Mt Wright (insitu) <sup>3</sup>	626,000	1.8	37,000	100%	37,000	0	0.0	0	100%	0	Reserve extension (February 2014) - JORC 2012
Mt Wright Stockpiles <sup>3</sup>	9,000	2.5	1,000	100%	1,000	60,000	2.9	6,000	100%	6,000	Movement in operating stockpiles - JORC 2012
Sarsfield (insitu) <sup>2</sup>	18,640,000	0.7	423,000	100%	423,000	18,640,000	0.7	423,000	100%	423,000	No change
Mali											
Syama (insitu)	2,955,000	2.6	243,000	80%	194,000	3,439,000	2.6	288,000	80%	230,000	Depletion due to annual production
Syama UG (insitu) <sup>5</sup>	14,296,000	2.4	1,103,000	80%	882,000	0	0.0	0	80%	0	Additional reserves from UG Pre-Feasibility (March 2014) - JORC 2012
Stockpiles	2,627,000	1.9	157,000	80%	126,000	2,199,000	1.9	136,000	80%	109,000	Movement in operating stockpiles
Syama Satellites (insitu)	4,986,000	2.1	337,000	80%	270,000	4,986,000	2.1	337,000	80%	270,000	No change
Tabakoroni (insitu)	1,821,000	2.8	163,000	85%	139,000	1,821,000	2.8	163,000	51%	83,000	Increase in Group share due to ownership change
Tanzania											
Nyakafuru JV (insitu) <sup>2</sup>	7,360,000	1.6	388,000	98%	380,000	7,360,000	1.6	388,000	98%	380,000	No change
Golden Pride (insitu)	0	0.0	0	100%	0	480,000	2.0	30,000	100%	30,000	Depletion due to annual production - Operation closed 2014
Golden Pride Stockpiles	0	0.0	0	100%	0	1,264,000	0.9	37,000	100%	37,000	Depletion due to annual production - Operation closed 2014
<b>Total (Probable)</b>	<b>53,320,000</b>	<b>1.7</b>	<b>2,852,000</b>		<b>2,452,000</b>	<b>40,249,000</b>	<b>1.4</b>	<b>1,808,000</b>		<b>1,567,000</b>	Increase in Probable Reserves mainly from Syama Underground and MTW
<b>Proved and Probable</b>	<b>98,104,000</b>	<b>1.6</b>	<b>5,058,000</b>		<b>4,418,000</b>	<b>87,867,000</b>	<b>1.5</b>	<b>4,300,000</b>		<b>3,730,000</b>	Increase in Reserves exceeds the 401koz. 2013/14 production depletion

Gold Resources <sup>1</sup>						RESOURCES <sup>1</sup>					Comments on Differences
<b>(includes stockpiles)</b>											
Project	Gold grade	Project Contained	Group Share	Group Share		Project	Gold grade	Project Contained	Group Share	Group Share	
Tonnes	(g/t)	Ounces	%	Ounces		Tonnes	(g/t)	Ounces	%	Ounces	
<b>RESOURCES <sup>1</sup></b>						<b>RESOURCES <sup>1</sup></b>					
<b>Resources (Measured)</b>						<b>Resources (Measured)</b>					
Australia											
Mt Wright (insitu) <sup>3</sup>	281,000	2.9	26,000	100%	26,000	0	0.0	0	100%	0	Upgrading of Resources from Indicated and Inferred - JORC 2012.
Stockpiles (Mt Wright)	42,000	2.1	3,000	100%	3,000	0	0.0	0	100%	0	Movement in operating stockpiles
Sarsfield (insitu) <sup>2</sup>	16,185,000	0.8	393,000	100%	393,000	16,185,000	0.8	393,000	100%	393,000	No change
Buck Reef West (insitu) <sup>2</sup>	17,857,000	1.1	598,000	100%	598,000	0	0.0	0	0%	0	New Resource identified at Ravenswood (June 2014) - JORC 2012
Mali											
Syama (insitu)	6,900,000	2.4	525,000	80%	420,000	14,769,000	2.6	1,256,000	80%	1,005,000	Resources converted to Reserves
Syama Satellites (insitu)	1,051,000	1.7	56,000	80%	45,000	1,051,000	1.7	56,000	80%	45,000	No change
Tabakoroni (insitu)	996,000	2.7	87,000	85%	74,000	996,000	2.7	87,000	60%	52,000	Increase in Group share due to ownership change
Tanzania											
Golden Pride (insitu)	3,786,000	2.0	238,000	100%	238,000	3,786,000	2.0	238,000	100%	238,000	No change
<b>Total (Measured)</b>	<b>47,098,000</b>	<b>1.3</b>	<b>1,926,000</b>		<b>1,797,000</b>	<b>36,787,000</b>	<b>1.7</b>	<b>2,030,000</b>		<b>1,733,000</b>	Increase in Measured Resources mainly due to new resources offset by conversion to Reserves
<b>Resources (Indicated)</b>						<b>Resources (Indicated)</b>					
Australia											
Mt Wright (insitu) <sup>3</sup>	290,000	2.8	26,000	100%	26,000	604,000	3.2	63,000	100%	63,000	Resources converted to Reserves (February 2014) - JORC 2012
Sarsfield (insitu) <sup>2</sup>	20,384,000	0.7	444,000	100%	444,000	20,384,000	0.7	444,000	100%	444,000	No change
Buck Reef West (insitu) <sup>2</sup>	11,582,000	0.9	323,000	100%	323,000	0	0.0	0	0%	0	New Resource identified at Ravenswood (June 2014) - JORC 2012
Mali											
Syama (insitu)	12,482,000	2.9	1,153,000	80%	922,000	19,285,000	2.6	1,595,000	80%	1,276,000	Resources converted to Reserves
Stockpiles	4,069,000	1.4	177,000	80%	142,000	3,774,000	1.3	164,000	80%	131,000	Movement in operating stockpiles
Syama Satellites (insitu)	4,840,000	1.9	288,000	80%	231,000	4,840,000	1.9	288,000	80%	231,000	No change
Tabakoroni (insitu)	2,674,000	2.6	224,000	85%	190,000	2,674,000	2.6	224,000	60%	134,000	Increase in Group share due to ownership change
Tanzania											
Golden Pride (insitu)	6,744,000	1.8	401,000	100%	401,000	6,744,000	1.8	401,000	100%	401,000	No change
Nyakafuru JV (insitu) <sup>2</sup>	19,067,000	1.1	672,000	95%	638,000	19,067,000	1.1	672,000	95%	638,000	No change
Ghana											
Bibiani (insitu) <sup>4</sup>	7,629,000	3.4	834,000	90%	751,000	0	0.0	0	0%	0	New Project - Coffey 2012 study (Refer to Table 1)
<b>Total (Indicated)</b>	<b>89,761,000</b>	<b>1.6</b>	<b>4,542,000</b>		<b>4,067,000</b>	<b>77,372,000</b>	<b>1.5</b>	<b>3,851,000</b>		<b>3,318,000</b>	Increase Indicated Resources mainly due to new resources and New Project
<b>Measured and Indicated</b>	<b>136,859,000</b>	<b>1.5</b>	<b>6,468,000</b>		<b>5,860,000</b>	<b>114,159,000</b>	<b>1.6</b>	<b>5,881,000</b>		<b>5,051,000</b>	Increase in Resources due to New project and new resources offset by conversions to Reserves

Gold Resources <sup>1</sup> (includes stockpiles)	Project					Project					Comments on Differences	
	Project	Gold	Project	Group	Group	Project	Gold	Project	Group	Group		
		grade	Contained	Share	Share		Contained	grade	Contained	Share		Share
Tonnes	(g/t)	Ounces Gold	%	Ounces	Tonnes	(g/t)	Ounces	%	Ounces			
<b>Resources (Inferred)</b>						<b>Resources (Inferred)</b>						
Australia												
Mt Wright (insitu) <sup>3</sup>	967,000	3.1	95,000	100%	95,000	1,090,000	3.1	108,000	100%	108,000	Resources converted	
Sarsfield (insitu) <sup>2</sup>	22,192,000	0.7	521,000	100%	521,000	22,192,000	0.7	521,000	100%	521,000	No change	
Buck Reef West (insitu) <sup>2</sup>	12,360,000	0.9	356,000	100%	356,000	0	0.0	0	0%	0	New Resource identified at Ravenswood (June 2014) - JORC 2012	
Welcome Breccia (insitu)	2,036,000	3.2	208,000	100%	208,000	2,036,000	3.2	208,000	100%	208,000	No change	
Mali												
Syama (insitu)	3,403,000	2.3	249,000	80%	199,000	3,425,000	2.3	251,000	80%	201,000	Resources converted	
Syama Satellites (insitu)	6,946,000	2.1	479,000	80%	383,000	6,946,000	2.1	479,000	80%	383,000	No change	
Tabakoroni (insitu)	3,132,000	2.2	219,000	60%	131,000	3,132,000	2.2	219,000	60%	131,000	Increase in Group share due to ownership change	
Tanzania												
Golden Pride (insitu)	12,945,000	1.7	724,000	100%	724,000	12,945,000	1.7	724,000	100%	724,000	No change	
Nyakafuru JV (insitu) <sup>2</sup>	6,312,000	1.1	227,000	90%	204,000	6,312,000	1.1	227,000	90%	204,000	No change	
Ghana												
Bibiani (insitu) <sup>4</sup>	7,667,000	3.5	866,000	90%	779,000	0	0.0	0	0%	0	New Project - Coffey 2012 study (Refer to Table 1)	
<b>Total (Inferred)</b>	<b>77,960,000</b>	<b>1.6</b>	<b>3,944,000</b>		<b>3,600,000</b>	<b>58,078,000</b>	<b>1.5</b>	<b>2,737,000</b>		<b>2,480,000</b>	Increase in Inferred Resources mainly due to new resources and New Project	
<b>Total Resources</b>	<b>214,819,000</b>	<b>1.5</b>	<b>10,412,000</b>		<b>9,464,000</b>	<b>172,237,000</b>	<b>1.6</b>	<b>8,618,000</b>		<b>7,531,000</b>	Increase in Resources due to New project and new resources offset by conversions to Reserves	

**Note:**

1. Mineral resources are exclusive of the Reserves - differences may occur due to rounding.
2. All Resources and Reserves are reported above 1.0 g/t cut-off except Nyakafuru and Buck Reef West above 0.5 g/t cut off and Sarsfield above 0.4 g/t cut off
3. Mt Wright Reserves are reported above 2.3 g/t cut off and Resources above 1.8 g/t cut off.
4. Bibiani Resources quoted above a 2.0 g/t cut off.
5. Syama Underground Reserves quoted above a 1.8 g/t cut off.

**COMPETENT PERSONS STATEMENT**

The information in this report that relates to the Exploration Results, Mineral Resources and Ore Reserves is based on information compiled by Mr Richard Bray who is a Registered Professional Geologist with the Australian Institute of Geoscientists and Mr Andrew Goode, a member of The Australasian Institute of Mining and Metallurgy. Mr Richard Bray and Mr Andrew Goode both have more than 5 years' experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Richard Bray and Mr Andrew Goode are full time employees of Resolute Mining Limited Group and each hold equity securities in the Company. They have consented to the inclusion of the matters in this report based on their information in the form and context in which it appears. This information was prepared and first disclosed under the JORC Code 2004. Except where noted, it has not been updated since to comply with the JORC Code 2012 on the basis that the information has not materially changed since it was last reported.

## BIBIANI GOLD MINE GHANA

### JORC Code, 2012 Edition – Table 1

#### Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc.). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<p>The mineral resource estimate is based on data collected from reverse circulation (RC) and diamond core (DD) drill holes.</p> <p>Previous sampling methods undertaken at Bibiani include reverse circulation (RC), diamond drilling (DD) and underground channel sampling (CHAN). Limited information around the historical data is available in company records. Mensin Gold Bibiani (MGBL) has not conducted sampling activities at the Bibiani deposit, as drill hole planning remains to be finalised.</p> <p>RC, DD and CHAN drilling and sample collection is assumed to have been completed to the industry standard at that time (1994-2012).</p> <p>More recent RC sampling (Noble Mineral Resources Ltd) was done with 4m composites, and resampling at 1m was conducted as required.</p>
Drilling techniques	<ul style="list-style-type: none"> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).</li> </ul>	<p>The deposit was modelled by Coffey Mining Pty Ltd on a subset of data comprising of 621 DD holes (244 Underground, 377 Surface), 724 RC holes and 244 Underground CHAN sampling runs.</p> <p>Core type and size has been recorded for some historic holes but many are unknown.</p>
Drill sample recovery	<ul style="list-style-type: none"> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</li> </ul>	<p>No recoveries have been provided, it is unknown if they were recorded.</p> <p>Where stopes or voids have been intersected, this was noted in the drill. Any additional measures taken to ensure sample representivity have not been documented in company records.</p> <p>Any historical relationship between sample recovery and grade was not identified in company records.</p>
Logging	<ul style="list-style-type: none"> <li>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.</li> </ul>	<p>Lithology, Alteration and Mineralisation have been recorded for RC, DD holes and underground channel samples.</p> <p>Diamond core and RC chips are logged onto paper records and / or into Excel spread sheets, then validated and imported into the digital drill hole database.</p> <p>Holes were logged in their entirety (100%).</p>



	<ul style="list-style-type: none"> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	
<p><i>Sub-sampling techniques and sample preparation</i></p>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p>Historic RC samples were split using a riffle (dry) to obtain a 2-4kg sample. Sample moisture content was not recorded. More recent grade control RC samples were sampled wet and dry where identified, otherwise assumed to be dry. All samples were riffle split unless marked otherwise. Spear sampling was used in some cases for wet samples. Underground channel samples are assumed to have been taken from walls and faces using industry standard methods.</p> <p>RC intervals are riffle split (dry) to obtain a 2-4kg sample, which are sent to the laboratory for pulverising.</p> <p>Diamond core was sampled at 1m intervals and cut in half to obtain a 2-4kg sample which is sent to the laboratory for crushing, splitting, pulverising and assaying.</p> <p>The sampling techniques for RC, DD and underground channel samples appear appropriate. Where they are unknown, best practice was assumed. Historic sample intervals were commonly 5 or 10 feet, (stored as 1.5 or 3 meters in the current database). Recent RC drilling has been sampled using 4 meter composites, and then resampled at 1m intervals as required.</p> <p>Analysis of sample sizes determined they appeared appropriate.</p> <p>Best practice was assumed at the time of historic RC, DD and underground channel sampling. More recent grade control and regional RC have duplicates on average of 1 per 65 meters of down hole drilling.</p> <p>Sampling, sample preparation and quality control protocols are industry standard and all attempts are made to ensure an unbiased representative sample is collected. The methods applied in this process are deemed appropriate by the Competent Person.</p>
<p><i>Quality of assay data and laboratory tests</i></p>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</i></li> </ul>	<p>Historic RC and DD holes have been assayed with fire assay and AAS. More recent grade control and regional RC have been a combination of bulk leach with an AAS finish or fire assay with an AAS finish. These methods appear suitable for determining gold concentrations of this type.</p> <p>Samples were submitted to Intertek and ALS Ghana laboratories for assay analysis.</p> <p>No geophysical tools were used to determine elemental concentrations used in resource estimations.</p> <p>Quality control (QC) procedures included the use of certified standards and blanks inserted at a rate of one in twenty samples.</p> <p>Umpire pulp analysis of 2-5% of pulps is performed by a second laboratory at the completion of a drill program to verify the results from the primary laboratory.</p> <p>Laboratory quality control data, including laboratory standards, blanks, duplicates, repeats and grind size results are also captured into the digital database and analysed for accuracy and precision.</p> <p>Analysis of the QC sample assay results indicates that an acceptable level of accuracy and precision has been achieved.</p> <p>Maxwell GeoServices completed a QAQC audit for Coffey Mining and Noble in Nov 2011 and determined historic sampling and laboratory practises used were of industry standard.</p> <p>Coffey Mining Pty Ltd reviewed the available QAQC reports in 2012 and concurs with the conclusions and recommendations of Maxwells. Coffey notes that the positive and negative assay bias that was calculated using data which may include the mislabelled CRM. Coffey recommends that bias be calculated after eliminating those results which can reasonably be attributed to mislabelled CRM.</p> <p>Coffey Mining also concluded that while the available QAQC data demonstrates acceptable levels of assay precision and</p>

		accuracy, this was considered only marginally acceptable and considerable room for improvement existed.
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<p>Verification of significant intersections was completed by company personnel and Coffey Mining personnel.</p> <p>No drill holes within the resource were twinned.</p> <p>Drill holes were logged onto paper templates, validated and then entered into a relational SQL 2008 database using DataShed data management software (Maxwell GeoServices). The data management software has a variety of verification protocols which are used to validate the data entry. The DataShed drill hole database was backed up on a daily basis to the head office server.</p> <p>Assay result files were reported by the laboratory in CSV format or hardcopy and are imported into the SQL database without adjustment or modification.</p>
Location of data points	<ul style="list-style-type: none"> <li>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<p>Collar coordinates are picked up in UTM (WGS84) by registered mine surveyors.</p> <p>Down hole surveys are collected every 30-50m using Reflex single shot and multi shot instruments.</p> <p>Location coordinates and azimuth bearings are reported in UTM WGS84 Zone 29 North.</p> <p>Bibiani Mine Grid is a locally established grid based on mining operations and is the principal grid system used on the site.</p>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Data spacing for reporting of Exploration Results.</li> <li>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</li> <li>Whether sample compositing has been applied.</li> </ul>	<p>Drill hole spacing was sufficient to demonstrate geological and grade continuity appropriate for the Mineral Resource and the classifications applied under the JORC Code.</p> <p>The appropriateness of the drill spacing was reviewed by the Coffey technical team and by the Competent Person.</p> <p>RC and diamond samples were collected or composited to 1m intervals.</p>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<p>Holes are drilled predominantly perpendicular to mineralised domains where possible.</p> <p>No orientation based sampling bias has been identified in the data.</p>
Sample security	<ul style="list-style-type: none"> <li>The measures taken to ensure sample security.</li> </ul>	<p>RC and diamond samples were collected from the drill location and stored on site before being securely dispatched to the laboratory.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<p>External audits of procedures by Maxwell GeoServices and Coffey Mining indicate protocols are within industry standards.</p>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</li> <li>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</li> </ul>	<p>Drilling was conducted within the Ghanaian Mining Concession Permit of Bibiani which covers the current mining leases of the Bibiani Project.</p> <p>Resolute Mining Limited has a 90% interest in the Bibiani Project through its subsidiary company Mensin Gold Bibiani Limited and the Exploitation Permit on which it is based. The Ghana Government holds a free carried 10% interest in Mensin Gold Bibiani Ltd (MGBL).</p> <p>The Bibiani Mine concession is located approximately 6° 27' latitude north and 2° 17' longitude west in the Western Region of Ghana. The Bibiani mineral concessions lie approximately 80 kilometres south west of the Ashanti capital, Kumasi. The principal access to the mine is from the east, along the Kumasi – Bibiani – Sefwi Bekwi Highway. Ghana mining law provides that all mineral resources are administered by the Minerals Commission of Ghana.</p>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<p>Commercial gold production commenced at Bibiani in the early 1900s and was suspended in 1915. In 1927 mining activities recommenced as the mine was developed and operated by foreign investors until it was nationalized in 1958. Post nationalisation, the mine was operated by SGMC (State Gold Mining Corporation) until it was closed in 1973 following the depletion of economic reserves.</p> <p>During the SGMC period, reserves within the existing infrastructure were depleted and the old workings were reworked to recover pillars and remnant lower grade material (probably plus 6g/t) that was below the pay limit applied to the deposit prior to nationalisation.</p> <p>Reports have suggested that during this first 65 years of production a total of 7.8 million tonnes from underground mining and 0.5million tonnes from surface operations were milled, producing over 2 million ounces (“oz.”) of gold at an average recovered grade of approximately 9.5 g/t Au.</p> <p>In the late-1980s, Glamco and International Gold Resources (“IGR”) gained rights to the old Bibiani mine and initiated tailings reclamation and surface exploration, which activities led to the delineation of an open pit resource and a positive feasibility study.</p> <p>Ashanti Goldfields purchased Bibiani from IGR in the mid-1990s for US\$ 130 million, financed an additional US\$ 85 million to capitalize the operation, and redeveloped the mine as an open pit operation with a modern processing plant. Ashanti Goldfields (now AngloGold Ashanti (“AGA”)) produced approximately 1.8 million ounces of gold from the main and satellite pits (after main pit production was hampered by a slope failure in 2004) and tailings retreatment, bringing total Bibiani production since inception to almost four million ounces.</p> <p>Central African Gold plc purchased Bibiani, for a cash consideration of US\$ 40 million. Subsequent to acquisition, CAG plc expended a further US\$ 51 million of capital on the mine, nearly all of which was used to accelerate underground access and to purchase a modern underground mining fleet. Despite development and capital constraints Bibiani produced a further 53 066 oz. of gold between 2007 and 2008 from three sources, namely old tailings, underground ore, and near-mine open cast oxide ore not included in the mineral resources.</p> <p>In late 2009, Noble Mineral Resources Ltd signed a ‘Sale of Shares’ agreement to acquire Central African Gold Ghana Ltd from Investec Bank subject to a number of Conditions. One of these Conditions states that Noble shall formulate a ‘Development Plan’ for the development of and the return to production of the Bibiani mining and processing operations.</p> <p>Resolute Mining Ltd became the owner of the Bibiani Project in June 2014 following the completion of the Deed of Company Arrangement (DOCA) regarding Noble Mineral Resources Limited (ASX:NMG) and acceptance and approval of a scheme of arrangement in Ghana.</p>
Geology	<ul style="list-style-type: none"> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<p>The license area is underlain by metasedimentary rocks of the Lower Birimian in the eastern parts and by intercalated metasedimentary and metavolcanic rocks of the Upper Birimian in the western part of the license. Granites occur in the south-western corner of the license. The Lower Birimian sediments consist mainly of phyllites with intercalated greywackes and minor tuffs, while the Upper Birimian rocks consist of basalt to rhyolites flows with intercalated tuffs and</p>



		<p>minor phyllites and chert horizons. Diorite intrusives are found within the Upper Birimian metavolcanic rocks. In the southern part of the license the rocks strike about 20° to 30° E and dip steeply to the southeast. Further to the north the strike changes to between 40° and 50° E.</p> <p>Previous mapping identified several cross faults that offset the stratigraphy however there is no clear evidence of a relationship between these faults and the gold mineralisation. The Bibiani ore body trend continues north to the Pamunu River approximately two kilometres from the Bibiani Mine. A parallel splay off the Bibiani trend continues obliquely to the Bibiani North deposit one kilometre to the north of the Bibiani Mining Lease.</p>
Drill hole Information	<ul style="list-style-type: none"> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes: <ul style="list-style-type: none"> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>Whole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<p>All information including easting, northing, elevation, dip, azimuth, coordinate system, drill hole length, interval length and depth are measured and recorded in UTM Zone 29 WGS84.</p> <p>Accuracy of the survey measurements is considered to meet acceptable industry standards.</p> <p>For completeness the following information about the drill holes used is provided:</p> <ol style="list-style-type: none"> <li>Easting, Northing and RL of the drill hole collars are measured and recorded in UTM Zone 29 (WGS84).</li> <li>Dip is the inclination of the drill hole from horizontal. For example a drill hole drilled at -60° is 60° from the horizontal.</li> <li>Down hole length is the distance down the inclination of the hole and is measured as the distance from the horizontal to end of hole.</li> <li>Intercept depth is the distance from the start of the hole down the inclination of the hole to the depth of interest, assayed interval of interest or start of reported significant intercept.</li> </ol>
Data aggregation methods	<ul style="list-style-type: none"> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<p>No significant intercepts are reported in this release.</p>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<p>The mineralisation is steeply dipping at approximately 70° from the horizontal.</p> <p>Drill hole azimuths were planned at mine grid 090° at a general inclination of -65° east to intersect as close to perpendicular to the ore zone as possible.</p>
Diagrams	<ul style="list-style-type: none"> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	<p>No maps, diagrams and tabulations are included in the body of text.</p>
Balanced reporting	<ul style="list-style-type: none"> <li>Where comprehensive reporting of all Exploration</li> </ul>	<p>No significant intercepts from new drill holes are reported in this release.</p>

## A proven gold producer

	<p><i>Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></p>	
<p><i>Other substantive exploration data</i></p>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<p>No geophysical and geochemical data and any additional exploration information are reported in this release as they are not deemed relevant to the release.</p>
<p><i>Further work</i></p>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<p>Mensin Gold Bibiani Limited has a detailed and comprehensive drilling program to evaluate the underground potential of the Bibiani project. The program includes surface and underground diamond core drilling that will commence in September 2014.</p>

## Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database integrity	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<p>Data have been compiled into a relational SQL database. The setup of this database precludes the loading of data which do not meet the required validation protocols. The data was managed using DataShed™ drill hole management software (Maxwell Geoservices) using SQL database techniques. Validation checks are conducted using SQL and DataShed relational database standards.</p> <p>The resource estimation was based on the available exploration and grade control drill hole database which was compiled by Noble. The database has been reviewed and validated by Coffey Mining prior to commencing the resource estimation studies.</p> <p>Data included samples from RC and diamond drilling which were included in the modelling process. All available drill hole data has been utilised. The database contains underground channel sampling from the Main Pit area which was excluded from the resource estimation studies. The database was validated and checks made to the database prior to use included:</p> <ul style="list-style-type: none"> <li><input type="checkbox"/> Check for overlapping intervals.</li> <li><input type="checkbox"/> Downhole surveys at 0m depth.</li> <li><input type="checkbox"/> Consistency of depths between different data tables.</li> <li><input type="checkbox"/> Check gaps in the data.</li> <li><input type="checkbox"/> Replacing less than detection samples with half detection.</li> <li><input type="checkbox"/> Replacing intervals with no sample with -999.</li> <li><input type="checkbox"/> Replacing intervals with assays not yet received with -999.</li> </ul> <p>There are no significant issues with the data.</p>
Site visits	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<p>The Competent Persons have conducted numerous site visits to the Bibiani Project in Ghana.</p> <p>All aspects of drilling, sampling and resource modelling were considered by the Competent Persons to be of industry standard.</p>
Geological interpretation	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource estimation.</li> <li>The factors affecting continuity both of grade and geology.</li> </ul>	<p>The Bibiani ore body is a lode type deposit similar to deposits in the Konongo - Axim belt which hosts the Obuasi ore body. The ore body is located in a shear zone within Lower Birimian sediments close to the eastern contact with Upper Birimian rocks. The shear zone is filled with quartz, either as massive veins or as quartz stockworks. In the widest parts of the ore body two and locally three quartz reefs can be identified. Two highly graphitic fault zones, historically referred to as pug seams or fissures, are associated with the major shear zone on the footwall and hanging wall. The ore body generally dips eastward at 60°-80°, crossing the regional structure at a low angle. The rocks around the Bibiani deposit have been structurally interpreted as an elongate, isoclinally folded roof pendant within granitic batholiths. In the central part of the mine the strike of the ore body is 300- 350, which changes to around 020 in the northern extension of the mine. The strike of the bedding cuts across the strike of the ore body at a shallow angle. Historically the ore body was divided into a northern and southern part, located north and south of the Central Shaft which lies on section line 5,400N (mine grid). In the open pit the ore body is continuous at lower cut-off grades. The South ore body, which occurs on the hangingwall of the West Fissure is about 180 meters long and consists of a composite vein of quartz and mineralised country rock dipping 60°- 70° to the east. The North ore body, consists of the continuation of the West Reef and the East and Central reefs, which are poorly defined to the south.</p> <p>The latter reefs consist of more massive laminated smokey quartz with phyllite partings. Milky white quartz is also present,</p>

Criteria	JORC Code explanation	Commentary
		<p>but this type is generally barren. The North ore body has been mapped as 20-40 meters wide near surface, widening substantially at depth. On 4 and 5 Level (100-120mRL), horizontal widths exceed 100m. The dip is generally near vertical at surface, but the eastern boundary flattens moderately at depth to less than 65° at around 150mRL. The two or three reefs merge between 400-500 meters north of Central Shaft. Further to the north the ore thins and continues as one near vertical reef 15-25 meters wide. Even further to the north the mineralisation appears as two thin parallel reefs each generally less than 10 metres wide. At Big Mug the ore body is in an overturned orientation. Intrusive porphyry dykes occur in the hanging wall and to a lesser extent in the footwall straddling the main shear zone. They can transgress into the ore body, where they become strongly altered and mineralised. At around 400 meters to the north of the old Central Shaft the porphyry body bends off to the north-east.</p> <p>The strike length of the delineated mineable area extends up to 2000 meters, although there are two short zones, where the ore body is too thin for economic extraction. The total strike length of the Bibiani mineralised trend is around 4,000 meters. Two parallel trends occur about 600 meters and 1,200 meters to the east of the main trend. They start around 500 meters north of Central Shaft. They have been interpreted as splays from the main trend, breaking-off near Central Shaft but there is limited geological evidence to support this interpretation.</p> <p>Based on grade information and geological observations, oxidation and mineralised domain boundaries have been interpreted and wireframes modelled to constrain the resource estimate in the Main Pit area. Interpretation and digitising of all constraining boundaries has been undertaken on cross sections orientated perpendicular to mine grid. The resulting digitised boundaries were used to construct wireframe surfaces and solids defining the three dimensional geometry of each interpreted feature.</p>
<p><i>Dimensions</i></p>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<p>Mineralisation in the Main Pit area lies within a vertical to steeply east dipping zone extending over approximately 2,300 metres of strike. The average dip of the mineralisation in the upper portion of the deposit is approximately 60° to the east although locally the dip is variable. At depth and to the north of the deposit the dip of the mineralisation becomes sub-vertical to vertical. The width of the mineralisation ranges from a few meters to over 60 metres. The mineralisation is complex and comprises multiple contiguous structurally controlled zones. The Main Zone is generally continuous with a number of smaller footwall and hanging wall subsidiary zones.</p>
<p><i>Estimation and modelling techniques</i></p>	<ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (e.g. sulphur for acid mine drainage characterization).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> </ul>	<p>For resource estimation the gold mineralisation has been modelled and constrained by an indicator grade shell. The indicator estimate was generated and developed using the following parameters:</p> <ul style="list-style-type: none"> <li>3m composites extracted from the resource dataset excluding the underground channel sampling.</li> <li>Indicator variography developed based on the 0.3g/t Au and 1.0g/t Au indicator transforms.</li> <li>Block model developed to cover the area of the main pit containing 5mE x 5mN x 3mRL blocks and attributes added to enable indicator grade estimates at the 0.3g/t Au and 1.0g/t Au cutoffs.</li> <li>Grade shells derived from 0.3g/t Au at the 30% probability level and 1.0g/t Au at the 35% probability level determined to be suitable for constraining the OK grade estimate volumetrically.</li> <li>This interpretation was completed based on geological review and has captured both the broad mineralisation halo and the higher grade &gt;1.0g/t Au material that has been interpreted at Bibiani Main Pit.</li> </ul> <p>The drill hole database was flagged or constrained by the two grade shells. Material flagged as being within the 1.0g/t Au grade shell has been designated Zone 1000 and material flagged as being within the 0.3g/t Au grade shell but outside the 1.0g/t Au grade shell has been designated Zone 100. In addition the drill hole database was flagged by modelled underground stopes and adits and any material flagged as being within underground voids has been excluded for the purposes of grade estimation, as it is considered high grade material that has already been mined. After consideration of the sampled interval lengths in the drill hole database, 3m run length composites were generated and coded by the grade shells.</p> <p>Based on the high grade cut investigations, a high grade cut of 8g/t Au and 35g/t Au was selected and applied to the 3m composite data for Zones 100 and 1000 respectively. For Zone 100 a total of 7 data were cut and a reduction in mean</p>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>Any assumptions about correlation between variables.</li> <li>Description of how the geological interpretation was used to control the resource estimates.</li> <li>Discussion of basis for using or not using grade cutting or capping.</li> <li>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</li> </ul>	<p>grade of 4% was noted. For Zone 1000 a total of 28 data were cut and a reduction of 4% in mean grade also noted.</p> <p>Variography is used to describe the spatial variability or correlation of an attribute. The spatial variability is traditionally measured by means of a variogram, which is generated by determining the averaged squared difference of data points at a nominated distance (h), or lag (Srivastava and Isaacs, 1989). The averaged squared difference (variogram or <math>\gamma(h)</math>) for each lag distance is plotted on a bivariate plot, where the X-axis is the lag distance and the Y-axis represents the average squared differences (<math>\gamma(h)</math>) for the nominated lag distance.</p> <p>Directional and downhole grade variography was generated to enable grade estimation via OK. For the purposes of resource estimation, the deposit has been divided into North (northing &gt; 5,720mN), Middle (between 5,100mN and 5,720mN) and South (northing &lt; 5,100mN) portions which approximately correspond to the changes in strike orientation and dip of the main mineralised zone. Variogram values have been calculated and modelled and the interpreted anisotropy directions rotated for each portion to correspond with the observed orientation of the 3 sub divisions.</p> <p>Geological elements coded to the block model include the weathering surfaces, geology model for the porphyry and the metasediments. The grade shell models were coded to allow for an appropriately constrained mineralisation grade estimate. Underground void models were also coded to allow for depletion of the resource.</p> <p>A parent block size of 15mE x 15mN x 6mRL was selected as appropriate. Sub-blocking to a 2.5mE x 2.5mN x 1.5mRL size was completed to ensure adequate volume representation.</p> <p>Resource estimation was completed via Ordinary Kriging. Inverse Distance Squared and Nearest Neighbour estimates were also completed within these domains to allow comparison with the OK mean. Grade estimation was carried out using the Vulcan implementation of the GSLIB kriging algorithms.</p>
Moisture	<ul style="list-style-type: none"> <li>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</li> </ul>	<p>All tonnages are estimated on a dry basis.</p>
Cut-off parameters	<ul style="list-style-type: none"> <li>The basis of the adopted cut-off grade(s) or quality parameters applied.</li> </ul>	<p>The mineral resources were reported at a 2.0 g/t Au grade cut-off for Bibiani in this release. This cut off was chosen as the insitu marginal cut- grade estimation, using current estimates from a Snowden scoping study on underground mining completed in 2013..</p>
Mining factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</li> </ul>	<p>Mining methods for the extraction of gold at Bibiani has primarily been by open pit and underground methods. It is anticipated that large scale underground mining methods will be applied for the remaining resources. Grade control of ore stopes and drives will be based on sampling from high quality diamond drilling spaced appropriately for underground mining definition.</p> <p>Bibiani was mined historically by open pit mining with a backhoe type excavator and truck operation. Beneath the open cut, mechanised and hand held underground open stope mining methods were used dating back to early 1900s.</p> <p>Subsequent to the Ashanti Goldfields acquisition, approximately 2 million ounces of gold was recovered from combined underground and some surface quarrying operations. Mineralisation was identified in a number of north south striking subparallel / enechelon reefs with gold contained in quartz and sulphide ore zones within porphyry dyke intruded shear zones. In the historic underground mine several shafts were sunk commencing in the southern part of the deposit and progressing northwards. Underground mine development has been recorded to a vertical depth of 800 metres and over a strike of two kilometres.</p>



Criteria	JORC Code explanation	Commentary										
Metallurgical factors or assumptions	<ul style="list-style-type: none"> <li>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</li> </ul>	<p>The crushing circuit at Bibiani comprises a single stage gyratory crusher.</p> <p>The ore zone is carbonated, silicified, albitised and sericitised. The pyrite content generally increases towards the ore body from the footwall and hanging wall with typically 2-3% observed in the central part of the ore body. Arsenopyrite has been observed within the ore body and is rarely found outside it. There is generally a good correlation between the presence of gold and the presence of arsenopyrite. The maximum arsenopyrite content is around 2-3%.</p> <p>The ore host rock can be graphitic and carbonaceous with the graphite content increasing in the more intensely sheared zones and especially within stockwork mineralisation along the footwall. Historic processing data suggests the graphite has a preg-robbing effect. Gold mineralisation is closely associated with sulphides and photomicrographs show gold along sulphide margins or in cracks within sulphide which suggests it can be recovered by conventional leaching operations. The gold grain size distribution is reported as predominantly less than 50 microns however visible gold has been observed within some quartz veins. The circuit configuration includes a Knelson Concentrator which typically recovers up to 35% of the gold.</p> <p>The majority of gold mineralisation is associated with quartz veins and quartz stockworks however the altered host rock contains a selvage of mineralisation which can contain up to 2 g/t.</p> <p>The milling circuit comprises 3.25 MW SAG mill and a 3.25MW ball mill. Discharge from both mills reports to a common sump and is pumped to classification hydro cyclones. The cyclone underflow reports back to the ball mill, while the cyclone overflow reports to the first of seven leach tanks in the conventional CIL plant.</p> <p>Gold is recovered from loaded carbon in a four tonne capacity AARL elution plant. Gold is then deposited on to stainless steel cathodes in an electrolytic circuit.</p> <p>Gold is into dore bars that historically have a fineness of 80% gold and 20% silver.</p>										
Environmental factors or assumptions	<ul style="list-style-type: none"> <li>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfield project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</li> </ul>	<p>Future processing operations would use the existing regulated tailings storage facility that was being used until 2013.</p> <p>Some waste rock from future mining underground may be potentially-acid forming while the majority of waste rock will be non-acid forming. Waste rock dumping has been scheduled, along with encapsulation designs and optimization determined to minimize the risk of acid forming conditions from the waste rock dumping landform. The rehabilitation plan for the landform is also a key control.</p> <p>Tailings generated from the project are not expected to be net acid forming potential and will be stored in the current regulated storage facility.</p>										
Bulk density	<ul style="list-style-type: none"> <li>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</li> <li>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc.), moisture and differences between rock and alteration zones within the deposit.</li> <li>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</li> </ul>	<p>Bulk density has been coded to the block model based on data provided by Noble Minerals Limited. The average bulk density for each subdivision, as presented below, was coded via a block model script.</p> <table border="0" data-bbox="1025 1251 1433 1394"> <tr> <td>• Backfill rock</td> <td>1.80</td> </tr> <tr> <td>• Oxide Metasediments</td> <td>2.00</td> </tr> <tr> <td>• Transition Metasediments</td> <td>2.50</td> </tr> <tr> <td>• Fresh Metasediments</td> <td>2.75</td> </tr> <tr> <td>• Fresh Porphyry</td> <td>2.77</td> </tr> </table>	• Backfill rock	1.80	• Oxide Metasediments	2.00	• Transition Metasediments	2.50	• Fresh Metasediments	2.75	• Fresh Porphyry	2.77
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Criteria	JORC Code explanation	Commentary
Classification	<ul style="list-style-type: none"> <li>• <i>The basis for the classification of the Mineral Resources into varying confidence categories.</i></li> <li>• <i>Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</i></li> <li>• <i>Whether the result appropriately reflects the Competent Person's view of the deposit.</i></li> </ul>	<p>The resource classification has been based on the robustness of the various data sources available, including:</p> <ul style="list-style-type: none"> <li>▪ Geological knowledge and interpretation;</li> <li>▪ Variogram models and the ranges of the first structure in multi-structure models;</li> <li>▪ Drilling density; and</li> <li>▪ Estimation statistics.</li> </ul> <p>The Coffey Mining estimate for the Bibiani Project deposit was classified as Measured, Indicated and Inferred Resources based on the confidence levels of key criteria such as kriging neighbourhood, data verification and validation. Resource classification codes were assigned to the block model.</p>
Audits or reviews	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of Mineral Resource estimates.</i></li> </ul>	<p>Mensin Gold Bibiani Limited is relying on audits and independent reviews that have been undertaken on the current Mineral Resource. These include:</p> <p><u>Coffey Mining Pty Ltd "Resource Estimation Bibiani Gold Project Ghana West Africa" August 2012</u></p> <p><u>Maxwell GeoServices "Noble Gold Bibiani Ltd QAQC Report" Nov 2011.</u></p> <p><u>Snowden "Bibiani Mine – Underground Study" April 2013</u></p>
Discussion of relative accuracy/ confidence	<ul style="list-style-type: none"> <li>• <i>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</i></li> <li>• <i>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</i></li> <li>• <i>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</i></li> </ul>	<p>The relative accuracy of the Mineral Resource estimate is reflected in the reporting of Measured, Indicated and Inferred categories.</p> <p>The relative accuracy of each resource is based on data quality, data quantity, geological confidence and the estimation accuracy.</p> <p>The precision of the estimation is globally acceptable with the assumption that at a mining level more detailed grade control drilling will be required.</p> <p>The geostatistical techniques applied to estimate the Bibiani deposit are deemed appropriate for the anticipated mining method.</p>