

ASX Announcement

Maiden Resource Estimate for the Kpali Gold Prospect

- Maiden Resource Estimate for the Kpali prospect totals 2.9mt @ 1.1g/t gold for 107,200 ounces
- Kpali resource remains open and displays increasing grade and the strongest mineralisation at depth
- Total gold resources increase 29% to 361,700 ounces

Castle Minerals Limited (ASX:CDT) is pleased to announce that a maiden resource estimate has been completed on the Kpali gold prospect in NW Ghana.

Kpali was discovered in 2013 and represents the sixth green fields gold discovery made by Castle in Ghana. Gold mineralisation at Kpali starts a few metres below the surface.

Castle's Managing Director, Mr Mike Ivey, said; "Kpali is our sixth gold discovery in Ghana and we expect that with further drilling the resource will be materially increased as the deposit remains open and displays increasing grade and the strongest mineralisation at depth. We also have a pipeline of additional gold targets that we plan to test later this year."

Castle's total gold inventory for its Ghana Projects has increased by 29% to 362,000 ounces due to the inclusion of maiden resource estimate for Kpali and updates to the mineral resources for the Akoko and Kandia deposits. An Inferred Mineral Resource of 107,200 ozs has been estimated as per the summary in Table 1 below.

Table 1: Kpali Deposit June 2014 Mineral Resource Estimate (All Inferred, 0.5g/t Au Cut-off)

Tumo	Tonnes	Au Cut	Au Uncut	Au Cut	Au Uncut
Туре	t	g/t	g/t	Ounces	Ounces
Oxide	365,000	1.0	1.0	11,500	12,200
Fresh	2,549,000	1.2	1.2	95,700	97,500
Total	2,914,000	1.1	1.2	107,200	109,700

Resource summaries and assumptions for all estimates are attached.

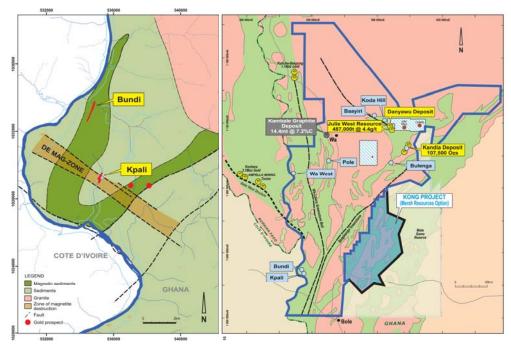


Figure 1: Wa Project prospects and location of Bundi and Kpali prospects in NW Ghana

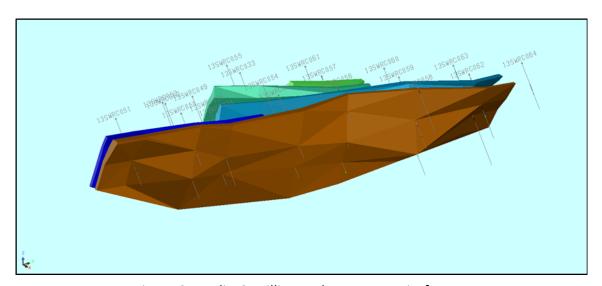


Figure 2: Kpali RC Drilling and Resource Wireframes

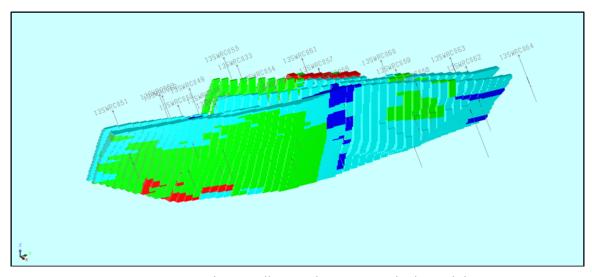


Figure 3: Kpali RC Drilling and Resource Block Model

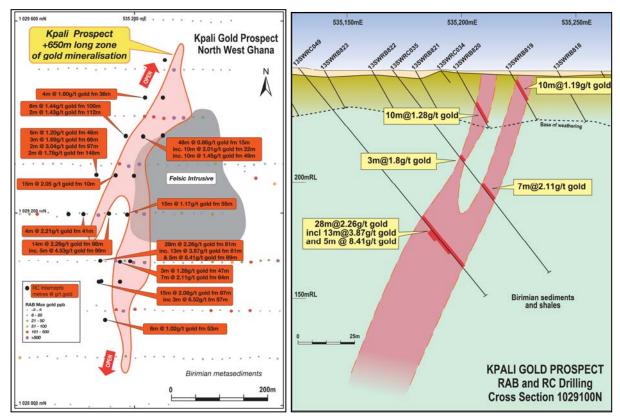


Figure 4: Kpali drill hole plan and intercepts and drill cross section on 1029 100N

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About Castle:

Castle Minerals listed on the Australian Stock Exchange in May 2006 (ASX code '**CDT**') and has since acquired the rights to five mineral projects in Ghana, West Africa including Akoko, Antubia, Bondaye, Opon Mansi (application) and Wa covering more than 11,000km².

All granted projects are 100% owned by Castle Minerals (subject to Ghanaian Government right to a free-carried 10% interest). Castle's corporate objectives are exploration and development of its projects in Ghana and the acquisition and exploration of other mineral resource opportunities, particularly in West Africa. The country of Ghana has a long history of gold mining and exploration and is Africa's second largest gold producer behind South Africa.

Castle has so far, discovered seven green fields gold deposits in Ghana with six of those having a formal Mineral Resource completed for an aggregate total of 362,000 ounces. In addition Castle has defined an Inferred Mineral Resource at the Kambale graphite deposit in NW Ghana that contains 14.5 million tonnes @ 7.2% graphitic carbon.

Castle owns and operates its own RAB drill rig in Ghana completing over 100,000m of low cost drilling.

Resource Estimate Summaries

The total gold inventory for Castle's Ghana Projects has increased by 29% to 362,000 ounces due to the inclusion of the maiden resource estimates for Kpali and updates to the mineral resources for the Akoko and Kandia deposits. Resource summaries for all Mineral Resource Estimates are presented below in Table 2 (Some totals may not add exactly due to rounding).

Table 2: Mineral Resource Estimates for the Wa and Akoko Gold Projects

Wa Project		Indicated			Inferred			Total		
	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	Lower
	t	g/t	Ounces	t	g/t	Ounces	t	g/t	Ounces	Cutoff
Julie West	383,000	4.2	52,100	32,000	4.0	4,100	415,000	4.2	56,200	1.0
Danyawu	72,000	5.5	12,800				72,000	5.5	12,800	1.0
Kandia 8000 Zone				229,000	1.8	13,400	229,000	1.8	13,400	1.0
Kandia 4000 Zone	1,772,000	1.0	57,700	777,000	0.9	21,500	2,549,000	1.0	79,200	0.5
Kpali				2,914,000	1.1	107,200	2,914,000	1.1	107,200	0.5
Wa Project Total	2.227.000	1.7	122.600	3.952.000	1.2	146.200	6.178.000	1.4	268.900	

Akoko Project		Indicated			Inferred			Total		
	Tonnes t	Au g/t	Au Ounces	Tonnes t	Au g/t	Au Ounces	Tonnes t	Au g/t	Au Ounces	Lower Cutoff
Akoko North	448,000	1.6	22,500	517,000	2.8	45,900	965,000	2.2	68,400	0.8
Akoko South				575,000	1.3	24,400	575,000	1.3	24,400	0.8
Total	448.000	1.6	22,500	1.092.000	2.0	70.300	1.540.000	1.9	92.800	

Total Ghana Projects		Indicated			Inferred		Total			
Wa Project	2,227,000	1.7	122,600	3,952,000	1.2	146,200	6,178,000	1.4	268,900	
Akoko Project	448,000	1.6	22,500	1,092,000	2.0	70,300	1,540,000	1.9	92,800	
Total	2,675,000	1.7	145,100	5,044,000	1.3	216,500	7,718,000	1.5	361,700	

The Kandia gold resource was re-estimated for the 4000 Zone. Since the 2011 resource estimate, further RC drilling was undertaken with the objective of defining depth extensions to the mineralisation. A total of 7 new holes were drilled, and two existing RC holes were deepened. Geology and assay results from those holes have now been incorporated into the deposit model. Several of the holes did not intersect mineralisation where expected. This has resulted in reduced depth extent to the mineralisation compared to the 2011 estimate, with a resulting downgrade of the tonnage and contained gold of the deposit with a reduction of 14,800 ozs. There has been no change to the 8000 Zone resource where there was no additional drilling. All other resource parameters remain unchanged from the previous estimate. A summary of the revised Mineral Resource for the deposit is shown in Table 3. The previous estimate is shown in Table 4.

Table 3: Kandia Deposit June 2014 ID2 Mineral Resource Estimate

	In	dicated	l		Inferre	d	Total			
Type	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	
	t	g/t	Ounces	t	g/t	Ounces	t	g/t	Ounces	
Oxide	126,000	1.0	4,000	50,000	1.3	2,100	176,000	1.1	6,000	
Fresh	1,645,800	1.0	53,800	955,800	1.1	32,900	2,602,000	1.0	86,600	
Total	1,772,000	1.0	57,700	1,006,000	1.1	34,900	2,778,000	1.0	92,700	

Table 4: Kandia Deposit December 2011 ID2 Mineral Resource Estimate

	In	dicated			Inferre	d	Total			
Type	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	
	t	g/t	Ounces	t	g/t	Ounces	t	g/t	Ounces	
Oxide	131,300	1.0	4,100	51,000	1.3	2,100	183,000	1.1	6,200	
Fresh	1,841,500	1.0	58,700	1,327,200	1.0	42,500	3,169,000	1.0	101,200	
Total	1,973,000	1.0	62,900	1,379,000	1.0	44,600	3,351,000	1.0	107,500	

Note: For both the 2014 and 2011 estimates, a 0.5g/t Au cut-off has been used for the 4000 Domain, and a 1.0g/t Au cut-off has been used for the 8000 Domain. The Akoko North Gold Resource was re-estimated to incorporate geology, assay data and bulk density data from four diamond drill holes that have been drilled subsequent to the 2011 resource update.

Geology and assay results from those holes have largely confirmed the previous interpretation. Bulk density data from the core has also been analysed and new bulk density parameters were derived for the Akoko North estimate and have also been applied to the Akoko South deposit. The new density parameters are significantly lower than the values assumed for the previous estimates (eg oxide density of 1.78t/m3 compared to 2.1t/m3 previously), resulting in a downgrade of the tonnage and contained gold of the deposits (reduction of 10,500 ozs).

A summary of the revised Mineral Resources for the deposits is shown in Table 5. The previous estimates are shown in Table 6.

Table 5: Akoko Project June 2014 Mineral Resource Estimate 0.8g/t Au Cut-off

	Indicated			Ir	ferred		Total			
Deposit	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	
	t	g/t	Oz	t	g/t	Oz	t	g/t	Oz	
Akoko North	448,000	1.6	22,500	517,000	2.8	45,900	965,000	2.2	68,400	
Akoko South				575,000	1.3	24,400	575,000	1.3	24,400	
Total	448,000	1.6	22,500	1,092,000	2.0	70,300	1,540,000	1.9	92,800	

Table 6: Previous Estimates Akoko North (2011) and Akoko South (2009) 0.8g/t Au Cut-off

	Indica	ited	Inferr	ed		Total	
Deposit	Tonnes	Gold	Tonnes	Gold	Tonnes	Gold	Gold
	t	g/t	t	g/t	t	g/t	Ounces
Akoko North	525,000	1.6	578,000	2.7	1,103,000	2.2	77,400
Akoko South			610,300	1.3	610,300	1.3	25,900
Total	525,000	1.6	1,188,300	2.0	1,713,300	1.9	103,300

Kpali Mineral Resource summary and Parameters

The Kpali resource estimate was completed using the following parameters:

- The Kpali deposit has a 540m strike extent from 1028940N to 1029480Nand the vertical extent of the resource is 100m from surface at 230mRL to 100mRL.
- At Kpali, 20 RC drill holes were drilled of which 19 were used in the resource estimate. The drilling density is approximately 40m by 80m in the main parts of the resource. Holes were all orientated at 50° to the east (UTM grid),.
- For RC drilling, bulk samples were collected at 1m intervals below a free standing cyclone in large plastic retention bags. The 1m bulk samples were split using a riffle splitter at the time of drilling and then stored off site. Five metre composite 'spear' samples were prepared which were submitted to the laboratory. If the 5m composite returned an assay greater than 0.1g/t Au, the individual 1m samples in the interval were assayed.
- Samples were sent to Transworld Laboratory in Tarkwa, Ghana for analysis. Samples
 were prepared by drying, crushing to -6mm and then pulverising to <75 microns (-200
 mesh). Analysis for Au was by 50g Fire Assay with an atomic absorption spectrometry
 (AAS) finish.
- Quality control samples were collected on a regular basis and the results have been reviewed by CDT and are considered to be satisfactory.
- RC drill hole collars have been surveyed by Coffey Mining (Coffey) using a Sokkia Stratus DGPS to an accuracy of 10mm.
- Down hole surveys were completed using a single shot Eastman camera.
- Wireframes were constructed using cross sectional interpretations based on a nominal 0.2g/t Au cut-off grade. Interpretations were based on those supplied by CDT.
- Samples within the wireframes were composited to even 1.0m intervals. A high grade cut of 10g/t was applied to the 1m composite values.
- A Surpac block model was used for the estimate with a block size of 40m NS by 10m EW by 10m vertical with sub-cells of 10m by 2.5m by 2.5m.
- The model was estimated using Inverse Distance (ID2) interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 120m was used with a second pass radius of 180m. A third pass radius of 250m was required to fill a small number of blocks remaining un-estimated.

- Bulk density data was not available and density values were assumed based on knowledge of similar deposits and rock types. The values applied in the model were 2.00t/m3 for the oxide material and 2.55t/m3 was assigned to the fresh material.
- The deposit has been classified as Inferred Mineral Resource due to the broad hole spacing and the uncertainty of structure and grade continuity.

Kandia Mineral Resource summary and Parameters

Table 7: Kandia Deposit June 2014 ID2 Mineral Resource Estimate

	In	dicated	l	lr	nferrec	l	Total			
Type	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	
	t	g/t	Ounces	t	g/t	Ounces	t	g/t	Ounces	
Oxide	126,000	1.0	4,000	50,000	1.3	2,100	176,000	1.1	6,000	
Fresh	1,645,800	1.0	53,800	955,800	1.1	32,900	2,602,000	1.0	86,600	
Total	1,772,000	1.0	57,700	1,006,000	1.1	34,900	2,778,000	1.0	92,700	

The Kandia resource estimate was completed using the following parameters:

- The 4000 Zone resource has an 850m strike extent and the vertical extent of the resource is 170m. The 8000 Zone resource lies 3.3km to the NE and has a 480m strike extent and a vertical extent of 130m.
- At Kandia, 274 RC drill holes were drilled of which 97 were used in the resource estimate. The drilling density is 40m by 40m in the main parts of the resource, and 80m by 40m in the less well mineralised portions of the deposit. Holes were generally orientated at 50° to the east (UTM grid), with the exception of two vertical holes.
- For RC drilling, bulk samples were collected at 1m intervals below a free standing cyclone in large plastic retention bags. The 1m bulk samples were split using a riffle splitter at the time of drilling and then stored off site. Five metre composite 'spear' samples were prepared which were submitted to the laboratory. If the 5m composite returned an assay greater than 0.1g/t Au, the individual 1m samples in the interval were assayed.
- Samples were sent to Transworld Laboratory in Tarkwa, Ghana for analysis. Samples were prepared by drying, crushing to -6mm and then pulverising to <75 microns (-200 mesh). Analysis for Au was by 50g Fire Assay with an atomic absorption spectrometry (AAS) finish.
- Quality control samples were collected on a regular basis and the results have previously been reviewed by Runge and are considered to be satisfactory.
- RC drill hole collars have been surveyed by Coffey Mining (Coffey) using a Sokkia Stratus DGPS to an accuracy of 10mm.
- Down hole surveys were completed using a single shot Eastman camera.
- Wireframes were constructed using cross sectional interpretations based on a nominal 0.5g/t Au cut-off grade. Interpretations were based on those supplied by CDT.
- Samples within the wireframes were composited to even 1.0m intervals. A high grade cut of 10g/t was applied to the 1m composite values.
- A Surpac block model was used for the estimate with a block size of 20m NS by 5m EW by 5m vertical with sub-cells of 5m by 1.25m by 1.25m.
- The model was estimated using Inverse Distance (ID²) interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 60m was used with a second pass radius of 100m and a third pass radius of 180m for the third pass to fill all remaining un-estimated blocks.

- Bulk density data was not available and density values were assumed based on knowledge of similar deposits and rock types. The values applied in the model were 2.00t/m³ for the oxide material and 2.55t/m³ was assigned to the fresh material.
- The portion of the 4000 Zone drilled at 40m spacings and displaying good continuity
 has been classified as Indicated Mineral Resource. The remainder of the 4000 Zone and all
 of the 8000 Zone has been classified as Inferred Mineral Resource due to the broader hole
 spacing and the uncertainty of structure and grade continuity.

Akoko Mineral Resource summary and Parameters

Akoko Project June 2014 Mineral Resource Estimate 0.8g/t Cut-off

Akoko North

	Ir	ndicated			Inferred			Total		
Туре	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au	
	t	g/t	Oz	t	g/t	Oz	t	g/t	Oz	
Laterite	1,200	2.0	100	700	1.9		2,000	1.9	100	
Oxide	438,300	1.6	22,100	303,500	2.1	20,900	741,800	1.8	43,000	
Transition	8,400	1.2	300	44,000	1.4	2,000	52,000	1.4	2,300	
Fresh				169,000	4.2	22,900	169,000	4.2	22,900	
Total	448,000	1.6	22,500	517,000	2.8	45,900	965,000	2.2	68,400	

Akoko South

	lı	Indicated			Inferred		Total		
Туре	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au
	t	g/t	Oz	t	g/t	Oz	t	g/t	Oz
Laterite									
Oxide				185,800	1.2	7,400.0	185,800	1.2	7,400
Transition				235,300	1.3	10,000.0	235,300	1.3	10,000
Fresh				153,900	1.4	7,000.0	153,900	1.4	7,000
Total				575,000	1.3	24,400.0	575,000	1.3	24,400

Total Akoko Project

	Ir	ndicated		I	nferred			Total			
Туре	Tonnes	Au	Au	Tonnes	Au	Au	Tonnes	Au	Au		
	t	g/t	Oz	t	g/t	Oz	t	g/t	Oz		
Laterite	1,200	2.0	100	700	1.9		2,000	1.9	100		
Oxide	438,300	1.6	22,100	489,300	1.8	28,300	927,600	1.7	50,400		
Transition	8,400	1.2	300	279,300	1.3	12,000	287,300	1.3	12,300		
Fresh				322,900	2.9	29,900	322,900	2.9	29,900		
Total	448,000	1.6	22,500	1,092,000	2.0	70,300	1,540,000	1.9	92,800		

The Akoko resource estimates were completed using the following parameters (from Runge 2009 report and updated where required):

- The Akoko North resource has a 1,370m strike extent and the vertical extent of the resource is 142m, however the majority of the resource is less than 40m vertical depth.
- The Akoko South resource has a 320m strike extent and the vertical extent of the resource is 140m.
- At Akoko North, 4 DD and 132 RC drill holes were drilled of which 2 DD and 90 RC were used in the resource estimate. Drilling density varied from 50m by 30m to 40m and 100m by 30m over the deposit. Drill holes are typically orientated at 50° to the east (UTM grid), with the exception of diamond holes 11AND001-003 which were drilled at 60° to the west.
- At Akoko South, of the 45 RC drill holes in the database, 11 were used in the resource estimate. Drilling density varied from 40m by 20m to 80m by 40m over the deposit.

- Drill holes are orientated at between 46° and 50° to the west (UTM grid), with the exception of AKRC034 which was drilled at 52° to the east.
- For RC drilling, bulk samples were collected at 1m intervals below a free standing cyclone in large plastic retention bags. The 1m bulk samples were split using a riffle splitter at the time of drilling and then stored off site. Five metre composite 'spear' samples were prepared which were submitted to the laboratory. If the 5m composite returned an assay greater than 0.1g/t Au, the individual 1m samples in the interval were assayed. For diamond drilling, core was generally sampled at even 1m intervals, with core cut using a core saw.
- Samples were sent to Transworld Laboratory in Tarkwa, Ghana for analysis. Samples were prepared by drying, crushing to -6mm and then pulverising to <75 microns (-200 mesh). Analysis for Au was by 50g Fire Assay with an atomic absorption spectrometry (AAS) finish.
- Quality control samples were collected on a regular basis and the results have been reviewed by Runge and are considered to be satisfactory.
- RC Drill hole collars have been surveyed by Coffey Mining (Coffey) using a Sokkia Stratus DGPS to an accuracy of 10mm. DD collars have not been accurately surveyed. Elevations were adjusted to match the collar elevation of adjacent RC drill holes.
- Down hole surveys were completed using a single shot Eastman camera.
- Wireframes were constructed using cross sectional interpretations based on a nominal 0.5g/t Au cut-off grade. Interpretations were based on those supplied in hard copy form by CDT.
- Samples within the wireframes were composited to even 1.0m intervals. High grade cuts of 14g/t at Akoko North and 20g/t at Akoko South were applied to the 1m composite values.
- At Akoko South a Surpac block model was used for the estimate with a block size of 20m NS by 10m EW by 5m vertical with sub-cells of 5m by 0.625m by 1.25m.
- At Akoko North a Surpac block model was used for the estimate with a block size of 25m NS by 10m EW by 10m vertical with sub-cells of 12.5m by 2.5m by 2.5m.
- At Akoko North, the shallow oxide zones were estimated using Ordinary Kriging (OK) interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 50m was used with a second pass radius of 90m and a third pass radius of 150m to fill all remaining un-estimated blocks. The two steep primary lodes were estimated using Inverse Distance to power 2 (ID²) interpolation.
- At Akoko South ID² interpolation was used for grade interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 50m was used with a second pass radius of 70m. This was increased to 100m for the third pass to fill all remaining un-estimated blocks. Greater than 99% of blocks were filled in the first two passes.
- Bulk density determinations were completed on drill core at Akoko North. These were used to derive bulk density values of 1.78t/m³ for the oxide material, 2.4t/m³ for the transitional material, and 2.5t/m³ assigned to the fresh material. The values were applied to both Akoko North and Akoko South.
- At Akoko North, the portion of the deposit drilled at 40m by 20m spacings has been classified as Indicated Mineral Resource. The remainder of Akoko North and all of Akoko South was classified as Inferred Mineral Resource due to the broader hole spacing and the uncertainty of structure and grade continuity.

Information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Michael Ivey, Castle Minerals Limited Managing Director, who is a Member of The Australasian Institute of Mining and Metallurgy. Michael Ivey is a permanent consultant to Castle Minerals Limited and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 JORC Code. Michael Ivey consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition - Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Certified Person Commentary
	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.	Sampling has been undertaken with Diamond core at Akoko North and Reverse Circulation (RC) drilling at all prospects and Rotary Air Blast (RAB) drilling at Kpali. Zinc, and other multi-element analysis of RC and RAB samples, has been undertaken using a hand held XRF at Kpali.
	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	Drill hole collar coordinates are in UTM grid (UTM WGS84 Zone 30N) and are measured by handheld GPS with accuracy of +/-2m.
	Aspects of the determination of mineralisation that are Material to the Public Report.	As per section below.
Sampling techniques	In cases where 'industry standard' work has been done this would be relatively simple (eg '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.	Reverse Circulation (RC) drilling was used to obtain 1m samples from which 2kg was riffle split, in anticipation of being sent to the lab and pulverised to produce a 50g charge for fire assay for gold assaying. 5m composite samples were then taken and sent to the lab first to identify the mineralised zones in each drill hole. The 1m splits in the mineralised zones were then sent to the lab for assay from the zones where the 5m composites are anomalous for Au (i.e. nominally assaying >0.1g/t).
		Rotary Air Blast (RAB) drilling was used to obtain 1m open-hole samples, from which 5m composite samples were taken and sent to lab where 2kg was pulverised and assayed by 50g aqua regia for gold.
	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-	Diamond drilling has been conducted using NQ2 size bits with triple tube technique in the oxide profile to preserve sample integrity. Diamond core was oriented using a downhole spear.
Drilling techniques	sampling bit or other type, whether core is oriented and if so, by what method, etc).	RC drilling has been conducted using a face sampling hammer, and stainless steel starter rods to enable downhole surveying of the hole.
		RAB drilling has been conducted using a blade bit, usually to depth of refusal at the fresh rock interface. A hammer bit was used to penetrate any quartz veins encountered, or occasionally to penetrate and sample the fresh bedrock if required.
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	No methods for ascertaining RC or RAB sample recoveries have been conducted. On the whole sample recoveries were good, with large samples recovered, and with variable levels of groundwater intersected to date. Diamond core recoveries were logged with a very high level of sample recovery achieved.
	Measures taken to maximise sample recovery and ensure representative nature of the samples.	No special measures have been undertaken for the RC drilling - standard industry drilling techniques have been applied. Triple tube coring was used in the oxide profile of the diamond holes at Akoko North.

	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.	This relationship has not been tested, as it is not believed to be a concern.
	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.	Core, RC and RAB chip samples have been routinely geologically logged and photographed in the field by geologists. The day's drilling plod sheets, and the collar, survey, logging and sampling data, were checked by the Senior Geologist, and sent to the Perth office each evening for loading into the company database.
Logging		No specific geotechnical of metallurgical logging has been undertaken on the Core, RC or RAB drill samples to date.
Logging	Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.	Logging includes noting lithology, colour, weathering, grain size, structure, alteration, sulphide mineralisation, and veining.
		Drill core is photographed.
		Each RC chip tray (10m) is photographed.
		The sample piles, and washed chips, of each complete RAB hole are photographed.
	The total length and percentage of the relevant intersections logged.	Every metre sample from every hole has been logged individually.
	If core, whether cut or sawn and whether quarter, half or all core taken.	Sawn half core was submitted for assay.
	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	1m RC samples riffle split when dry, and tube sampled if wet.
		5m RC composites tube sampled from each RC retention bag after 1m riffle split sampling completed.
		5m RAB composite samples scooped from several places from each 1m sample pile.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Riffle splitting of dry 1m RC samples is standard industry practice, and considered appropriate for resource level work in this deposit style. Where the samples are wet, tube sampling of 1m RC samples is considered to be adequate sampling for resource level work.
Sub-sampling techniques and sample preparation		5m composites in RC and RAB drilling is considered appropriate for first-pass work to indicate the presence of mineralisation, in anticipation of subsequent follow up drilling and sampling.
		Cored holes were cut with a diamond saw and bagged on site. Samples were usually collected on 1m intervals but were adjusted to be consisted with vein and lithology boundaries where appropriate. 0.5m sample intervals were collected for some of the oxide core at Akoko North as part of a niche sampling exercise.
	Quality control procedures adopted for all sub- sampling stages to maximise representivity of samples.	Every 50 th RC and RAB sample is taken as a duplicate sample.
	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.	Analysis of duplicate results has not raised any concerns about sample quality to date.
	Whether sample sizes are appropriate to the grain	To date both the grainsize of the rocks and the gold

	size of the material being sampled.	mineralisation, are considered relatively fine. There is not believed to be any "coarse gold" issue, and the chosen sampling techniques are considered
		appropriate.
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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.	All RC and diamond samples were submitted to Intertek Laboratory in Tarkwa, Ghana, for 50g Fire Assay analysis for Au. Preparation was by drying, crushing to 75% passing 2mm, then <2kg riffle split pulverised to nominal 95% passing 75µm in a LM2 mill (lab method PT01). Analysis method was 50g Fire Assay for Au, with Flame AAS finish, 0.01ppm detection limit (lab method "FA51"). All RAB gold samples were submitted to Intertek Laboratory in Tarkwa, Ghana, for 50g Aqua Regia analysis for Au. Preparation was by drying and pulverising <2kg to nominally 95% passing 75µm in LM2 mill (lab method "PT01"). Analysis method was 50g Aqua Regia for Au, with AAS finish, 1ppb detection limit (lab method "AR50"). Both assay techniques are considered as total. Results were sent by email as "csv files" to the Wa and Perth offices. QAQC sample results (blanks, standards and duplicates) were checked and any problems were communicated and addressed with the lab before results were entered into the Castle database. 63 Bundi zone RAB pulps, chosen from in and around the anomalous gold zones, were sent to Bureau Veritas Mineral Laboratories in Abidjan for multielement geochemistry by ICP (Mixed Acid Digest with ICP-AES Finish — method code MA101). Zinc analysis was completed on one metre bagged RC split samples (before they were sent off to the lab for gold assaying) using a handheld portable XRF machine (initial programs utilised a Niton model XL3t, programs since December 2013 have used an Olympus Innov-X Delta Premium). Reading times were 60-90 seconds. Multiple readings were taken from anomalous zinc zones to confirm analysis.
		Results were verified using the supplied Niton and Innov-X XRF standards, and samples of known zinc value sourced from conventional laboratory analysis of Bundi RAB samples. The 2013 Helicopter-borne Magnetics, Radiometrics and VTEM surveys was completed by Geotech Limited (Canada) on 200m spaced E-W lines, with interpretation of magnetic data by Bill Robertson of Value Adding Resources Pty Ltd (Perth), and VTEM data by Brett Adams of Spinifex Geophysics (Perth).
	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.	Duplicate samples were taken every 50 th sample. Blank samples (obtained from a stone quarry near Wa) were inserted every 20 th sample. Standards (from Geostats in Perth) were inserted every 50 th sample. QAQC analysis and reporting has not highlighted any areas of concern.
Verification of	The verification of significant intersections by either independent or alternative company personnel.	RAB holes with good intersections are usually confirmed by drilling RC holes under them. RC 5m composite samples with good assays are confirmed by assaying the 1m split samples from the
sampling and assaying		same zones.
assayiiig	The use of twinned holes.	No holes have been twinned to date. RC holes have been drilled intentionally following up good results encountered in RAB drilling, and have confirmed the occurrence of mineralisation in the RAB

		holes.
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	The daily drilling plod sheets, and the collar, survey, logging and sampling data, were checked by the Senior Geologist, and sent to the Perth office each evening for loading into the company database.
	Discuss any adjustment to assay data.	Lab assay results were sent by email as "csv files" to the Wa and Perth offices. QAQC sample results (blanks, standards and duplicates) were checked and any problems were communicated and addressed with the lab before results were entered into the Castle database. There has been no adjustment to assay data.
	Accuracy and quality of surveys used to locate drill	Drill hole collar coordinates are in UTM grid (UTM
	holes (collar and down-hole surveys), trenches, mine workings and other locations used in	WGS84 Zone 30N) are measured by handheld GPS with accuracy of +/-2m.
Location of	Mineral Resource estimation.	RC holes were downhole surveyed using stainless steel rods at the end of the drill string and a Reflex Ezi Shot tool provided by the drillers. In shallower RC holes down hole surveys were taken at the collar, halfway down the hole, and at end-of-hole. Deeper RC holes had surveys taken approximately every 50m. Survey tool error for some holes at Kpali was observed and these hole surveys were adjusted to remove the erroneous readings.
data points		Diamond holes were surveyed using a Reflex Ezi Shot tool.
	Specification of the grid system used.	UTM grid (UTM WGS84 Zone 30N) used exclusively
	Quality and adequacy of topographic control.	At Kpali and Kandia the topography in the area is largely flat. At Kpali no other relative level (RL) control was used other than handheld GPS measurements, which in RL may be accurate to +/-20m. At Kandia surveyed collar positions of RC holes were used for control.
		Akoko topography is undulating and surveyed collar positions of RC holes were used for control. Cored hole RL's were estimated.
	Data spacing for reporting of Exploration Results.	RAB spacing ranged from 100m to 200m lines, and 20m to 40m collar spacing.
		Initial RC drilling targeted below encouraging RAB intercepts, with first pass infill RC drilling in December 2013 bringing spacings to variably 80m, 100m or 200m spaced sections, with one to three holes drilled on each section on a nominal 40m spacing.
Data spacing and		The 2013 Helicopter-borne Magnetics, Radiometrics and VTEM survey was completed on 200m spaced E-W lines.
distribution	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.	The mineralised domains for Kpali, Kandia and Akoko have demonstrated sufficient continuity in both geological and grade continuity to support the definition of Mineral Resources and the classifications applied under the 2012 JORC Code.
	Whether sample compositing has been applied.	RC intercepts reported are from 1m splits where available, or from 5m composites when 1m splits results are still awaited.
		RAB intercepts reported are from 5m composites.
Orientation of data in relation to geological structure	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	Both the Bundi and Kpali mineralised structures appear to be striking N to NNE, and dipping steeply to the west. The drilling azimuth of 090 appears to be appropriate at both prospects.
	If the relationship between the drilling orientation	There is not considered to be any significant sampling

	and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	bias from current information.
Sample security	The measures taken to ensure sample security.	Samples are systematically numbered and recorded, bagged in labelled polyweave sacks, and dispatched in batches to the lab using local transport. The lab confirms receipt of all samples on the submission form on arrival at the lab.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews of sampling techniques have been conducted. Analysis of performance of QAQC samples for the 2012-2013 field season has been reported by consultant Database Manager, Joe Reid, with no issues highlighted. QAQC for the 2013/14 RC holes at Kpali and Bundi were analysed with no issues highlighted.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Certified Person Commentary
Circoila	·	
Mineral tenement and land tenure status	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. 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.	At Kapli exploration work contained in this report has been conducted on the 100% owned Degbiwu Prospecting Licence, granted on 30 April 2012, part of the Wa Project in NW Ghana. The Wa Project is 100% owned by Carlie Mining Limited (subject to Ghanaian Government right to a free-carried 10% interest). Carlie Mining is a 100% owned subsidiary of Castle Minerals Limited. At Kandia a Prospecting Licence has been submitted by Carlie Mining and is awaiting grant. At Akoko a 100% owned granted Prospecting Licence (PL2/398) has been granted to Topago Mining Limited (subject to Ghanaian Government right to a free-carried 10% interest). Topago Mining is a 100% owned subsidiary of Castle Minerals Limited. The concession is in good standing, and no known impediments exist.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	No previous exploration data is known from the immediate prospect areas, apart from, at Kandia and Kpali, wide-spaced regional BLEG sampling by Newmont, and regional geological mapping by Russian geologists in the 1960s.
Geology	Deposit type, geological setting and style of mineralisation.	Castle is exploring for mesothermal gold deposits in the Birimian host-rocks of NW Ghana. The highly anomalous levels of zinc in the Bundi Au-Zn prospect has highlighted there may also be potential for base metal (possibly VHMS-style) deposits in the Degbiwu PL area.
Drill hole Information	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: o easting and northing of the drill hole collar o elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar o dip and azimuth of the hole o down hole length and interception depth o hole length.	Appropriate tabulations for all significant RC and RAB results in the Degbiwu PL area have been included in previous announcements to the ASX about Bundi and Kpali prospects: 22 nd April 2013 6 th May 2013 20 th May 2013 23 rd May 2013 17 th June 2013 4 th July 2013 28 th January 2014 31 st January 2014 18 th February 2014
	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.	Appropriate tabulations for all significant RC and RAB and diamond results have been included in previous announcements to the ASX.
Data aggregation methods	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	Intercept results are arithmetic averages if 1m splits, and weighted averages if unequal composite lengths are included. No top cuts are applied. RC and diamond intercepts are reported above 0.5g/t, unless there is geological reason (i.e. demonstrable continuity of the mineralisation and alteration) to

		include internal zones of lower assays to >0.2g/t.
		RAB assay intercepts are generally reported above 0.1g/t or 0.05g/t gold.
	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.	Higher-grade internal zones within a broader mineralised zone may be reported if there is one or more unusually high grades in an otherwise consistent zone.
	The assumptions used for any reporting of metal equivalent values should be clearly stated.	No metal equivalence used or stated.
	These relationships are particularly important in the reporting of Exploration Results.	The RC and diamond holes are drilled at -50 to 090 (E), and the RAB holes are drilled at -60 to 090.
Relationship between mineralisation widths and	If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	From interpretation of available data, it is believed that on average the strike of mineralisation is N-NNE, and dipping steeply W.
intercept lengths	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').	Only the downhole lengths are reported. The true width at Akoko is estimated at 90-100%; Kandia 80% and Kpali 70%.
Diagrams	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.	See diagrams in this, and previous, announcements.
Balanced reporting	Where comprehensive reporting of all Exploration 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.	Appropriate tabulations for all significant Diamond RC and RAB results have been included in previous announcements to the ASX.
Other substantive exploration data	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.	No other material exploration data to report at this time.
	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further work planned as stated in this announcement.
Further work	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	See diagrams in this announcement.

Section 3 Estimation and Reporting of Mineral Resources – Akoko and Kandia

Criteria	JORC Code explanation	Commentary
Database integrity	 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. Data validation procedures used. 	 The data base has been systematically audited by CDT geologists. All assay data was electronically transferred from laboratory csv files with minimal opportunity for transcription errors. All drilling is plotted and locations were checked for consistency with planned programs.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those	The Competent Person has conducted regular site visits to both project areas. The visit

Criteria	JORC Code explanation	Commentary
	 visits. If no site visits have been undertaken indicate why this is the case. 	included review and inspection of the deposit areas, observation of drilling and sampling techniques and review of site procedures.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 The confidence in the geological interpretation is considered to be good and is based on interpretation of RC and diamond drilling information. At Akoko North, 4 DD and 132 RC drill holes were drilled of which 2 DD and 90 RC were used in the resource estimate. At Akoko South, of the 45 RC drill holes in the database, 11 were used in the resource estimate. At Kandia, 274 RC drill holes were drilled of which 97 were used in the resource estimate. Geochemistry and geological logging has been used to assist identification of lithology and mineralisation. At the Kandia deposit, mineralisation is hosted in moderately dipping shear zones. Geological exposures in artisanal working have been incorporated into the mineralisation interpretation. Continuity is likely to be variable due to primary structural variations but the main zones have continuity confirmed by infill drilling. At Akoko, the main zones of the resource are interpreted to comprise flat dipping zones of supergene mineralisation which is confirmed by infill drilling. Variability in grade is evident, and where continuity cannot be assumed, the resource is classified as Inferred.
Dimensions	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.	 The Akoko North resource has a 1,370m strike extent and the vertical extent of the resource is 142m, however the majority of the resource is less than 40m vertical depth. The Akoko South resource has a 320m strike extent and the vertical extent of the resource is 140m. At Kandia, the 4000 Zone resource has an 850m strike extent and the vertical extent of the resource is 170m. The 8000 Zone resource lies 3.3km to the NE and has a 480m strike extent and a vertical extent of 130m.
Estimation and modelling techniques	 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. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage 	 At Akoko North, the shallow oxide zones were estimated using Ordinary Kriging (OK) interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 50m was used with a second pass radius of 90m and a third pass radius of 150m to fill all remaining un-estimated blocks. The two steep primary lodes were estimated using Inverse Distance to power 2 (ID2) interpolation. A high grade cut of 14g/t was applied to 1m composite data. At Akoko South ID2 interpolation was used for grade interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 50m was used with a second pass radius of 70m. This was increased to 100m for the third pass to fill all remaining un-estimated blocks. Greater than 99% of blocks were filled in the first two passes. A high grade cut of 20g/t was applied to 1m composite data.

Criteria	JORC Code explanation	Commentary
Criteria	characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. Any assumptions behind modelling of selective mining units. Any assumptions about correlation between variables. Description of how the geological interpretation was used to control the resource estimates. Discussion of basis for using or not using grade cutting or capping. The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	 At Kandia, the model was estimated using Inverse Distance (ID2) interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 60m was used with a second pass radius of 100m and a third pass radius of 180m for the third pass to fill all remaining un-estimated blocks. A high grade cut of 10g/t was applied to 1m composite data. At each deposit a minimum of 10 samples and a maximum of 40 samples were used for the first pass estimation, reducing to a minimum of 4 samples for the third pass. At both projects, linear grade estimation was deemed suitable due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 80m down-dip. This was equivalent to the maximum hole spacing in the resources. At Akoko South a Surpac block model was used for the estimate with a block size of 20m NS by 10m EW by 5m vertical with sub-cells of 5m by 0.625m by 1.25m. At Akoko North a Surpac block model was used for the estimate with a block size of 25m NS by 10m EW by 10m vertical with sub-cells of 12.5m by 2.5m by 2.5m. At Kandia, a Surpac block model was used for the estimate with a block size of 20m NS by 5m EW by 5m vertical with sub-cells of 5m by 1.25m by 1.25m. The parent block size dimensions were selected to be no less than half the drill hole spacing in the better drilled parts of the deposits. The sub-block size provided sufficient resolution to the block models to allow for variations in lode geometry. No recovery of by-products is anticipated. Only Au was interpolated into the block model. Reconciliation could not be conducted as the deposits are unmined No assumptions were made on selective mining units. Only Au assay data was available, therefore correlation analysis was not possible. The deposit mineralisation was constrained
		 No recovery of by-products is anticipated. Only Au was interpolated into the block model. Reconciliation could not be conducted as the deposits are unmined No assumptions were made on selective mining units. Only Au assay data was available, therefore correlation analysis was not possible.
		by wireframes constructed using a 0.5g/t Au cut-off grade. The wireframes were applied as hard boundaries in the estimate. • Validation of the model included detailed comparison of composite grades and block grades by strike panel and elevation. Validation plots showed good correlation between the composite grades and the block model grades. • Previous Mineral Resource estimates were available for each deposit. Refer to ASX releases by CDT; 5/12/2011 Maiden Kandia Gold Resource of 107,500 Ounces; 25/8/2011 Akoko North Resource Grade Increased by 37% and 31/3/2009 76,000 Ounce Gold Resource at Akoko North

the overall Mineral Resource due to a reduction in bulk density values applied to the

Criteria	JORC Code explanation	Commentary
Moisture	Whether the tonnages are estimated on a dry	model based on data collected after the initial estimate was reported. • At Kandia, the current estimate has reduced the overall Mineral Resource due to deeper drilling not confirming assumed depth extensions to a portion of the deposit. • Tonnages and grades were estimated on a dry
	basis or with natural moisture, and the method of determination of the moisture content.	in situ basis. No moisture values were reviewed.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 At Akoko, the Mineral Resource has been reported at a 0.8g/t Au cut-off. At Kandia, the broad, more continuous southern zone has been reported at a 0.5g/t Au cut-off and the narrow, less continuous northern zone at a 1.0g/t Au cut-off. The cut-off grades were based on the assumption of open pit mining, with the variations reflecting potential scale of mining and deposit grade distribution.
Mining factors or assumptions	• 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.	 CDT has assumed that the deposits are amenable to mining using selective open pit techniques typical of the global gold industry. Portions of the deposits would clearly be amenable to mining once sufficient resources are defined to warrant construction of a processing plant by CDT or other operators. At Akoko, a large scale mine is operating within hauling distance of the deposit.
Metallurgical factors or assumptions	• 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.	 It is assumed that extraction of gold will be achieved by gravity and cyanide leaching methods. At Akoko North a large number of samples have been assessed for preliminary leaching test work, with metallurgical recoveries of greater than 90% indicated by these results. No extraction test work has been undertaken at Akoko South or Kandia. Akoko South appears geologically similar to Akoko North and has a large oxide component. At Kandia the only sulphide specie observed has been minor amounts of pyrite within the primary mineralisation. It has been assumed, but not confirmed, that the mineralisation will be amenable to standard gravity and leaching techniques.
Environmental factors or assumptions	• 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 greenfields 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.	No assumptions have been made regarding environmental factors. CDT will work to mitigate environmental impacts as a result of any future mining or mineral processing.
Bulk density	• Whether assumed or determined. If assumed, the basis for the assumptions. If determined,	At the Akoko project, CDT collected 156 bulk density measurements from Akoko North drill

Criteria	JORC Code explanation	Commentary
	 the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	 core from holes completed in 2011. Moisture and pore space was accounted for in the measuring process. The measurements were grouped into the different weathering types and average density values determined then applied to the block model. The Akoko North values were applied to the Akoko South model. No density measurements were available for the Kandia deposit, so assumed values were applied to the Mineral Resource, based on knowledge of similar deposits in the region.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	 The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The resource was classified as Indicated and Inferred Mineral Resource based on data quality, sample spacing, and lode continuity. The Indicated Mineral Resource was defined within areas of close spaced diamond and RC drilling of less than 40m by 40m, and where the continuity and predictability of the lode positions was good. The Inferred Mineral Resource was assigned to areas of the deposit where drill hole spacing was greater than 40m by 40m, where small isolated pods of mineralisation occur outside the main mineralised zones, and to geologically complex zones. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on geological interpretation producing a robust model of mineralised domains. This model has been confirmed in places by infill drilling which generally supported the interpretation. Validation of the block model shows good correlation of the input data to the estimated grades. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
	 Whether appropriate account has been taken of all relevant factors (ie 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). 	
	Whether the result appropriately reflects the Competent Person's view of the deposit.	
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	 External estimates audits have been completed which verified the technical inputs, methodology, parameters and results of the estimate.
Discussion of relative accuracy/ confidence	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	The Mineral Resource estimates for Akoko and Kandia have been reported with a moderate degree of confidence, reflected in the classifications applied. The continuity of the main lodes have been defined by good quality drilling at regular spacings, and the

Criteria	JORC Code explanation	Commentary
	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.	global estimates of tonnes and grade.
	 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. These statements of relative accuracy and 	
	confidence of the estimate should be compared with production data, where available.	

Section 3 Estimation and Reporting of Mineral Resources - Kpali

Criteria	JORC Code explanation	Commentary
Database integrity	 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. Data validation procedures used. 	The data base has been systematically audited by CDT geologists. All assay data was electronically transferred from laboratory csv files with minimal opportunity for transcription errors. All drilling is plotted and locations were checked for consistency with planned programs.
Site visits	 Comment on any site visits undertaken by the Competent Person and the outcome of those visits. If no site visits have been undertaken indicate why this is the case. 	The Competent Person has conducted regular site visits to both project areas. The visit included review and inspection of the deposit areas, review of drilling and sampling techniques and review of site procedures.
Geological interpretation	 Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit. Nature of the data used and of any assumptions made. The effect, if any, of alternative interpretations on Mineral Resource estimation. The use of geology in guiding and controlling Mineral Resource estimation. The factors affecting continuity both of grade and geology. 	 The confidence in the geological interpretation is considered to be good and is based on interpretation of RAB and RC drilling information. At Kpali, 20 RC drill holes were drilled of which 19 were used in the resource estimate. Geochemistry and geological logging has been used to assist identification of lithology and mineralisation. At the Kpali deposit, mineralisation is hosted in moderately dipping shear zones within sedimentary lithologies. Continuity of structure is good but grade variation is evident due to varying intensity of alteration and mineralisation.
Dimensions	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.	 The Kpali resource has a 540m strike extent and the vertical extent of the resource is 100m. The deposit comprises several parallel mineralised structures encompassed within a zone up to 150m wide.
Estimation and modelling techniques	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	At the Kpali deposit, ID2 interpolation was used for grade interpolation with the search ellipse orientated to match the lode geometry. A first pass radius of 120m was used with a second pass radius of 180m. This was increased to 250m for the third pass to

Criteria	JORC Code explanation	Commentary
	assisted estimation method was chosen include a description of computer software and parameters used. • The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. • The assumptions made regarding recovery of by-products. • Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). • In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. • Any assumptions behind modelling of selective mining units. • Any assumptions about correlation between variables. • Description of how the geological interpretation was used to control the resource estimates. • Discussion of basis for using or not using grade cutting or capping. • The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	fill all remaining un-estimated blocks. Greater than 99% of blocks were filled in the first two passes. A high grade cut of 10g/t was applied to 1m composite data. A minimum of 10 samples and a maximum of 40 samples were used for the first pass estimation, reducing to a minimum of 4 samples for the third pass. Linear grade estimation was deemed suitable due to the geological control on mineralisation. Maximum extrapolation of wireframes from drilling was 80m down-dip. This was equivalent to the maximum hole spacing in the resource. A Surpac block model was used for the estimate with a block size of 40m NS by 10m EW by 10m vertical with sub-cells of 10m by 2.5m by 2.5m. The parent block size dimensions were selected to be no less than half the drill hole spacing in the better drilled parts of the deposit. The sub-block size provided sufficient resolution to the block model to allow for variations in lode geometry. No recovery of by-products is anticipated. Only Au was interpolated into the block model. Reconciliation could not be conducted as the deposit is unmined No assumptions were made on selective mining units. Only Au assay data was available, therefore correlation analysis was not possible. The deposit mineralisation was constrained by wireframes constructed using a 0.2g/t Au cut-off grade. The wireframes were applied as hard boundaries in the estimate. Validation of the model included detailed comparison of composite grades and block grades by strike panel and elevation and direct local comparison of drill hole grades with block grades.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	 deposit. Tonnages and grades were estimated on a dry in situ basis. No moisture values were reviewed.
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	 The Kpali deposit has been reported at a 0.5g/t Au cut-off grade. The cut-off grade was based on the assumption of the deposit having some potential for open pit mining.
Mining factors or assumptions Metallurgical	 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. The basis for assumptions or predictions 	 CDT has assumed that the deposit has some potential for mining using selective open pit techniques typical of the global gold industry. Portions of the deposit could be amenable to mining once sufficient resources are defined to warrant construction of a processing plant by CDT or other operators. It is assumed that extraction of gold will be

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factors or assumptions	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.	achieved by gravity and cyanide leaching methods. No metallurgical test work has been carried out for the Kpali deposit.
Environmental factors or assumptions	• 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 greenfields 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.	No assumptions have been made regarding environmental factors. CDT will work to mitigate environmental impacts as a result of any future mining or mineral processing.
Bulk density	 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. 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. Discuss assumptions for bulk density estimates used in the evaluation process of the different materials. 	No density measurements were available for the Kpali deposit, so assumed values were applied to the Mineral Resource, based on knowledge of similar deposits in the region.
Classification	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie 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). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 The Mineral Resource estimate is reported here in compliance with the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' by the Joint Ore Reserves Committee (JORC). The resource was classified as Inferred Mineral Resource based on good quality drilling data, the broad sample spacing, and assumed lode continuity. The input data is comprehensive in its coverage of the mineralisation and does not favour or misrepresent in-situ mineralisation. The definition of mineralised zones is based on geological interpretation producing a robust model of mineralised domains. Validation of the block model shows good correlation of the input data to the estimated grades. The Mineral Resource estimate appropriately reflects the view of the Competent Person.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	External estimates audits have not been completed.
Discussion of relative accuracy/	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or	The Mineral Resource estimate for the Kpali deposit has been reported with a moderate degree of confidence, reflected in the

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confidence	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. • 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. • These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	classification applied. The continuity of the main lode has been assumed due to broad spaced drilling but the data is of good quality, and the resultant block estimate has accurately reflected the composite input data. The Mineral Resource statement relates to a global estimate of tonnes and grade. Reconciliation could not be conducted due to the absence of mining at the deposit.