

Visible Gold In Bulk Stream Sediment Concentrates



ASX & Media Release

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ASX: CDT

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Company Secretary

- Gold panned from 5 of 15 bulk samples of stream sediments draining Mt Roe conglomerate at Coolyia Creek
- Implies gold anomalism present within sections of Mt Roe Conglomerate which recent detailed mapping has confirmed extends for 4km strike
- Gold panned from 5 of 12 bulk samples of stream sediments draining Hardey and Mt Roe conglomerates at Beasley Creek
- Mapping and sampling merges Beasley West and Beasley Central prospects for a combined strike of 4.4km of prospective Hardey and Mt Roe conglomerates
- Recent mapping and sampling confirms opportunity to identify in-situ gold occurrences within Castle's Pilbara conglomerate-hosted gold projects

Castle Managing Director, Stephen Stone said ***"Anomalous gold in bulk samples collected from seasonal streams draining and immediately below the Mt Roe and Hardey conglomerate horizons at its Coolyia Creek and Beasley Creek projects and the addition of visible gold in panned concentrates from these is another very encouraging development"***.

"With the prospective conglomerates extending over many kilometres at both projects, this recent sampling and the accompanying detailed mapping will enable Castle to better define localities for eventual bulk sampling of the conglomerates themselves for in-situ gold mineralisation".

Castle Minerals Limited ("Castle" or "the Company")(ASX: CDT) advises that recent sampling programmes completed at its Pilbara region Coolyia Creek and Beasley Creek gold projects has recovered fine-grained gold in panned concentrates from bulk sediment samples collected from streams draining mapped conglomerate horizons. Detailed mapping has also better defined the location of the prospective Mt Roe and Hardey Formation conglomerate horizons across both projects.

These horizons are considered to be the most likely hosts for the widely sought 'Witwatersrand style' paleo-placer gold mineralisation in the Pilbara region (refer Castle ASX releases 16th April, 21st February and 29th January 2018; 20th December, 23rd November and 13th November 2017).

Photo 1: Feeding stream sediment sample into the field portable super-concentrator



Photo 2: Gold in panned concentrate



Coolyia Creek

At Coolyia Creek, 15 x 15kg stream sediment samples from seasonal streams draining the target Mt Roe unconformity surface were processed using a field-portable super-concentrator (*Photo 1*). Panning of the sample concentrates returned fine-grained visible gold from five of the sample sites.

Sample splits (2kg) of all concentrates were submitted to a laboratory for bottle roll cyanide extractable gold analysis with three samples returning highly anomalous (>100ppb Au) results to a maximum of 144ppb Au (Table 1).

This implies the presence of gold anomalism within sections of Mt Roe Conglomerate which recent detailed mapping by Castle has also confirmed now extends for 4km at Coolyia Creek.

The anomalous southern area, where three of the concentrate samples returned visible fine-grained gold, is of particular interest as mapping has shown the Mt Roe Conglomerate in this area (whilst also noting that the general stratigraphy is fairly flat dipping) to have an apparent surface exposure of up to 300m width (*Photo 1*, Figure 1).

Visual gold was also identified in bulk sample concentrates obtained from the sampling of two separate streams draining the unconformity in the northern part of the project area. This gold may derive from the Mt Roe conglomerate overlying the unconformity but could also be sourced from gold in the underlying older Archean basement rocks where prospector scrapings have been observed.

Mapping at Coolyia Creek has actually identified two distinct Mt Roe conglomerate units. A lower conglomerate horizon comprises pebble to cobble sized clasts of basalt, granite and quartz immediately on the unconformity contact with the older Archean basement. The apparent surface exposure of this conglomerate varies between 50m – 300m wide. A thin interflow unit of basalt has also been mapped within this conglomerate. An upper and overlying conglomerate is composed of cobble to boulder sized clasts of granite in a quartz-feldspathic sand matrix.

Beasley Creek

At Beasley Creek, the prospective unconformity between the older Archean basement and the overlying Fortescue Group stratigraphy has now been mapped in reasonable detail over an east-west strike of 16km (Figure 2).

Castle has previously reported the recovery of 62 small gold nuggets proximal to the Mt Roe and Hardey conglomerates that sit above much of the unconformity surface. Four broad prospect areas have been defined.

At Beasley Central, historical alluvial and eluvial gold mining of material overlying Hardey conglomerate is evident. Drilling by previous licence holders has returned a *4m intercept grading 11.4g/t Au (RRC15) in rocks straddling the unconformity contact (*refer ASX release dated 20th December 2017 and the included Table 1 and Appendix 1 and 2*)

Recently completed work collected twelve stream sediment samples from seasonal streams and small creeks draining the Mt Roe and Hardey unconformity at and between the Beasley West and Beasley Central prospects and also at Beasley East. No stream sediment samples were collected from the Beasley Central prospect itself as it has been heavily disturbed and 'contaminated' by previous mining activities.

These samples were also processed using the field portable super-concentrator with panning returning visible fine-grained gold in five of the samples.

Sample splits (2kg) of all concentrates were submitted to a laboratory for bottle roll cyanide extractable gold analysis with most samples returning varying levels of anomalism up to a maximum value of 166ppb Au (BSC001). This maximum assay result corresponds to a panned sample returning visual fine-grained gold at the 3km striking Beasley West target area. The sample came from one of eight streams draining conglomerates where the Company's earlier metal detecting operations had recovered small nuggets.

It is also now apparent from this work that the Beasley Central and Beasley West prospects comprise a single 4.4km highly prospective zone of conglomerates. This zone will become a key focus of future exploration campaigns.

At Beasley East, visual gold was returned from one stream sediment sample with bottle roll assays generally lower than those seen at Beasley West.

Routine rock chip sampling across both project areas returned minimal gold values. It is recognised that given the expected nuggety nature of the mineralisation being sought, and having reviewed the work of other companies in the region, this is not considered to be an effective exploration tool and that considerably larger bulk hard rock samples are required.

NB: The results of the super-concentrator sluicing and panning operation are qualitative in nature and do not provide a reliable analytical result. These serve only to provide a preliminary indication of the presence or absence of visible gold in the field and to enable geologists to vector towards the primary source of gold.

**The historical drilling results referred to above were obtained by previous explorers. Information pertaining to the drilling, sampling and assaying techniques has been extracted from reports lodged in 1998 with Geological Survey of Western Australia (GSWA). Castle personnel have located and verified in the field the collar positions of the referred to holes.*

Figure 1: Coolyia Creek mapped geology and recent sampling

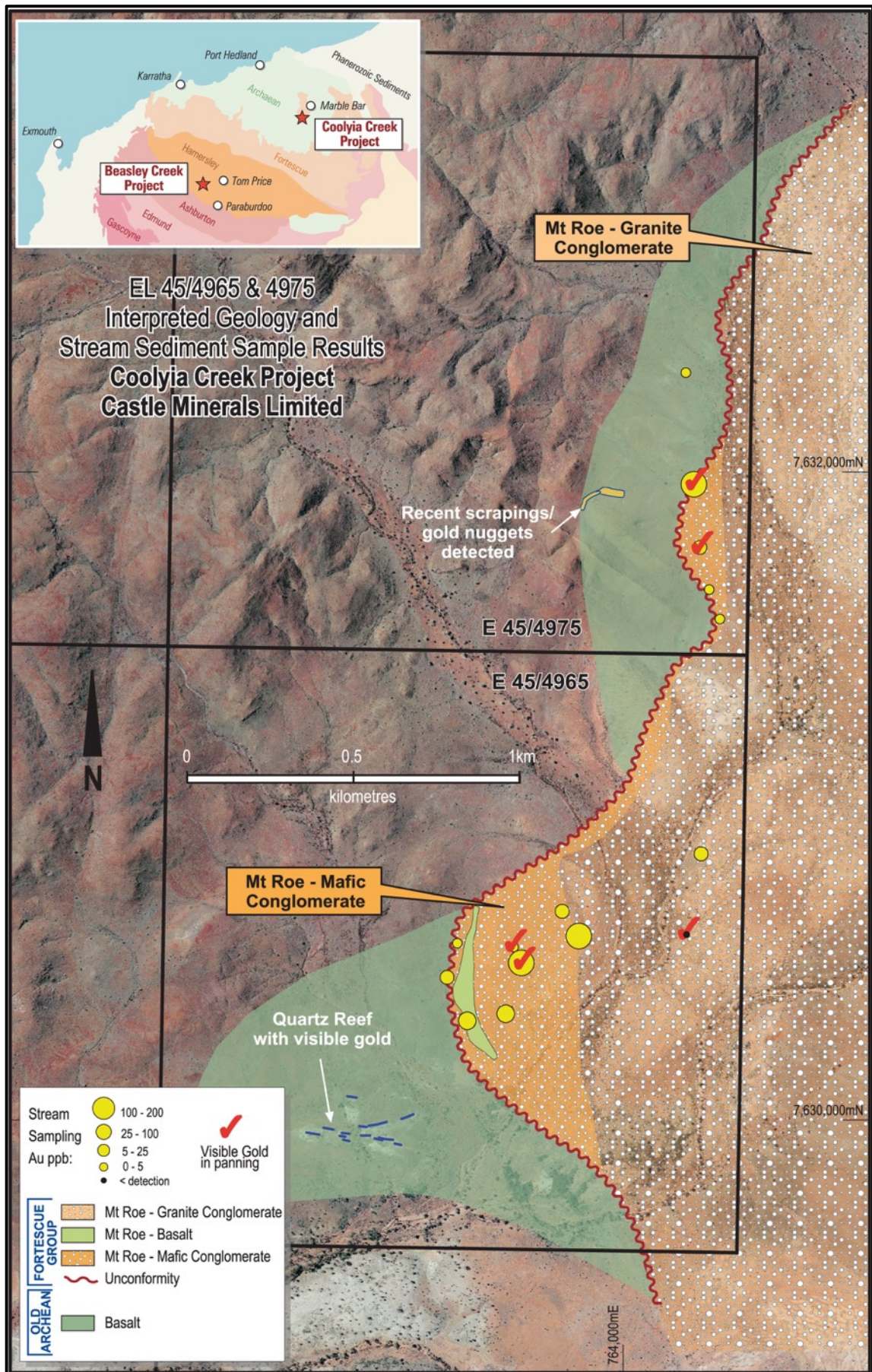
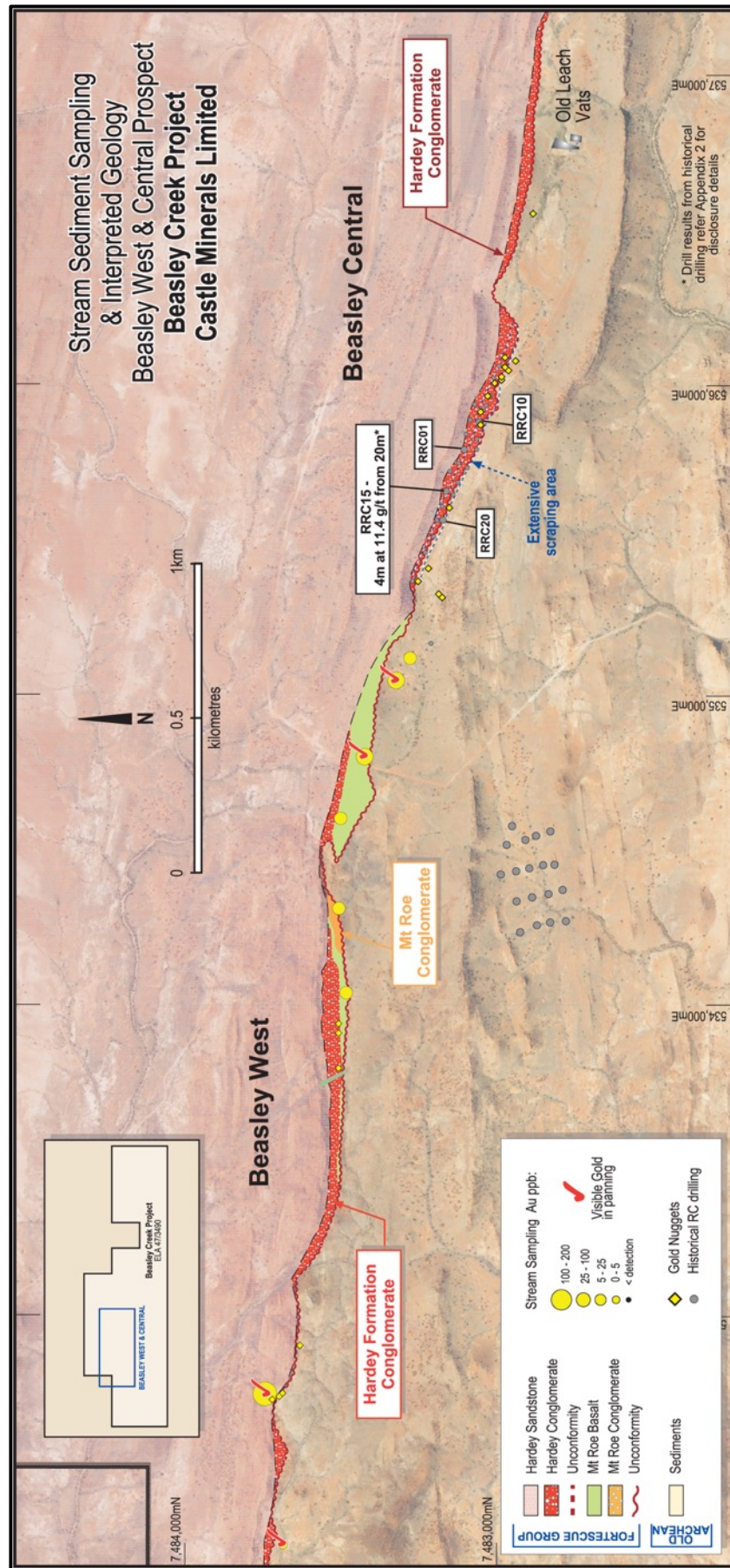


Figure 2: Beasley Creek Western and Central targets geology and sampling



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About Castle Minerals Limited

Castle Minerals is listed on the Australian Stock Exchange (ASX: CDT) and headquartered in Perth, Western Australia. In addition to its interest in the Coolyia Creek and Beasley Creek possible 'Witwatersrand-style' conglomerate-hosted gold projects in the Pilbara region of Western Australia, it has a large contiguous tenure position in the Upper West region of Ghana, West Africa, a country with a long history of gold exploration and mining. Its Ghana licence holdings encompass large tracts of highly prospective Birimian geological terrane, the host to many of West Africa's multi-million-ounce gold mines. All of Castle's ground in Western Australia and Ghana, whilst at a relatively early stage of exploration, presents a number of compelling targets that offer considerable opportunities for discoveries.

Cautionary Statement

The Coolyia Creek and Beasley Creek Projects are considered to be of early stage, grass roots exploration status. No Competent Person has done sufficient work in accordance with JORC Code 2012 to conclusively determine if gold is actually consistently present in conglomerates on the licences or to estimate in what quantities it occurs. In each case the general integrity of mapping by the GSWA has been confirmed and has then been refined by mapping by Castle's geologists. It is possible that following further evaluation and/or exploration work that the confidence in the information used to identify and acquire interests in the areas of interest in the Pilbara may be reduced when reported under JORC Code 2012.

Competent Persons Statement

The scientific and technical information in this Report that relates to the geology of the deposits and exploration results is based on information compiled by Mr Stephen Stone, who is an Executive Director of Castle Minerals Limited. Mr Stone is a Member of the Australian Institute of Mining and Metallurgy and has sufficient experience which 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 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Stone is the Qualified Person overseeing Castle's exploration projects and has reviewed and approved the disclosure of all scientific or technical information contained in this announcement that relates to the geology of the deposits and exploration results.

Forward Looking Statement

Statements regarding Castle's plans, forecasts and projections with respect to its mineral properties and programmes are forward-looking statements. There can be no assurance that Castle's plans for development of its mineral properties will proceed as currently expected. There can be no assurance that Castle will be able to confirm the presence of Mineral Resources or Ore Reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Castle's mineral properties. The performance of Castle may be influenced by a number of factors which are outside the control of the Company, its Directors, staff or contractors.

Location and assay results of stream samples collected at Coolyia Creek and Beasley Creek

Project	Sample ID	East	North	Mesh Size	Visible Gold Present	Au ppb Bottle Boll	Au ppb Tails
Coolyia Creek	CCSS01	763475	7630439	-2mm	No	9.95	0.06
	CCSS02	763532	7630308	-2mm	No	69.50	-0.5
	CCSS03	763506	7630544	-2mm	No	3.97	-0.5
	CCSS04	763674	7630533	-2mm	Yes	1.02	-0.5
	CCSS05	763696	7630484	-2mm	Yes	144.00	0.60
	CCSS06	763650	7630330	-2mm	No	70.50	-0.5
	CCSS07	763868	7630567	-2mm	No	109.00	0.07
	CCSS08	763818	7630644	-2mm	No	9.83	-0.5
	CCSS09	764233	7630821	-2mm	No	8.54	-0.5
	CCSS10	764190	7630573	-2mm	Yes	-0.01	-0.5
	CCSS11	764289	7631546	-2mm	No	0.76	-0.5
	CCSS12	764258	7631637	-2mm	No	0.13	-0.5
	CCSS13	764229	7631768	-2mm	Yes	8.34	-0.5
	CCSS14	764212	7631963	-2mm	Yes	135.00	0.15
	CCSS15	764188	7642307	-2mm	No	1.42	-0.05
Beasley West	BCSS01	532748	7483744	-2mm	Yes	166.00	0.07
	BCSS02	532262	7483686	-2mm	Yes	2.38	-0.05
	BCSS03	534312	7483507	-2mm	No	14.00	0.05
	BCSS04	534040	7483483	-2mm	No	15.20	-0.05
	BCSS05	534602	7483501	-2mm	No	6.67	0.07
	BCSS06	534801	7483424	-2mm	Yes	25.70	-0.05
	BCSS07	535046	7483323	-2mm	Yes	27.30	-0.05
	BCSS08	535118	7483278	-2mm	No	9.72	-0.05
Beasley East	BCSS09	537981	7482691	-2mm	No	0.53	-0.05
	BCSS10	543240	7481010	-2mm	No	1.41	-0.05
	BCSS11	543147	7481077	-2mm	No	1.86	0.06
	BCSS12	542859	7481329	-2mm	Yes	7.82	-0.05

JORC Code, 2012 Edition – Table 1

Section 1: Sampling Techniques and Data

Criteria	JORC Code explanation	Certified Person Commentary
Sampling techniques	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.	Stream sediment samples were collected from streams draining areas downstream from prospective conglomerate beds.

	<p>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</p>	<p>Stream sediment samples were collected from the base of the stream bed by digging. Sample material was sieved to - 2mm to remove coarser material. Approximately 15 kg of sieved material was collected at each trap site for processing.</p>
	<p>Aspects of the determination of mineralisation that are Material to the Public Report.</p>	<p>The stream sediment sample technique identifies the presence or absence of physical gold in the sample. The inference being that if gold is identified it would indicate bedrock source upstream from where the sample was collected.</p> <p>Gold mineralisation in both areas is expected to be particle gold.</p>
	<p>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 3kg was pulverised to produce a 30g 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.</p>	<p>The stream sediment sample collection method is industry standard. The samples were processed using a portable wet sluice to produce a concentrate. This concentrate was panned off to reveal recovered gold. The company employed field personnel with experience operating similar equipment in order to ensure accurate results were obtained.</p> <p>A subsample of the bulk stream sediment sample was collected for laboratory analysis.</p>
Drilling techniques	<p>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-sampling bit or other type, whether core is oriented and if so, by what method, etc).</p>	<p>No drilling undertaken</p>
Drill sample recovery	<p>Method of recording and assessing core and chip sample recoveries and results assessed.</p>	<p>No drilling undertaken</p>
	<p>Measures taken to maximise sample recovery and ensure representative nature of the samples.</p>	<p>Not applicable</p>
	<p>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.</p>	<p>Not applicable</p>
Logging	<p>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.</p>	<p>Geological mapping was used to identify prospective conglomerate horizons was used to select streams suitable for sampling.</p>
	<p>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</p>	<p>Geological mapping is semi quantitative in that it relies on exposure of outcrops to direct the geologist to areas of interest</p>
	<p>The total length and percentage of the relevant intersections logged.</p>	<p>Not applicable</p>
Sub-sampling techniques and sample preparation	<p>If core, whether cut or sawn and whether quarter, half or all core taken.</p>	<p>Not applicable</p>
	<p>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</p>	<p>The subsample from the bulk stream sediment sample was collected by PVC tube sampling through the sieved and homogenized bulk sample.</p>
	<p>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</p>	<p>The entire bulk sample was processed through the field concentrator and panned off.</p>

		The entire subsample was bottle roll leached. After bottle roll analysis the residue was washed, pulverised, and a 50 gm subsample was taken for fire assay.
	Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.	No specific quality control measures were adopted for the subsampling of the bulk stream sediment samples. The process was undertaken by experienced personnel in the field.
	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.	No field duplicates were collected in the field.
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Due to the coarse nature of the gold, sample size is important to obtain a representative sample of the material to be tested. No work has been undertaken on the appropriate sample size however 15 kg samples are being collected by other companies undertaking similar exploration in the area.
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.	A 2 kg subsample from the bulk stream sample was collected for laboratory analysis. The sample was bottle rolled with the aliquant analysed for cyanide soluble gold. In addition, after bottle roll testing the sample was washed in acid, dried, pulverised and fire assayed for gold. This two stage process is considered appropriate to test for both cyanide soluble gold as well as particle gold that may not dissolve in the cyanide solution
	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.	No geophysical surveys undertaken
	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.	No external duplicates or blanks were submitted. Standard internal laboratory checks were in place.
Verification of sampling and assaying	The verification of significant intersections by either independent or alternative company personnel.	Due to the early stage of exploration and the type of work completed to date, no independent verification or assaying has been undertaken.
	The use of twinned holes.	No applicable
	Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.	Not applicable
	Discuss any adjustment to assay data.	No applicable
Location of data points	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.	The sample locations were recorded from a hand-held GPS. Accuracy is approximately +/- 2 m, and locations compared with recent color aerial photography
	Specification of the grid system used.	GDA94 zone 50 projection
	Quality and adequacy of topographic control.	The combination of aerial photography and GPS readings are considered sufficiently accurate for the stage of exploration.
	Data spacing for reporting of Exploration Results.	The sample spacing is non -systematic and is dictated by the surface topography.

Data spacing and 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 samples are of a reconnaissance nature, and are spaced sufficiently across the target to provide a first pass indication of the potential of the target area.
	Whether sample compositing has been applied.	By nature, stream sediment samples are considered composite samples.
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.	The stream sediment sampling program was concentrated in areas that were draining areas downslope from mapped conglomerate units. The deposit style being explored for is not well understood. Further detailed work will be required before determining the optimum orientation of samples
	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.	Not applicable
Sample security	The measures taken to ensure sample security.	Samples were collected by contract geological personnel employed by the company. Samples were placed in labeled plastic bags and held securely by the field crew until the material was processed in the field. The concentration and panning was undertaken by field personnel familiar with the equipment or similar equipment and overseen by a geologist.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits have been completed as yet.

Section 2: Reporting of Exploration Results

Criteria	JORC Code explanation	Certified Person Commentary
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.	Details of the tenements are: Coolyia Creek E45/4965, E45/4975. Castle Minerals have acquired a 80% interest in the title from the current registered holders - refer ASX announcement 13/11/2017 "Mt Roe and Hardey Conglomerates confirmed at Coolyia Creek" Current registered holders are free carried to decision to mine and hold alluvial prospecting rights Beasley Creek E47/3490 Castle Minerals has acquired a 80% interest in the tenement from the current registered holder – refer ASX announcement 21/2/2018 "Beasley Creek Prospectivity Enhanced" Current registered holder is free carried to decision to mine and hold alluvial prospecting rights
	The security of the tenure held at the time of reporting along with any known impediments to obtaining a license to operate in the area.	All three titles have been granted, and are in good standing with the Department of Mines Industry Regulation and Safety
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Coolyia Creek. Previous exploration work has been restricted to regional scale exploration programs mainly for diamonds. There is evidence of prospector scale detecting for gold within the tenements. No drilling has previously been completed on the tenement

		<p>Beasley Creek Previous exploration for gold, nickel, PGE, and iron ore has been undertaken on the tenement. In addition, scraping and treatment of alluvial material overlying the Beasley Central Prospect conglomerate has been completed. RC drilling on the Beasley Central conglomerate has also been undertaken. Former holders of the tenement have released results of the drilling on the ASX.</p>
Geology	<p>Deposit type, geological setting and style of mineralisation.</p>	<p>The mineralisation targeted by the company is paleo – placer style conglomerate hosted gold. Within the Pilbara this style of mineralisation is currently not well understood.</p> <p>Mineralisation appears to be particular gold that accumulates on the unconformity surfaces within sedimentary sequences within the Mount Roe Basalt or Hardey Formation. Controls on the concentration of gold on the unconformity surfaces are poorly understood at the current time. There are a number of historical and recent gold occurrences of this style of mineralisation recorded in the Pilbara, and recent exploration by a number of third parties in the area is on going</p>
Drill hole Information	<p>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:</p> <ul style="list-style-type: none"> ○ easting and northing of the drill hole collar ○ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar ○ dip and azimuth of the hole ○ down hole length and interception depth ○ hole length. 	<p>There has been no previous drilling on the Coolyia Creek Project</p> <p>At Beasley Creek RC drilling has been previously undertaken on the Beasley Central Prospect. The results of the drilling have been previously reported to the ASX.</p>
	<p>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.</p>	<p>The current program explored areas of the Beasley Creek Project not tested by the earlier exploration work</p>
Data aggregation methods	<p>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</p>	<p>The results released in this report relate to the discovery of alluvial gold.</p> <p>No weighting or averaging techniques have been applied</p>
	<p>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.</p>	<p>Not applicable</p>
	<p>The assumptions used for any reporting of metal equivalent values should be clearly stated.</p>	<p>Not applicable</p>
Relationship between mineralisation widths and intercept lengths	<p>These relationships are particularly important in the reporting of Exploration Results.</p>	<p>No mineralisation widths have been measured or implied.</p>
	<p>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</p>	<p>Not applicable</p>
	<p>If it is not known and only the down hole lengths are reported, there should be a clear statement to</p>	<p>Not applicable</p>

	this effect (eg 'down hole length, true width not known').	
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.	Geological maps and photographs are presented in the body of the report
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.	All results of the gold panning and geochemical analysis have been reported
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.	Geological descriptions of key rock units are provided in the report
Further work	The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).	Further bulk stream sediment sampling will be required at both projects prior to identifying areas suitable for a larger bedrock bulk sampling programme.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Refer to diagram in body of the report