CASTILE
RESOURCES LIMITED

ASX Announcement 16 September 2022

NEW DISCOVERY ADDS 51,000oz OF GOLD TO ROVER 1 RESOURCE

Castile Resources Limited (**ASX:CST**) (**"Castile"** or **"the Company"**) is pleased to present the new Mineral Resource Estimate (**MRE**) for Rover 1 that has been updated to include the two new discoveries from targeting extensions to gold and copper mineralisation in the Jupiter Deeps region of Rover 1.

The Company recently announced a new high grade gold zone discovery (ASX:CST 4 July 2022) and also confirmed a significant extension to the mineralised Jupiter Deeps IOCG alteration (ASX:CST 22 July 2022).

The 2022 program was true "exploration" style drilling aimed at growing the Resource inventory by targeting extensions to the existing gold and copper mineralisation that lies down dip of the Jupiter Deeps region of the Rover 1 orebody.

Analysis is now complete on all sampling collected from the Rover 1 2022 exploration drilling campaign and Castile is pleased to announce that the total metal inventory of gold, copper, cobalt and magnetite have all increased significantly primarily due to large increases in the Inferred category representing extensions to the Jupiter Deeps ore body.

Compared to the MRE released on 8 March 2022, increases in the new September 2022 MRE include:

- **Total gold increased by 20% to 315,200oz with Inferred gold increasing by 289% to 81,400oz**
- **Total copper increased by 7% to 83,200t with Inferred copper increasing by 44% to 20,100t**
- **Total cobalt increased by 5% to 4,000t with Inferred cobalt increasing by 22% to 1,100t**
- **Total magnetite increased by 18% to 1,295,000t with Inferred magnetite increasing by 119% to 357,000t**
- **Total tonnage increased by 18% to 5.58Mt with Inferred Tonnes increasing by 86% to 1.61Mt**

Table 1: Rover 1 September 2022 Mineral Resource Estimate (with Comparisons to March 2022 MRE: See Table 2)

Classification	Rover 1 Mineral Resource Estimate			
	Gold (Oz)	Copper (T)	Cobalt (T)	Magnetite(T)
Indicated	233,800 (↓4%)	63,100 (0%)	2,900 (0%)	938,000 (↑1%)
Inferred	81,400 (↑289%)	20,100 (↑44%)	1,100 (↑22%)	357,000 (↑119%)
Total	315,200 (↑20%)	83,200 (↑7%)	4,000 (↑5%)	1,295,000 (↑18%)

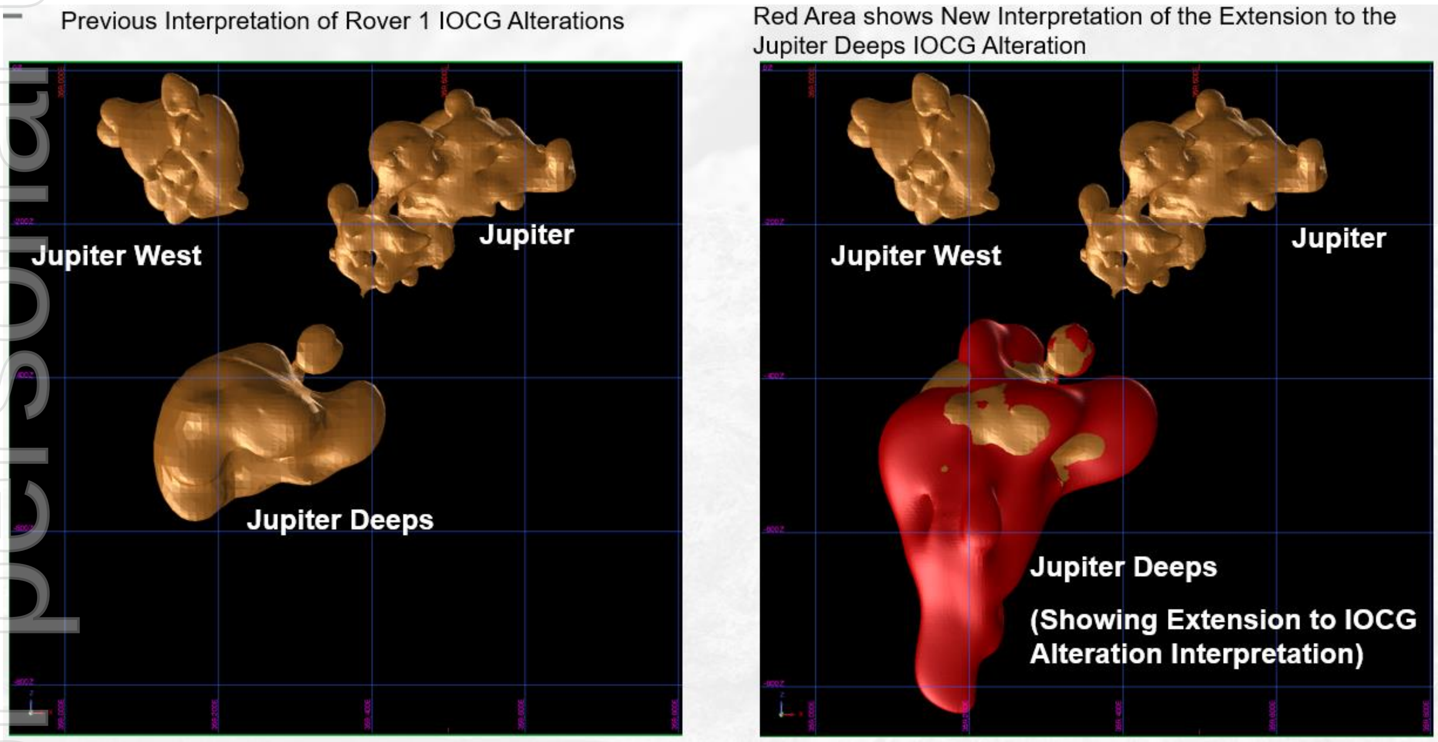
2g/t Eq Cut Off Grade		Grade			
Classification	Tonnes	Gold (g/t)	Copper (%)	Cobalt (%)	Magnetite (%)
Indicated	3,970,000 (↑2%)	1.83 (↓6%)	1.59 (↓3%)	0.07 (0%)	23.64 (↓2%)
Inferred	1,611,000 (↑86%)	1.57 (↑110%)	1.25 (↓23%)	0.07 (↓35%)	22.79 (↑17%)
Total	5,581,000 (↑18%)	1.76 (↑2%)	1.49 (↓9%)	0.07 (↓10%)	23.20 (↑1%)

The Company was primarily targeting gold with this program so the majority of the additional tonnes are within the new high grade gold zones which typically carries less accompanying copper. This has seen the total universal copper grade decrease by 9% to 1.49% but the additional tonnes have seen total copper metal increase by 7% to 83,200t.

A significant increase of 834,000t has taken the total tonnage of the MRE to 5,581,000t. The big move is in grade and tonnages for the inferred section of the additional 52,000oz of gold. The inferred tonnes have increased by 86% to 1.61Mt but more importantly the gold grade has more than doubled from 0.75g/t to 1.57g/t, an increase of 110%.

A significant amount of this inferred material will be added to our mining inventory within the Pre-Feasibility Study which is now well progressed. Figure 1 below shows the interpretation of the increased size of the Jupiter Deeps IOCG alteration.

Figure 1: Interpretation of Extensions to the Jupiter Deeps IOCG Alteration



Mark Hepburn, the Managing Director of Castile commented:

"These are significant additions to our overall Mineral Resource Estimate resulting from the outstanding success of the 2022 exploration program. This will substantially increase our mining inventory for our Pre-Feasibility Study which is due in the December quarter of this year. These structures still remain open at depth and give us great confidence that there is still potential for further mineralisation in Jupiter Deeps"

Table 2: Comparison of Rover 1, September 2022 Mineral Resource Estimate update with the March 2022 MRE.

September 2022 Resource Update

2g/t AuEQ COG		Grade					Metal			
	Tonnes	Au g/t	Cu %	Co %	Mag %		Au Oz	CuT	CoT	MagKT
Measured	-	-	-	-	-		-	-	-	-
Indicated	3,970,000	1.83	1.59	0.07	23.64		233,800	63,100	2,900	938
Inferred	1,611,000	1.57	1.25	0.07	22.13		81,400	20,100	1,100	357
Total	5,581,000	1.76	1.49	0.07	23.20		315,200	83,200	4,000	1,295

March 2022 MRE

2g/t AuEQ COG		Grade					Metal			
	Tonnes	Au g/t	Cu %	Co %	Mag %		Au Oz	CuT	CoT	MagKT
Measured	-	-	-	-			-	-	-	
Indicated	3,882,000	1.94	1.63	0.07	24.04		242,600	63,400	2,900	933
Inferred	865,000	0.75	1.62	0.10	18.97		20,900	14,000	900	163
Total	4,747,000	1.73	1.63	0.08	23.08		263,500	77,400	3,800	1,096

September Update vs March 2022 MRE Relative Differences							Metal			
	Tonnes	Au g/t	Cu %	Co %	Mag %		Au Oz	CuT	CoT	MagKT
Measured										
Indicated	2%	-6%	-3%	0%	-2%		-4%	0%	0%	1%
Inferred	86%	110%	-23%	-35%	17%		289%	44%	22%	119%
Total	18%	2%	-9%	-10%	1%		20%	7%	5%	18%

Rover 1 Mineral Resource Estimate

The following sections outline the geological interpretation, assumptions and procedures associated with the estimation of the Rover 1 mineral resource. Castile compiled the geological and mineralisation interpretation and validated drillhole database. This data was provided to Cube Consulting who undertook geostatistical analysis and resource estimation. The MRE incorporates all drilling at Rover 1 since 2011.

Drilling

The Rover 1 mineral deposit has been drilled on a nominal 40m x 40m spacing, infilled to 20m x 20m through volumes containing significant mineralisation. Drilling post 2011 has targeted the Western Lode and the Jupiter Deeps mineralised areas as well as some infill drilling in the main Jupiter zone (2020, 2021). The September 2022 resource update is informed by an additional drill hole and 3 daughter holes for 1,783.7m cored and 936 samples.

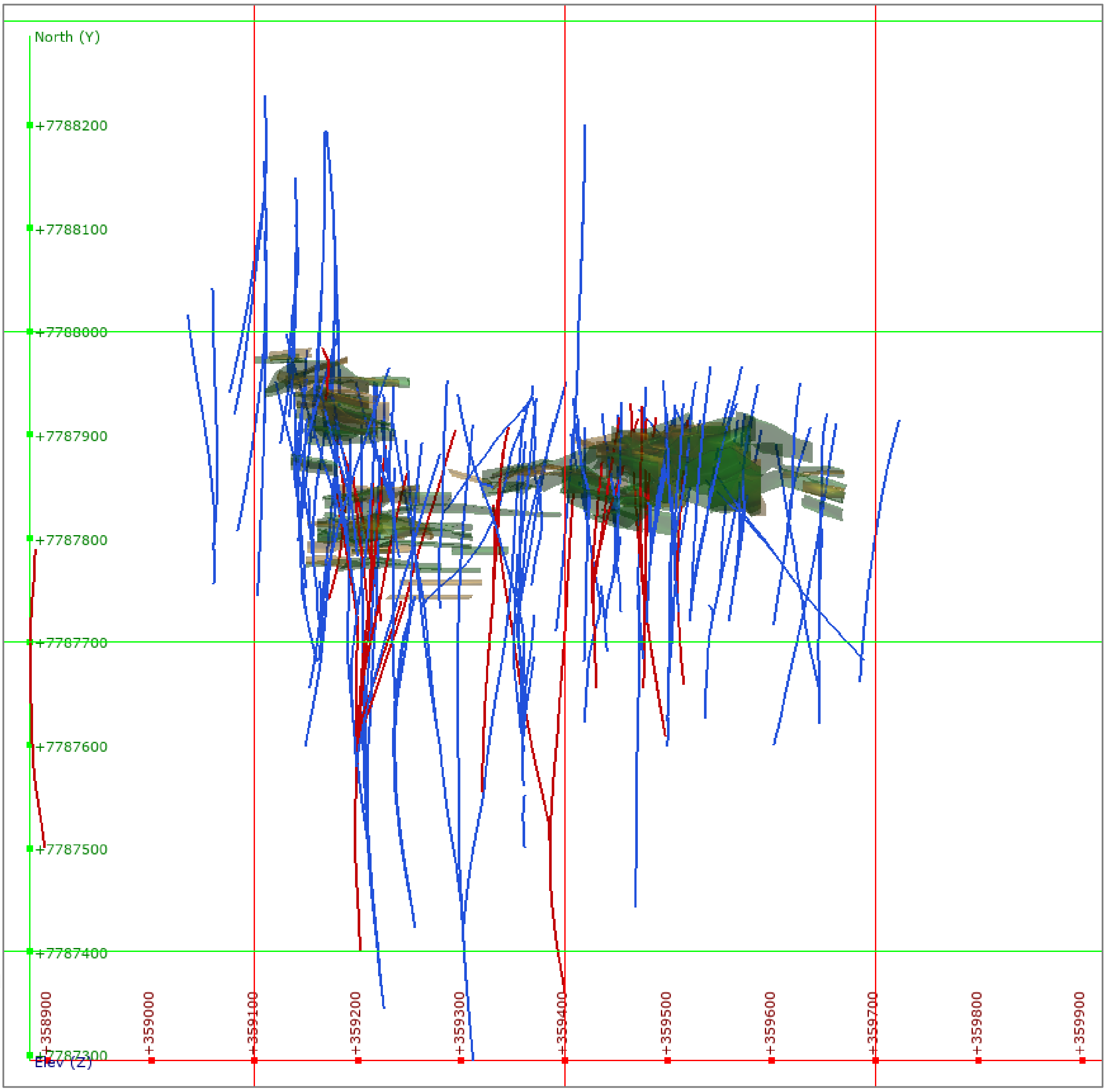


Figure 1: Rover 1 drill hole locations with interpreted mineralisation domains. Blue holes are pre 2019, red drill holes are from Castile drilling programs 2020 - 2022. Drill holes include the Westgold and Adelaide Resource datasets.

Sampling and Preparation

All data used in the calculation of the Rover 1 mineral resource 1 has been gathered from diamond core. Multiple sizes have been used historically; HQ, NQ and BQ. Core samples are selected to lie on geological boundaries, with intervals selected of lengths between 0.1 to 1.1m. Historic samples were selected on 1m intervals, irrespective of geology. To ensure representivity of samples, field blanks and certified reference material (CRM) are inserted at a nominal ratio of 1:20 samples.

Sample recovery is recorded on retrieval of the core tube, measuring recovered core against drill string advance. No apparent relationship has been observed between sample recovery and grade. No has sample bias due to preferential loss or gain of fine or coarse material been noted. Samples are halved using an automatic core saw then individual samples collected in prenumbered calico sample bags. The un-sampled half of diamond core is retained for check sampling if required.

Individual sample bags are placed in lots of 5 into poly weave bags annotated with the sample number series within and closed by zip tie. All samples are then placed into a bulka bag and transported to the certified laboratory.

In the case of pre 2020 drilling, samples underwent the following laboratory preparation:

- Half core undergoes total preparation, crushed using a vibrating jaw crusher to achieve a maximum sample size of 4 mm.
- The sample is then weighed, and if the sample weight is greater than 3.2 kg, the sample is split into two using a Jones-type riffle splitter.
- The crushed sample is then pulverised in a Labtech LM5 Ring Mill such that 90% passed 75um.
- For samples weighing greater than 3.2 kg, the first portion is removed and second portion is homogenised in the same machine. Once complete, the first portion is put back in the LM5 and both portions are homogenised.
- From the pulverised sample, approximately 200 g is collected via a scoop as a master sample for assaying.
- For every 20th sample, an approximately 25 g sample is screened to 75 microns to check that homogenising has achieved 90% passing 75 microns.
- From the analysis sample, 30g is taken for fire assay, while a 0.2g potion is taken for acid digestion. These samples are extracted from the packet with a spatula and weighed out.

Post 2020 sample preparation process consists of:

- Crushing using a Boyd Crusher to achieve a maximum sample size of 2mm.
- The crushed sample is split down to a 3kg sample via a rotating sample divider attached directly to the Boyd Crusher.
- The crushed sample is then pulverised in a Labtech LM5 Ring Mill such that 90% passes 75um. 200g is split and placed in a packet for analytical work.
- For every 20th sample, an approximately 25g sample is wet screened to check grind effectiveness.
- From the analysis sample, 25g is taken for fire assay, while a 0.2g potion is taken for acid digestion. These samples are extracted from the packet with a spatula and weighed out.
- Umpire laboratory checks were performed to validate the representivity of the 25g fire assay by analysis on 30g fire assays. No bias was observed.

The sample sizes are considered appropriate to the grainsize of the material being sampled.

QAQC is ensured during sampling via the use of sample ledgers, blanks, CRM and repeats. QAQC is ensured during the assays process via the use of blanks, CRM and repeats at a NATA / ISO accredited laboratory.

Analysis Methods

Analysis of Castile drill core for Au, Ag, Bi, Co, Cu, Pb and Zn is as follows:

- Gold (Au-AAS scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 25-40g charge (dependant on vintage) of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then cupelled to yield a precious metal bead.
- The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards.
- Samples returning assay values in excess of 10g/t Au were repeated.
- Silver, bismuth, cobalt, copper, lead and zinc samples are digested using a 4 acid digest.
- The subsequent solution is analysed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.

Analysis of Historic drill core for Au, Ag, Bi, Co, Cu, Pb and Zn is as follows:

- Gold (Au-AAS scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 30-40g charge of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then cupelled to yield a precious metal bead.
- The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards.
- Samples returning assay values in excess of 100g/t Au were repeated using the screen-fire method.
- Silver, bismuth, cobalt, copper, lead and zinc samples are digested using a 4 acid digest.
- The subsequent solution is analysed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry.

These assay methodologies are appropriate for the style of mineral deposit under consideration.

Magnetite content was determined through mineral phase identification using Corescan® hyperspectral core imaging system (Corescan® HCI-4.1) comprising a shortwave infrared imaging spectrometer at ~500 µm spatial resolution (~514 bands across 450 - 2500nm). This analysis method is well established for quantitative determination of iron ore minerals.

A total of 27 holes for 2224m core was scanned. The sample material was checked for surface contamination and cleaned to ensure a compliant surface for scanning. Half core (HQ or NQ) was scanned in the core box. Prior to mineral identification, any non-core / non-sample material was identified and masked. The masked material is then excluded from subsequent mineral identification processes, mineral maps, and numerical logs.

The hyperspectral datasets were processed by Corescan's® experienced spectral geology team using the company's proprietary software, Chameleon™. Mineral identification is determined using best-fit algorithms that compare the spectral signature taken from the sample with spectral reference libraries. Mineral compositional parameters (e.g. cation substitutions, crystallinity) are calculated for the relevant mineral groups. Mineral occurrence, spectral parameter images and mineral abundance logs at ~500µm spatial resolution are generated for each sample interval for viewing and exported as (.CSV) format. These mineral logs include the relative abundances of each mineral as well as spectral parameters such as mineral composition, crystallinity, and mineral sub-speciation proportions.

Relative abundance logs were used as a proxy for volume. Mineral phases identified averaged 96% of area, these unknown areas were assumed as silicate minerals. Proxy volume was multiplied by the SG of the mineral identified and a weight percent calculated.

Quality Assurance and Quality Control (QAQC)

The QAQC for sampling associated with drillhole programs at Rover 1 up to the end of 2015 was independently assessed by Cube Consulting for gold and copper and is summarised below. The QAQC for sampling associated with 2021 and 2022 drillhole programs at Rover 1 was reviewed by Castile Resources and is summarised after the historic QAQC.

Cube Consulting independently assessed all available QAQC sample data for the drilling completed on the Rover 1 project between March 2008 to August 2015, focusing on gold and copper QAQC data only. The dataset was received on 31/01/2017 as an Access database and the QAQC information was supplied as Excel spreadsheets between 31/01/2017 and 09/02/2017.

The following summary is based on the issues found during the QAQC review:

- The combined CRM, blanks and duplicate samples represent an insertion rate of 6% (i.e. 1,506 samples);
- A total of 67 blank CRM was inserted into the sampling stream:
- The pulp blanks (i.e. 48 samples) suggest a low risk of contamination during the analytical stages of the assaying process for both gold and copper;
- The whole rock granite samples suggest a low risk of contamination during the sample preparation stage for gold, but the consistent reporting of ~60 ppm Cu indicates the granite contains a minor amount of copper and it is not suitable for a copper blank;
- It is recommended that certified coarse blanks are used in the future to monitor contamination during the sample preparation and analytical stages.
- A total of 705 gold and 61 copper CRM's were inserted into the sampling stream between 2008 and 2015. The inclusion of the CRM represents an insertion rate of 3%, which is slightly lower the industry standard of 5%.
- The analysis of the CRM's accuracy, precision and control charts is within acceptable limits and a low risk is associated with the accuracy and precision of the assay results;
- Approximately 5% of the CRM's were misclassified because of sample swapping and/or data transcription errors.
- Limited field duplicates, coarse reject duplicates or pulp duplicates have been submitted during for the Rover 1 dataset.
- No umpire laboratory duplicate sampling is presented in the dataset;
- No field duplicates or coarse reject samples were present in the dataset;
- The laboratory repeats for both gold and copper relative paired difference plots and average coefficient of variation are within acceptable limits;
- A total of 145 pulp duplicates were re-assayed using BLEG assaying methodology. The purpose of this is unclear. The BLEG duplicates will not give any meaningful conclusions with respect to the precision associated with the nature of the mineralisation, sample collection, sample preparation, sample size and assay methodology.

The following recommendations to address identified issues are summarised below:

- Sample weights should be recorded prior to leaving site and on receipt at the laboratory to improve the "sample chain of custody" and reduce potential sample handling errors;
- Incorporate coarse reject and field duplicate sampling as part of the routine QC procedures to monitor the accuracy and precision of the sample preparation, sampling error, analytical methods and natural variability (i.e. nugget effect) of the mineralisation. An insertion rate of 5% - 10% is considered industry best practice;
- Perform a retrospective field duplicate sampling campaign based on the coarse rejects stored onsite;
- Umpire laboratory duplicates are essential in determining any assay bias at the primary laboratory. It is recommended that 5% of mineralised samples are submitted to an alternative laboratory for check assay.
- Wet screening of the pulp should be conducted and grind size monitored on a routine basis.

The QAQC review demonstrates that the analytical accuracy and precision is acceptable and this indicates the sample data is appropriate for the purpose of Mineral Resource estimation.

Castile Resources reviewed available QAQC sample data for the drilling completed on the Rover 1 project between March 2020 to November 2021 as part of the MRE completed in April 2022, focusing on gold and copper QAQC data only. QAQC reports were routinely prepared at the conclusion of drill programs once all results were returned, then reviewed as part of drill program completion reports. No issues were observed in the reliability of the assay data.

The following summary is based on the individual drill program QAQC reports:

- The combined CRM, blanks and duplicate samples represent an insertion rate of 1:13 samples;
- A total of 205 blanks and CRM were inserted into the sampling stream:
    - The blanks (68 samples) suggest a low risk of contamination during the sample preparation stages of the assaying process for both gold and copper;
    - Bunbury basalt certified blank samples (68 samples) suggest a low risk of contamination during the sample preparation stage for gold.
- A total of 106 gold and 34 copper CRM's were inserted into the sampling stream, representing an overall insertion rate of 1:13.
    - The analysis of the CRM's accuracy, precision and control charts is within acceptable limits indicating a low risk is associated with the accuracy and precision of the assay results;
    - A small number of CRM's were misclassified because of sample swapping and/or data transcription errors.
- Limited field duplicates, coarse reject duplicates or pulp duplicates have been submitted during for the Rover 1 dataset.
    - No field duplicates or coarse reject samples were present in the dataset;
    - The laboratory repeats for both gold and copper relative paired difference plots and average coefficient of variation are within acceptable limits;
    - A total of 22 pulps were re-assayed at an umpire laboratory to verify gold results were representative. Results were repeatable.

Castile Resources reviewed available QAQC sample data for the drilling completed on the Rover 1 project between March 2022 to July 2022, focusing on gold and copper QAQC data only. QAQC reports were prepared at the conclusion of drill programs once all results were returned, then reviewed as part of drill program completion reports. No issues were observed in the reliability of the assay data.

The following summary is based on the individual drill program QAQC reports:

- The combined CRM, blanks and duplicate samples samples;
- A total of 147 blanks and CRM were inserted into the sampling stream representing an overall insertion rate of 1:8:
  - The Bunbury basalt certified samples (59 samples) suggest a low risk of contamination
  - A total of 31 gold and 57 copper CRM's were inserted into the sampling stream, representing an insertion rate of 1:14.
  - The analysis of the CRM's accuracy, precision and control charts is within acceptable limits and a low risk is associated with the accuracy and precision of the assay results;
  - A small number of CRM's were misclassified because of sample swapping and/or data transcription errors.
- Limited field duplicates, coarse reject duplicates or pulp duplicates have been submitted during for the Rover 1 dataset.
  - No field duplicates or coarse reject samples were present in the dataset;
  - The laboratory repeats for both gold and copper relative paired difference plots and average coefficient of variation are within acceptable limits;

Database

Database checks were performed prior to the estimation process and included but not limited to:

- Checking for duplicate drill hole names and duplicate coordinates in the collar table.
- Checking for missing drill holes in the collar, survey, assay and geology tables based on drill hole names.
- Checking for survey inconsistencies including dips and azimuths <0°, dips >90°, azimuths >360°, negative depth values.
- Checking for inconsistencies in the "From" and "To" fields of the assay and geology tables. The inconsistency checks included the identification of negative values, overlapping intervals, duplicate intervals, gaps and intervals where the "From" value is greater than "To" value.
- Database checks were conducted within Microsoft Access and Surpac Mining Software.

The database was extracted on the 1st of August 2022 and the information used in the estimation process is coded with the "Validated_Code" (ResInvalid = ignored, Valid = used in estimation process) field in the collar table.

A total of 242 drill holes have been drilled within the Rover 1 mineralised area of which 212 drill holes were used in the estimation process:

170 - Westgold / Metals X / Castile Resources diamond drillholes.
19 - Adelaide Resources diamond drill holes.
23 - Historic GeoPeko diamond drill holes

Geology

The Rover 1 deposit occurs in a low relief area covered by extensive transported cover lying over approximately 110 metres of flat-lying Cambrian sediments of the Wiso Basin. The basin rocks unconformably overly a Proterozoic basement of the Warramunga Formation which hosts the deposit in the Rover 1 area, consequently, the deposit does not outcrop. Recent dating by the Northern Territory Geological Survey indicates the host rocks are part of the Ooradidgee Group.

The deposit is situated within a sequence of variably altered volcano-sedimentary rocks consisting of interbedded shales, siltstones tuffaceous sandstones and crystal tuff. Alteration grades from distal silica and silica-hematite (historically logged as hematitic shales) to proximal Jasper, quartz-magnetite and magnetite ironstone. Strong late stage chlorite alteration is associated with the ironstone margins and 'root zone'. The sediment package has been metamorphosed to lower greenschist facies.

Rover 1 consists of three mineralised areas: Jupiter, Jupiter West and Jupiter Deeps. Structural investigations indicate the ironstones are associated with antiformal structures. Economic mineralisation is observed to be associated with steep axial planar shear zones interacting with geology to generate brittle fracturing through competency contrast. These brecciated zones have focused mineralising fluids, resulting in deposition of sulphide phases as crack seal.

Geological Interpretation

The geological interpretation on a sectional basis formed the framework of the estimation domains and was performed on 20m spaced easting sections. The geological interpretation focused on defining the extents of the ironstone alteration and feeder zones (i.e. interpreted axial planner shears) focusing mineralisation into the system.

The sectional interpretation was conducted for all zones, resulting in a broad alteration halo and distinct ironstone types: Jasper/hematite ironstone, quartz-magnetite ironstone and magnetite ironstone. These zones were used to control density and magnetite interpolation in the block model, as well as constraining the extents of copper and gold mineralisation interpretations.

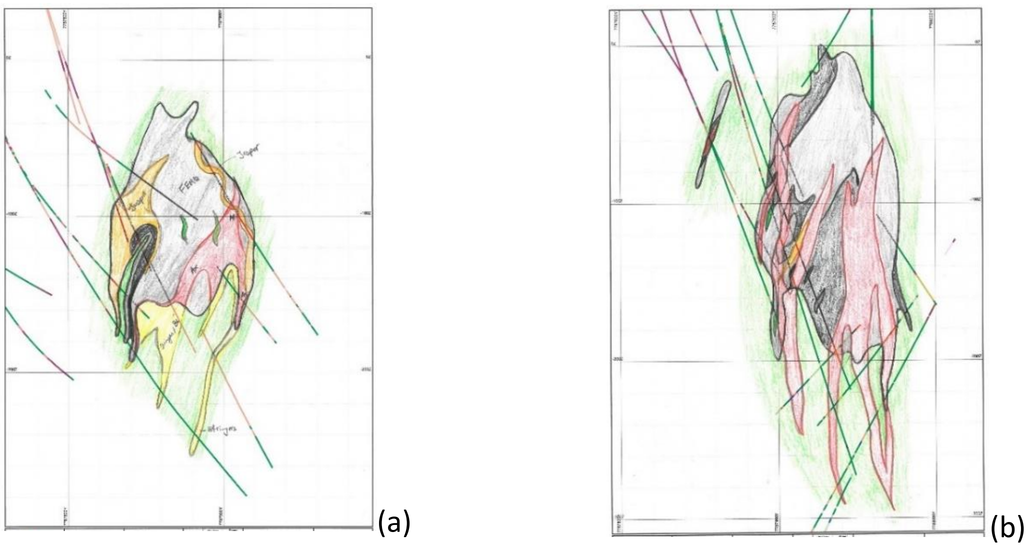


Figure 2: Example sectional interpretation of the Rover 1 mineralised area. (a) Jupiter mineralised area; and, (b) Western Lode mineralised area.

Estimation Domains

Due to the multi-element nature of the Rover 1 mineralisation, the interpretation and construction of the estimation domains was informed by:

- Lithological and structural interpretation (as discussed above);
- Global statistical analysis to determine mineral associations;

Global Statistical Analysis

Multivariate statistics were conducted on the samples inside the halo domain to justify which domains would be used for the Ag, Bi and Co estimate.

Table 1: Multivariant Correlation Matrix from Cube (2022)

	Au	Cu	Co	Ag	Bi
Au	1	0.063	0.031	0.127	0.199
Cu		1	0.369	0.135	0.154
Co			1	0.1	0.101
Ag				1	0.086

	N(Au)	N(Cu)	N(Co)	N(Ag)	N(Bi)
N(Au)	1	0.656	0.675	0.711	0.724
N(Cu)		1	0.552	0.568	0.154
N(Co)			1	0.572	0.469
N(Ag)				1	0.449

The above Table 1 shows that Au and Cu have a weak correlation (0.063). These elements were modelled with independent domains. Cu and Co have a moderately positive correlation (0.369) and it is deemed acceptable to estimate both elements within the same set of domains. Ag and Bi both have a weak correlation with Au and Cu; however, when a normal score transformation is applied to suppress the scaling effect, those elements proved to have a strong correlation with Au (0.711 and 0.724 respectively) The normal score correlation justifies using the gold domains for the estimation of Ag and Bi.

Mineralisation Selection Criteria

Estimation domains were constructed for gold and copper. The orientation of the estimation domains was governed by the lithological and structural interpretation in the first instance.
The domaining selection criteria for gold mineralisation was based on:

- >0.50 ppm gold assay results;
- Orientation defined in the sectional lithological interpretation and structural orientations
- In some instances, material below the cut-off was incorporated into the interpretation to maintain geological continuity.

The domaining selection criteria for copper mineralisation was based on:

- >5000 ppm copper assay results;
- Orientation defined in the sectional lithological interpretation, structural orientations and gold estimation domains;
- In some instances material below the cut-off was incorporated into the interpretation to maintain geological continuity.

The domaining selection criteria for ironstone and density was based on:

- Geological interpretation;
- Logged hematite and magnetite;

The interpretation of the estimation domains was initially conducted for the gold estimation domains.

The gold estimation domains were used to assist with defined the orientation of the copper domains, under the assumption the gold and copper mineralisation are associated with the same controls, though temporally discrete.

The gold estimation domains were used in the estimation of silver and bismuth. Copper estimation domains were used in the estimation of Cobalt as per the multivariant analysis above.

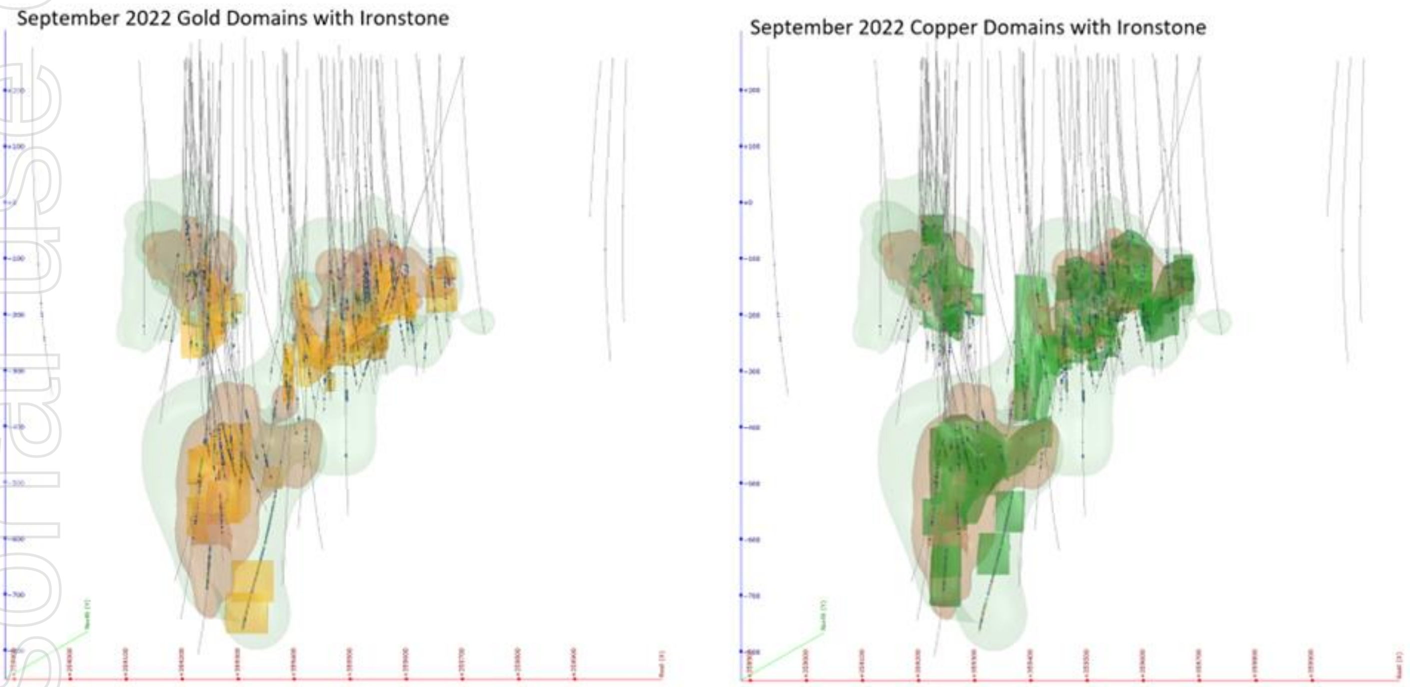


Figure 3: Interpreted gold and copper estimation domains and interpreted ironstones.

Geostatistical Analysis and Estimation Methodology

Statistical analysis and estimation parameter development and interpolation was undertaken by Cube Consulting under the direction of Castile Resources. The following is a summary of the resource technical note.

Spatial Continuity

The spatial continuity analysis of estimation domains was performed using Supervisor and Isatis on samples composited to 1m. All estimation domains displayed a skewed distribution and normal scores transformations were used to obtain interpretable experimental estimation domains. Exploratory data analysis (EDA) was performed on all estimation domains. Most domains have a limited number of samples (< 50) which made it difficult to interpret trends within the variogram maps. When possible, domains were grouped to compute and model a variogram.

Experimental variograms were generated using the 1m composite data and a number of estimations domains were assigned the variogram parameters of the larger domains based on the orientation of the domain and the distribution.

Estimation

The interpolation of Au, Cu, Co, Ag, Bi and SG attributes was based on a number of different approaches depending on the characteristics of the estimation domain. The assigned estimation domains included:

- Au, Ag and Bi – based on the interpreted gold estimation domains;
- Cu, Co – based on the interpreted copper estimation domains;
- Density– based on the interpreted ironstone.
- A background halo domain was based on ironstone and alteration was used to control the extrapolation of the background interpolation.

A number of estimation approaches were implemented for Au, Cu, Co, Ag and Bi depending on variable domain characteristics, which included the following permutations:

- Some of the larger non-halo domains were estimated using an Ordinary Kriging ("OK") indicator approach where samples displayed bi modal distributions. An indicator grade threshold was chosen, splitting the grade distribution into lower grade and higher grade sub-domains. The indicator was estimated using OK, yielding a proportion of lower and higher grade material for each block. The high and low grades were then estimated separately by OK, using the lower and higher grade samples respectively. A final grade was calculated for each block by weighting the upper and lower grade estimates using the results of the indicator estimate. The estimated indicator (I*), which values are bounded between 0 and 1, plays the role of a proportional weighting (%) field, and the final grade was computed such as: Final grade = (I* x HG) + (I* x LG).This method is able to "sharpen" the transition between lower and higher grade areas within the domain, which would be over smoothed if a standard OK approach was used;
- All domains were estimated using OK based on the entire domain sample population;
- A number of domains were assigned the domain's declustered mean composite grade due to the small number of available composites;
- A distance limiting top-cut approach was implemented for specific gold domains to limit the spatial influence of outlier values into poorly informed areas.
- Some domains display orientation changes. These domains utilised dynamic kriging in Isatis, with trend surfaces developed to control the orientation of the search volume for block estimation
- Ordinary Kriging was used to estimate density inside the interpreted ironstone estimation domains using a local orientation to define the orientation of the modelled variogram and search neighbourhoods. Outside of the alteration or ironstone volumes, a flat density of 2.75t/m3 was used.
- The resource modelling results were validated against the primary input data for all domains, globally and spatially.
- Being a 'virgin' mineral deposit, the model was not depleted for mining voids outside of topography.

Global Resource

The global resource for the Rover 1 mineralised area is outlined in Table 1 above for all material ≥2.0 g/t Au metal equivalency (AuEq). The numbers have not been reported within any underground mine designs and no recoveries have been applied to the AuEq calculation. Commodity prices used for the metal equivalency are Gold Price = US$1,800/oz and Copper = US$9,800/tonne. Modelled copper units are in ppm. The metal equivalence equation is defined as: AuEq = Au + (Cu x 0.000169). The 2.0g/t Au metal equivalent cut-off grade represents the economic cut-off of mining and processing gold only, *excluding CAPEX*.

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This announcement was approved for release by the Castile Resources Board of Directors

Competent Persons Statement

Geology

The information in this announcement that relates to exploration results and mineral resources is based on, and fairly represents information and supporting documentation by Mr Mark Savage. Mr Savage is a full-time employee of Castile, and a Member of The Australasian Institute of Mining and Metallurgy. Mr Savage has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, and Mineral Resources. Mr Savage consents to the inclusion in this announcement of the matters based on the exploration and resource results in the form and context in which they appear.

Metallurgy

The information contained in this report is based on, and fairly and accurately represent the information and supporting documentation prepared by Mr Damian Connelly. Mr Connelly is a full-time employee of METS Engineering who are a Contractor to Castile, and a Fellow of The Australasian Institute of Mining and Metallurgy. Mr Connelly has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves. Mr Connelly consents to the inclusion in the report of the matters based on the results in the form and context in which they appear.

Forward Looking Statements

Certain statements in this report relate to the future, including forward looking statements relating to Castile's financial position and strategy. These forward-looking statements involve known and unknown risks, uncertainties, assumptions, and other important factors that could cause the actual results, performance, or achievements of Castile to be materially different from future results, performance or achievements expressed or implied by such statements.

Actual events or results may differ materially from the events or results expressed or implied in any forward-looking statement and deviations are both normal and to be expected. Other than required by law, neither Castile, their officers nor any other person gives any representation, assurance or guarantee that the occurrence of the events expressed or implied in any forward-looking statements will occur. You are cautioned not to place undue reliance on those statements.

ASX Announcement 16 September 2022

Section 1 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	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.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.*	• All data used in the following sections at Rover 1 has been gathered from diamond core. Multiple sizes have been used historically; HQ, NQ and BQ. • Samples are selected to lie on geological boundaries, with intervals selected of lengths between 0.1 to 1.1m. Historic samples selected on 1m intervals. Samples are halved using an automatic core saw then individual samples collected in prenumbered calico sample bags. • The sample of between 0.5kg to 3kg is whole crushed then pulverised to produce a 40g charge for fire assay with AAS finish for Au and a further sample for mixed acid digest with an ICP-MS finish for Ag, As, Bi, Co, Cu, Pb and Zn. • To ensure representivity of samples, field blanks and certified reference material are inserted at a nominal ratio of 1:20 samples.
Drilling techniques	• *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).*	
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *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.*	• Sample recovery is recorded on retrieval of the core tube, measuring recovered core against drill string advance. No apparent relationship has been observed between sample recovery and grade. No has sample bias due to preferential loss or gain of fine or coarse material been noted.
Logging	• *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.* • *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography.* • *The total length and percentage of the relevant intersections logged.*	• All geological data has been visually logged and validated by the relevant area geologists, recording lithology, alteration, mineralisation, structure, veining, magnetic susceptibility and geotechnical data. • Logging is quantitative in nature. • All holes are logged completely.

Criteria	JORC Code explanation	Commentary

Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*
	• *If non-core, whether riffled, tube sampled, rotary split, etc. and whether sampled wet or dry.*
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*
	• *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.*
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*
		• Diamond Drilling - Half-core niche samples, sub-set via geological features as appropriate. Historic core samples on 1m intervals independent of geological features.
		• Half core undergoes total preparation.
		• Castile sample preparation process consists of;
		  ○ Crushing using a Boyd Crusher to achieve a maximum sample size of 2mm.
		  ○ The crushed sample is split down to a 3kg sample via a rotating sample divider attached directly to the Boyd Crusher.
		  ○ The crushed sample is then pulverised in a Labtech LM5 Ring Mill such that 90% passes 75um. 200g is split and placed in a packet for analytical work.
		  ○ For every 20th sample, an approximately 25g sample is wet screened to check grind effectiveness.
		  ○ From the analysis sample, 40g is taken for fire assay, while a 0.2g potion is taken for acid digestion. These samples are extracted from the packet with a spatula and weighed out.
		• QA/QC is ensured during sampling via the use of sample ledgers, blanks, standards and repeats.
		• QA/QC is ensured during the assays process via the use of blanks, standards and repeats at a NATA / ISO accredited laboratory.
		• In the case of Historic sampling, preparation consisted of the following:
		  ○ Crushing using a vibrating jaw crusher to achieve a maximum sample size of 4 mm.
		  ○ The sample is then weighed, and if the sample weight is greater than 3.2 kg, the sample is split into two using a Jones-type riffle splitter.
		  ○ The crushed sample is then pulverised in a Labtech LM5 Ring Mill such that 90% passed 75um.
		  ○ For samples weighing greater than 3.2 kg, the first portion is removed and second portion is homogenised in the same machine. Once complete, the first portion is put back in the LM5 and both portions are homogenised.
		  ○ From the pulverised sample, approximately 200 g is collected via a scoop as a master sample for assaying.
		  ○ For every 20th sample, an approximately 25 g sample is screened to 75 microns to check that
		  ○ homogenising has achieved 80% passing 75

Criteria	JORC Code explanation	Commentary
		microns. ○ For every 20th sample, an approximately 25g sample is wet screened to check grind effectiveness. ○ From the analysis sample, 30g is taken for fire assay, while a 0.2g potion is taken for acid digestion. These samples are extracted from the packet with a spatula and weighed out. • The sample sizes are considered appropriate to the grainsize of the material being sampled. • The un-sampled half of diamond core is retained for check sampling if required.
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.* • *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.*	• Analysis of Castile drill core for Au, Ag, Bi, Co, Cu, Pb and Zn is as follows; ○ Gold (Au-AAS scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 40g charge of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then cupelled to yield a precious metal bead. ○ The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards. ○ Samples returning assay values in excess of 10g/t Au were repeated. ○ Silver, bismuth, cobalt, copper, lead and zinc samples are digested using a 4 acid digest. ○ The subsequent solution is analysed by inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry. • Analysis of Historic drill core for Au, Ag, Bi, Co, Cu, Pb and Zn is as follows; ○ Gold (Au-AAS scheme – lower detection limit = 0.01ppm, upper detection limit = 100ppm). A 30-40g charge of prepared sample is fused with a mixture of lead oxide, sodium carbonate, borax, silica and other reagents and then cupelled to yield a precious metal bead. ○ The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards. ○ Samples returning assay values in excess of 100g/t Au were repeated using the screen-fire method. ○ Silver, bismuth, cobalt, copper, lead and zinc samples are digested using a 4 acid digest. ○ The subsequent solution is analysed by

Criteria	JORC Code explanation	Commentary
		inductively coupled plasma - atomic emission spectroscopy or by atomic absorption spectrometry. • No significant QA/QC issues have arisen in recent drilling results. • These assay methodologies are appropriate for the style of mineral deposit under consideration.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Anomalous intervals as well as random intervals are routinely checked assayed as part of the internal QA/QC process. • Several twinned holes have been drilled with no significant issues highlighted. • Primary data is collected on a ruggedised computer, on predefined and self-validating worksheets. This data is imported into a relational database (DataShed) and is backed up regularly. • All data used in the calculation of resources is compiled in databases which are overseen and validated by senior geologists. • No primary assays data is modified in any way.
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.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• All data is spatially oriented by survey controls via direct pickups by DGPS. Drillholes are all surveyed downhole. Modern holes are surveyed by north seeking gyro tools. • All drilling is undertaken in MGA grid. • Topographic control is generated from a combination of aerial photogrammetry and ground-based surveys. This methodology is considered adequate for the resource in question.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *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.* • *Whether sample compositing has been applied.*	• Drilling has been undertaken on a nominal 40x40m spacing, infilled to a nominal 20x20m spacing where significant mineralisation has been identified. • No compositing of primary samples is undertaken prior to analysis
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.* • *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.*	• Drilling intersections are nominally designed to be normal to the orebody under consideration as far topography and economics allows. • It is not considered that drilling orientation has introduced an appreciable sampling bias.
Sample security	• *The measures taken to ensure sample security.*	• Individual samples in calico samples are collected in groups of 5 and placed into poly weave bags and secured with a zip-tie. All poly weave bags of a submission are then placed within a bulka bag, which is then sealed before delivery to a third party

Criteria	JORC Code explanation	Commentary
		transport service who provides a tracking number. The transport contractor then relays the samples to the independent laboratory contractor.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• Site generated data is routinely reviewed by the Castile corporate technical team.

Section 2 Reporting of Exploration Results
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	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.* • *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.*	• The Rover Project comprises 5 granted exploration leases. • Native title interests are recorded against the Rover Project tenements. • The Rover Project tenements are held by Castile Resources exclusively. • Third party royalties exist across various tenements at the Rover Project, over and above the Northern Territory government royalty. • Castile operates in accordance with all environmental conditions set down as conditions for grant of the leases or Authorisations to conduct Mining Activities. • There are no known issues regarding security of tenure. • There are no known impediments to continued operation.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Tennant Creek area has an exploration and production history in excess of 100 years. • The Rover area specifically has exploration history dating back to the 1970's, firstly undertaken by Geo Peko.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Rover Project is presently considered to be associated with a southern repeat of the 1860-1850Ma Warramunga Province. Recent dating by the NTGS indicates the host rock date equivalent to the Ooradidgee. This is a weakly metamorphosed succession of partly tuffaceous sandstones, siltstones and turbidite shales. Locally the turbidite metasediments are variably altered by hematite and silica flooding. • Mineralisation is mainly of the Iron Ore Copper-Gold (IOCG) type, particularly the Tennant Creek sub-type. Massive ironstone comprised of magnetite or hematite +/-quartz is interpreted to be alteration of metasediments within a structural trap.

Criteria	JORC Code explanation	Commentary
		• Copper manifests as chalcopyrite, associated with breccia fill within magnetite-quartz ironstones and Jasper/BIF that often form an alteration transition to a chlorite alteration envelope. Pervasive sub-economic copper levels can persist throughout the zone. Economic levels of copper are dominantly contained in the lower massive magnetite zone of the ironstone bodies, particularly where intense chlorite alteration replaces magnetite laterally and at depth, grading into magnetite chlorite stringer zones. Gold content is related to an increase in haematite dusted quartz veins, with bonanza grades associated with massive pyrite with subordinate bismuthite. Cobalt appears to have a direct relationship with copper mineralisation.
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:* ○ *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.* • *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.*	• All drillhole information reported has been incorporated into the Mineral Resource. • No new exploration results are being presented in this release.
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.* • *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.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• All drillhole information reported has been incorporated into the Mineral Resource. • Assay results are reported on a length weighted average basis. • Assay results are reported above a 0.5g/t Au / 0.5% Cu or 0.5% Pb + Zn cut offs. • Results reported may include up to two metres of internal dilution below a 0.5g/t Au / 0.5% Pb + Zn / 0.5%m Cu.
Relationship between mineralisation widths and	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should*	• All drillhole information reported has been incorporated into the Mineral Resource. • Interval widths are reported as downhole width unless otherwise stated.

Criteria	JORC Code explanation	Commentary
intercept lengths	*be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').*	
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.*	• All drillhole information reported has been incorporated into the Mineral Resource. • Schematic plans and sections presented. • No new exploration results are being presented in this release.
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 drillhole information reported has been incorporated into the Mineral Resource. • No new exploration results are being presented in this release.
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.*	• All drillhole information reported has been incorporated into the Mineral Resource. • No new exploration results are being presented in this release.
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).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Ongoing exploration and mine feasibility assessments continues to take place at the Rover Project.

Section 3 Estimation and Reporting of Mineral Resources
(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

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.*	• Drillhole data is stored in a Maxwell's DataShed based on the Sequel Server platform which is currently considered "industry standard". • As new data is acquired it passes through a validation approval system designed to pick up any significant errors before the information is loaded into the master database. The information is uploaded by a series of Sequel routines and is performed as required. The database contains diamond drilling (including geotechnical and specific gravity data), face chip and sludge drilling data and some associated metadata. By its nature this database is very large, and therefore exports from the main database are undertaken (with or without the application of spatial and various other filters) to create a database of workable size, preserve a snapshot of the database at the time of orebody modelling and interpretation and preserve the integrity of the master database. • In addition to data upload validation, data is visually checked within a 3D work space (Surpac and Leapfrog) to ensure spatial data is correct and consistent with previous validated drilling (drill hole azimuths, dips, sampling, geology).
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.*	• Mr Savage has been routinely on-site from 2019, reviewing historic core and data, supervising drill programs relating to recent exploration results and the resource under consideration.
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.*	• Geological interpretation of the deposit was carried out using a systematic approach to ensure that the resultant estimated Mineral Resource was both sufficiently constrained, and representative of the expected sub-surface conditions. In all aspects of resource estimation, the factual and interpreted geology was used to guide the development of the interpretation of mineralisation zones. • Mineralisation is primarily controlled by subvertical structures interacting with contrasting geology rheology to generate brittle fracturing. These brecciated zones have focused mineralising fluids, resulting in deposition of sulphide phases. • Mining of similar deposits in the Tennant Creek

		region provides confidence in the current geological interpretation.
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 Rover 1 deposit is mineralised over a strike length of over 540m, a lateral extent of +70m and a depth of over 800m. • Ironstone bodies are oriented east-west, steeply dipping north with a moderate westerly plunge.
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 (e.g. 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.*	• All geological and mineralisation domain interpretation was undertaken by Castile Resources, carried out in three dimensions using Surpac (mineral domains) and Leapfrog (geological domains). • Resource estimation was undertaken by Cube Consulting, under the direction of Castile Resources. • After validating the drillhole data to be used in the estimation, interpretation of the orebody is undertaken in sectional and / or plan view to create the outline strings which form the basis of the orebody wireframe. Wireframing is then carried out using a combination of automated stitching algorithms and manual triangulation to create a three-dimensional representation of the sub-surface mineralised body. Copper and gold domains were modelled separately. • Drillhole intersections within the 3D mineralised body are used to flag the appropriate sample records within the drillhole database tables for compositing purposes. Drillholes are subsequently composited to allow for grade estimation. • Once sample data has been composited, statistical analysis is undertaken on mineral domains to assist with determining estimation parameters, top-cuts etc. Variographic analysis of individual domains is undertaken in Snowdens 'Supervisor' and Geovariances 'Isatis' software and incorporated with observed geological and geometrical features to determine the appropriate search parameters. Given the strongly skewed sample populations of all elements, 'normal-score' transformation was used to generate meaningful variograms. Domains with limited samples were grouped together where they were close proximity and shared orientation to model variograms. • An empty block model is created for the area of interest. The model contains attributes set at background values for the various elements of

interest as well as density, and estimation parameters that are subsequently used to assist in resource categorisation.

- The block sizes used in the model vary depending on orebody geometry, minimum mining units, estimation parameters and levels of informing data available.
- The interpolation of Au, Cu, Co, Ag, Bi, SG and Magnetite was based on a number of different approaches depending on the characteristics of the estimation domain. The assigned estimation domains included:
    - Au, Ag and Bi – based on the interpreted gold estimation domains;
    - Cu, Co – based on the interpreted copper estimation domains;
    - Density and magnetite – based on interpreted ironstone and alteration domains.
- Two approaches were used for the estimation of Rover1: an Indicator Kriging for domains which displayed a bi-modal distribution, and an Ordinary Kriged (OK) estimate for all domains. In the case where domains were estimated with an Indicator, the indicator was estimated first, then each population (High-Grade HG and Low-Grade LG), as defined by the threshold used for the indicator, was kriged in the domain. The estimated indicator (I*), which values are bounded between 0 and 1, plays the role of a proportional weighting (%) field, and the final grade was computed such as:
  Final grade = (I* x HG) + (I* x LG).
- When the number of composites was not sufficient for a variogram to be interpreted, an artificial one was created based on the strike length and width of the domains with reasonable nugget effects and sills for this type of deposit.
- Due to the shape of the domains, some have been estimated using dynamic kriging. The reference surface was created in Geovariances 'Isatis' software package to guide the variogram algorithm and search volume.
- The ordinary kriging estimation method is considered appropriate for the style of mineral deposit under consideration. Estimation was undertaken in Geovariances 'Isatis' software and the results transferred to a Surpac block model.
- In some circumstances where sample populations are small, and geostatistical trends unable to be interpreted, the domain was

		assigned the declustered mean composite grade. • A distance limiting top-cut approach was implemented for some gold domains to limit the spatial influence of outlier values, which have limited continuity. • Both by-product and deleterious elements are estimated at the time of primary grade estimation if required. Multivariate statistical analysis has identified a relationship between gold- silver- bismuth and a separate copper-cobalt relationship. There are no assumptions made about the recovery of by-products. • The resource model is then depleted for topography mining voids where applicable and subsequently classified in line with JORC guidelines utilising a combination of estimation derived parameters and geological knowledge. This approach has proven to be applicable to similar deposits. • Estimation results are validated against primary input data. • In all aspects of resource estimation the factual and interpreted geology was used to guide the development of the estimation.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnage estimates are dry tonnes.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• The Rover 1 mineral resource inventory comprises material at 2.0g/t Au equivalent. • The 2.0g/t Au equivalent cut-off grade represents the economic cut-off of mining and processing gold only *excluding CAPEX*. • Au equivalent is calculated on gold and copper only by the following formulae: AUEQ = Au + (Cu x 0.000169). Cu assays are in ppm. • Gold Price = US$1,800/oz and Copper = US$9,800/tonne.
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*	• Underground mining is assumed on the basis that similar deposits have been mined successfully by underground methods at the nearby Tennant Creek field. • Minimum mineralisation widths and composite grades have been considered during the interpretation stage. • There may be cases where lower grade material is incorporated to maintain geological continuity of the interpretation. • No mining factors are incorporated into the

	rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	resource as these will be considered within Reserve Calculations
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.*	• Conventional sulphide oxidation processing methods are assumed on the basis that similar deposits have been successfully mined and processed. • Metallurgical test work indicates ore is non-refractory. • No metallurgical factors are incorporated into the resource as these will be considered within Reserve Calculations.
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.*	• Castile operates in accordance with all environmental conditions set down as conditions for grant of the respective leases. • Castile is investigating mitigation of environmental impacts by storage of PAF material underground and utilising tails into paste fill to minimise surface disturbance and hydrology impacts. Use of paste fill will aid in maximising extraction of the resource. • No environmental factors are incorporated into the resource as these will be considered within Reserve Calculations.
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.*	• Bulk density of mineralisation at the Rover Project is variable, dependant on lithology, alteration and mineralisation. • Geological technicians perform routine density test-work on core samples of both host rock and mineralisation. All sampled intervals are tested for density. • Density measurements have been determined using the water immersion technique on core. • Bulk density is modelled by lithological domains.

Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.* • *Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* • *Whether the result appropriately reflects the Competent Person's view of the deposit.*	• Resources are classified in line with JORC guidelines utilising a combination of estimation quality parameters, and geological knowledge. • This approach considers all relevant factors and reflects the Competent Person's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Resource estimates were calculated and reviewed internally by independent contractor Cube Consulting then peer reviewed by Castile Resources' Corporate technical team.
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 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.*	• The reported resource estimate is considered robust, and representative of the deposits on a global scale. • The relative accuracy and confidence of the resource is reflected in the classification category assigned. • No production data exists to compare the resource estimate against.