

Untested Off-hole Conductor Identified at Explorer 142

Castile Resources Limited (ASX:CST) ("Castile" or "the Company") advises of the results from the June 2022 DHEM (Down Hole Electromagnetic) survey of hole NR142D003 at Castile's 100% owned Explorer 142 Prospect located 32 kms to the west the Company's flagship Rover I Project.

The purpose of the survey was to test an interpreted off-end of hole anomaly identified from modelling results of 2021 resurvey of historic hole NR142D003. (See CST:ASX 29 October 2021 Quarterly Activities Report and Appendix 5B).

Drill hole NR142D003 was successfully extended from 815m to 982m and re-cased at the end of the 2021 field season. Gap Geophysics used a single transmitter loop shown in Figure 1 for the survey with the results then remodeled by independent geophysics specialist Newexco and the modelling results then subject to review by the Castile Resources technical team.

\$33,000 \$33,00

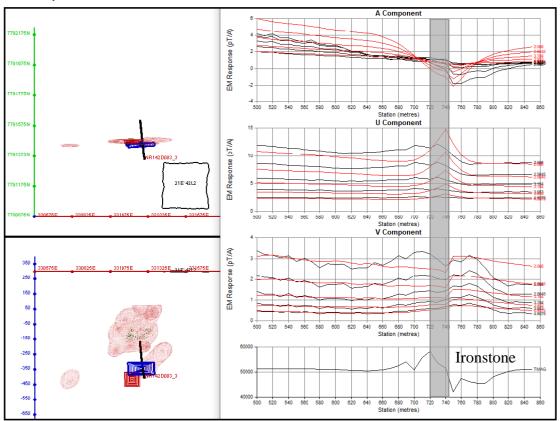
Figure 1: Location of NR142D003 and Tx Loop. Coordinates in MGA93 Zone 53. (from NX24337).

The anomalism in the hole is complex due to the super position of signal from multiple sources. The new survey has improved the quality of the initial field data, identifying two anomalies:

- an early time on-hole (proximal) anomaly with interpreted conductive source (Figure 2) associated with known ironstone; and
- a mid time off-hole (medium distal) anomaly with interpreted conductive source (Figure 3) that is not associated with known ironstone bodies.



Figure 2: NR142D003 modelling of early time channels (15-19, 2-5ms) for the on-hole conductor (blue box). The red solid is the known ironstone occurrence. Black and red profiles refer to field response and model values respectively. Grey bar on field response represents ironstone intersection (from NX24337)

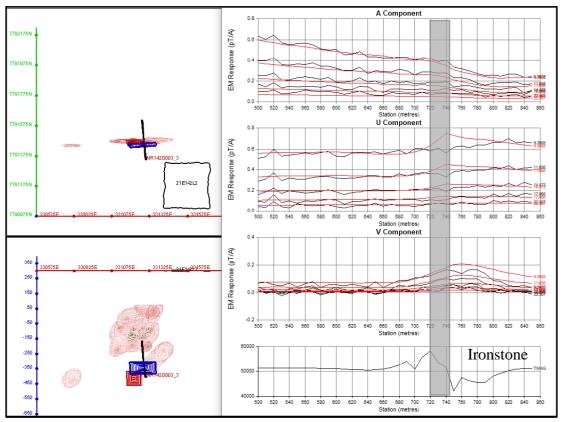


This off-hole anomaly source has not been previously tested by drilling.

Castile will work up a strategy for this target at Explorer 142 in the ensuing period once results of all 2022 field work across Castile's tenements is received and targets prioritised. The Company notes that results from the DHEM survey at Explorer 108 are pending in addition to ground gravity surveys continuing at various other targets within Castile's Rover Project. The results of these surveys will be presented to the market as they become available.



Figure 3: NR142D003 modelling of mid time channels (22-26, 9-22ms) for the off-hole anomaly (red box). Red solid is known ironstone occurrence. Black and red profiles refer to field response and model values respectively. Grey bar on field response represents ironstone intersection (from NX24337).



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



COMPETENT PERSON STATEMENTS

Geology

The information contained in this report that related to exploration results and mineral resources is based on, and fairly and accurately represent information and supporting documentation prepared by 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 the report of the matters based on the exploration and resource results in the form and context in which they appear.



ASX Announcement Section 1 Sampling Techniques and Data

18 July 2022

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques Drilling techniques Drill sample recovery	 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. Drill type (e.g. core, reverse circulation, openhole 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.). 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. 	 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. Samples are halved using an automatic core saw then individual samples collected in prenumbered calico sample bags. To ensure representivity of analysis, field blanks and certified reference material is inserted in 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.
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	 All geological data has been visually logged and validated by the relevant area geologists, recording lithology, alteration, mineralisation, structure, veining, magnetic susceptibility and



ASX Announ	cement	18 July 2022
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	 JORC Code explanation 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. 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 	geotechnical data. Logging is quantitative in nature. All holes are logged completely. Diamond Drilling - Half-core niche samples, sub-set via geological features as appropriate. Core undergoes total preparation. For the 2021 field season, sample preparation process consists of; Half ore samples of between 0.5 to 3kg are whole crushed using a Boyd Crusher to achieve a maximum sample size of 2mm.
	 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. 	 A cone splitter is used to split 1kg of material which is pulverised in a Keegor mill to a nominal 100µm particle size., then roll mixed to homogenise the sample. The mill inserts a barren coarse flush after every sample. 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. Repeatability is performed by selecting 1:20 coarse reject material as field duplicates and re-assayed. 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	 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, 	Analysis of 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 =



ASX Announ	cement	18 July 2022
Criteria	JORC Code explanation	Commentary
laboratory tests	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.	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. O The bead is then dissolved in acid and analysed by atomic absorption spectroscopy against matrix-matched standards. O Samples returning assay values in excess of 100g/t Au were repeated using the screen-fire method. O Silver, bismuth, cobalt, copper, lead and zinc samples are digested using a 4-acid digest. O The subsequent solution is analysed by 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. 	 All data is spatially oriented by survey controls via direct pickups by the survey department. Drillholes are all surveyed downhole. Modern holes are surveyed by Gyro tools.



	COLLIGIT	10 July 2022
Criteria	JORC Code explanation	Commentary
	Quality and adequacy of topographic control.	 All drilling and resource estimation 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 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 listed in Criteria	the preceding section also apply to this section.) 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 Tennant Creek Project comprises 5 granted exploration leases. Native title interests are recorded against the Tennant Creek tenements. The Tennant Creek tenements are held by Castile Resources exclusively. Third party royalties exist across various tenements at Tennant Creek, 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. 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 in particular has an intensive exploration history stretching from the 1970's.
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, in particular, the Paleoproterozoic Ooradidgee Formation, after recent geochronology work undertaken by NTGS. This is a weakly metamorphosed succession of partly tuffaceous sandstones and 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. Copper manifests as of 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



ASA AHHOUNCE	ornoric .	10 July 2022
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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. 	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 pyrite. • Lead and zinc mineralisation at Explorer 108 is associated with a brecciated, dolomitised metasedimentary unit, consisting of irregular, generally narrow bands or veins of semi-massive sphalerite and galena. A basal "high-grade" zone is present at the contact of the altered metasediments and lower felsic volcaniclastic unit. • It is postulated that Explorer 108 mineralisation is an analogue of Mt Isa style base metal mineralisation. • Exploration results are presented in Tables 1 and 2 of the ASX release dated 24/05/2021 related to this edition of JORC Table 1.
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 	 Results are reported on a length weighted average basis. Results are reported above a 1gm Au / Au Eq. cut-off / 1%m Pb + Zn and 1%m Cu. Results reported may include up to three metres of internal dilution below a 0.5g/t Au / Au Eq. cut-off / 0.5% Pb + Zn / 0.5%m Cu. Metal equivalent values are reported based



ASX Announce	ment	18 July 2022
Criteria	JORC Code explanation	Commentary
	 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. 	on the ratio of prevailing commodity prices which are given above.
Relationship between mineralisation widths and intercept lengths	 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 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'). 	Interval widths are reported as downhole width unless otherwise stated.
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.	 Diagrams are presented in the ASX release dated 24/05/2021 related to this edition of JORC Table 1.
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. 	 Completed drilling where analysis is available is 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 information related to the reported results is presented in the ASX release dated 24/05/2021 related to this edition of JORC Table 1.
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 planning assessment continues to take place at the Rover Project.