



ASX RELEASE (21 SEPTEMBER 2022)

Supergene Copper Resource Upgrade

Highlights:

- Significant Supergene/Transition Copper Resource Upgrade to Indicated Resource;
- Total indicated and inferred Resource stands at 2.27Mt at 0.5% Cu for 11,265t contained Cu – a four-times increase in the total supergene copper resource;
- Underpins several years of copper sulphate production at Tartana subject to positive leach test work;
- Plant refurbishment remains on track – targeting first production in December 2022;

R3D Resources Limited (ASX: **R3D**) (the **Company**), is pleased to announce a significant resource upgrade based on the results of a resource drilling campaign earlier in 2022 which targeted supergene/transition mineralisation lying in the base of the open pit. This programme was designed to upgrade and extend existing copper resources which may be suitable for heap leaching to produce copper sulphate using the existing heap leach – solvent extraction – crystallisation infrastructure which is currently undergoing refurbishment.

Results from the 28-hole (1,620m) RC drilling campaign were announced on the ASX on the 30 August 2022 program. This announcement noted that individual 1 metre sample assays were up to 5.21% Cu and 94 g/t Ag from 32 – 33 m depth (TR082) while the overall best interval was 39 m at 0.71% Cu from 21 m to 60 m (TR063) and 13 m at 1.71 % Cu from 43 m – 56 m depth (see Announcement dated 30 August 2022).

Bluespoint Mining Services Pty Ltd (BMS) has completed a Mineral Resource Estimation (MRE) for the Tartana Flats area based on this recent drilling campaign as well as using historical data and with the results summarised in Table 1. The estimation has updated an earlier Inferred Resource of 175.6 kt @ 1.5% Cu for 2,634 tonnes Cu using a 0.5% Cu cut-off grade (see Prospectus dated 26th May 2021). The recent drilling has also determined that the overlying unconsolidated fill is approximately 10 m thick while the supergene 'blanket' is approximately 20 m thick. The underlying primary mineralisation remains open at depth and along strike.

Resource Category	Tonnes (Kt)	Cu Grade (%)	Density (t/m ³)	Contained Cu (t)	Resource Category	Tonnes (Kt)	Cu Grade (%)	Density (t/m ³)	Contained Cu (t)
Indicated	1657	0.47	2.63	7788	Indicated	1354	0.55	2.63	7447
Inferred	610	0.57	2.63	3477	Inferred	579	0.59	2.63	3416
Total	2267	0.5	2.63	11265	Total	1933	0.56	2.63	10825

Figure 1. 1(a) MRE at a 0% Cu Cutoff for the Supergene/Transition zone. 1(b) MRE at 0.2% Cu Cutoff for the Supergene/Transition zone (Source: BMS, see JORC 2012 Tables at end of this report).

R3D Managing Director Stephen Bartrop commented:

“This new four-times increase in total supergene copper resources generates confidence in our ability to establish a copper sulphate pentahydrate operation with a minimum 5-year life if leach test work being conducted now on this mineralisation returns positive levels of leachable copper. In addition, the potential to dozer push the overburden to the south end of the pit may represent a low-cost method of removing the overburden to quickly exposing the ore and which will improve the mining economics.”

Tartana Supergene/Transition Resource Upgrade

R3D Resources has commissioned BMS to revise the Mineral Resource Estimate (MRE) for the Tartana Flats area which is based on data from the 2022 resource drilling program as well as historical data. The recent 28-hole (1,620m) RC drilling program has been reported to the ASX on the 30 August and involved drilling three lines with RC holes angled at 60 degrees (see Figure 2). Significant intersections reported in the earlier announcement are also highlighted on Figure 2.

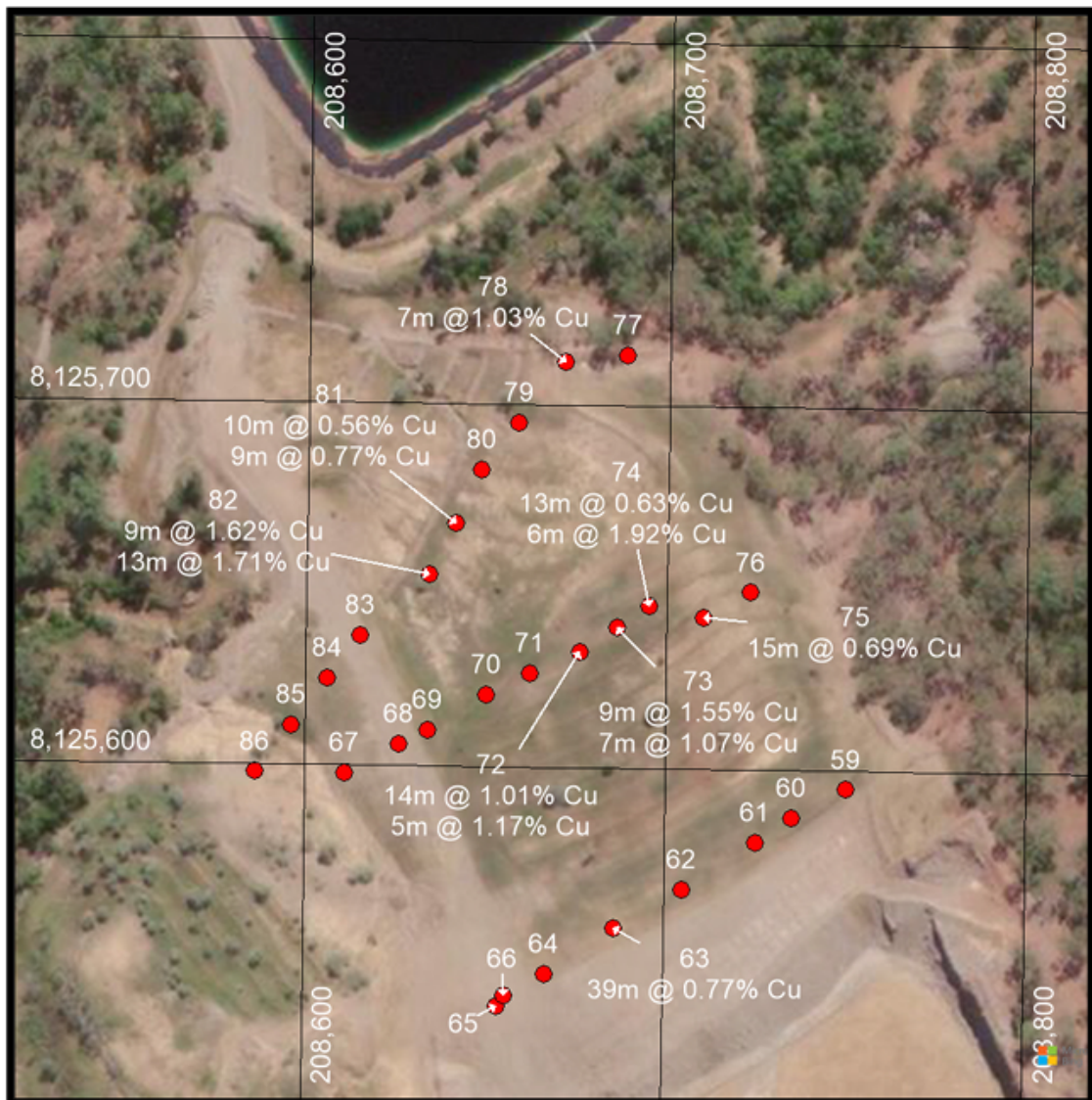


Figure 2. Three fence lines with the 28 collar locations in red were focused on testing the mineralisation below the backfilled northern half of the Tartana open pit.

BMS has modelled in the mineralisation using the new drilling data as well as some of the historical drilling data which has been verified by the current drilling program. A cross-section based on the most southerly fence line is presented in Figure 3 and highlights an approximate 20 m 'blanket' of mineralisation underlying approximately 10 m of pit fill which has been used to partially rehabilitate the pit.

The supergene mineralisation has been logged from the identification of secondary sulphide minerals while the primary ore consists mostly of chalcopyrite. The mineralisation is open at depth with historical drilling suggesting that the grades remain similar to the supergene zone but further drilling is required to upgrade this mineralisation to inferred resource status. The mineralisation also remains open along strike.



Figure 3. Cross-section of the most southerly fence-line in the north portion of the pit. Supergene zone in red with transition and primary ore below. The overlying fill is above the ore zone. Source: BMS.

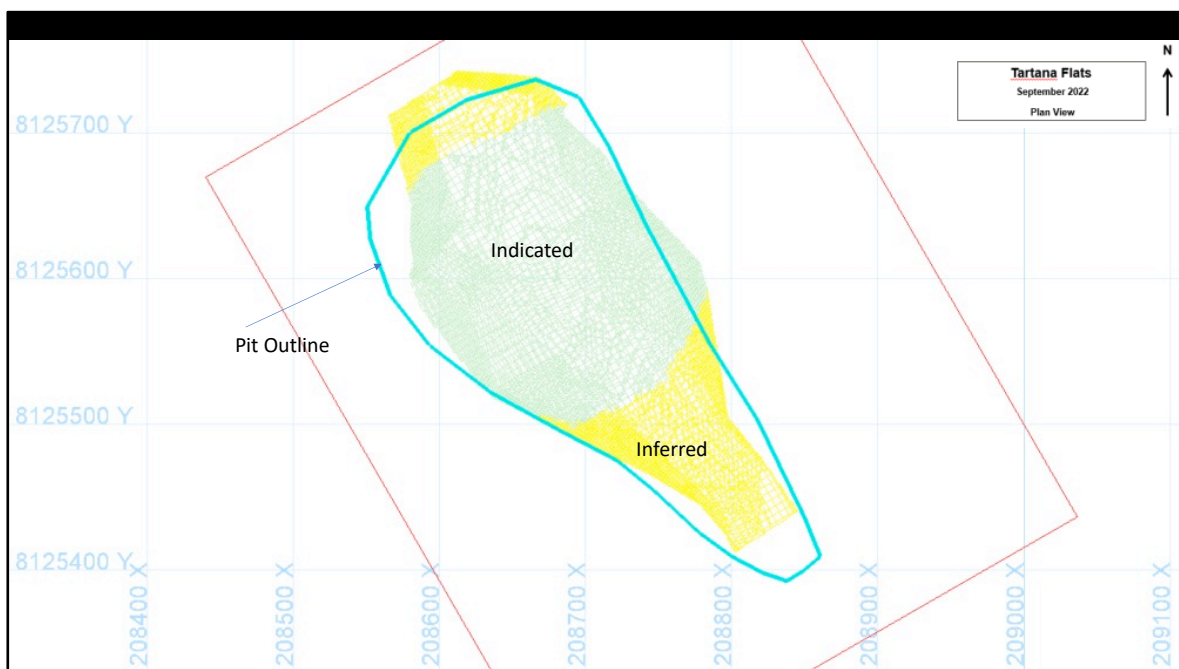


Figure 4. BMS Block Model showing final resource classification for Tatana Flats (green – Indicated Resource, yellow – inferred resource). Source: BMS.

Resource tonnes and average copper grade at various copper cut-off grades is presented in Figure 5.

Cu Cut-off Grade %			Contained Cu t
	Tonnes t	Cu %	
0.00	2,266,823	0.50	11334
0.10	2,142,085	0.52	11139
0.20	1,933,455	0.56	10827
0.30	1,607,845	0.62	9969
0.40	1,216,712	0.71	8639
0.50	871,272	0.82	7144
0.60	623,694	0.93	5800
0.70	441,067	1.04	4587
0.80	294,634	1.19	3506
0.90	209,122	1.33	2781
1.00	159,588	1.44	2298
1.10	126,529	1.55	1961
1.20	101,284	1.65	1671
1.30	80,457	1.75	1408
1.40	60,445	1.89	1142
1.50	51,616	1.96	1012
1.60	43,022	2.04	878
1.70	38,161	2.09	798
1.80	30,355	2.18	662
1.90	25,427	2.25	572
2.00	19,120	2.35	449
2.10	15,409	2.42	373
2.20	12,169	2.49	303
2.30	9,152	2.57	235
2.40	7,246	2.63	191
2.50	5,473	2.70	148
2.60	3,172	2.79	88
2.70	2,186	2.85	62
2.80	1,528	2.91	44
2.90	213	3.15	7
3.00	213	3.15	7
3.10	213	3.15	7

Figure 5. Impact of increasing the copper cut-off grade on resource tonnes and average copper grade (source: BMS).

The table in Figure 5 is presented as the 2022 Grade-Tonage Curve in Figure 6.

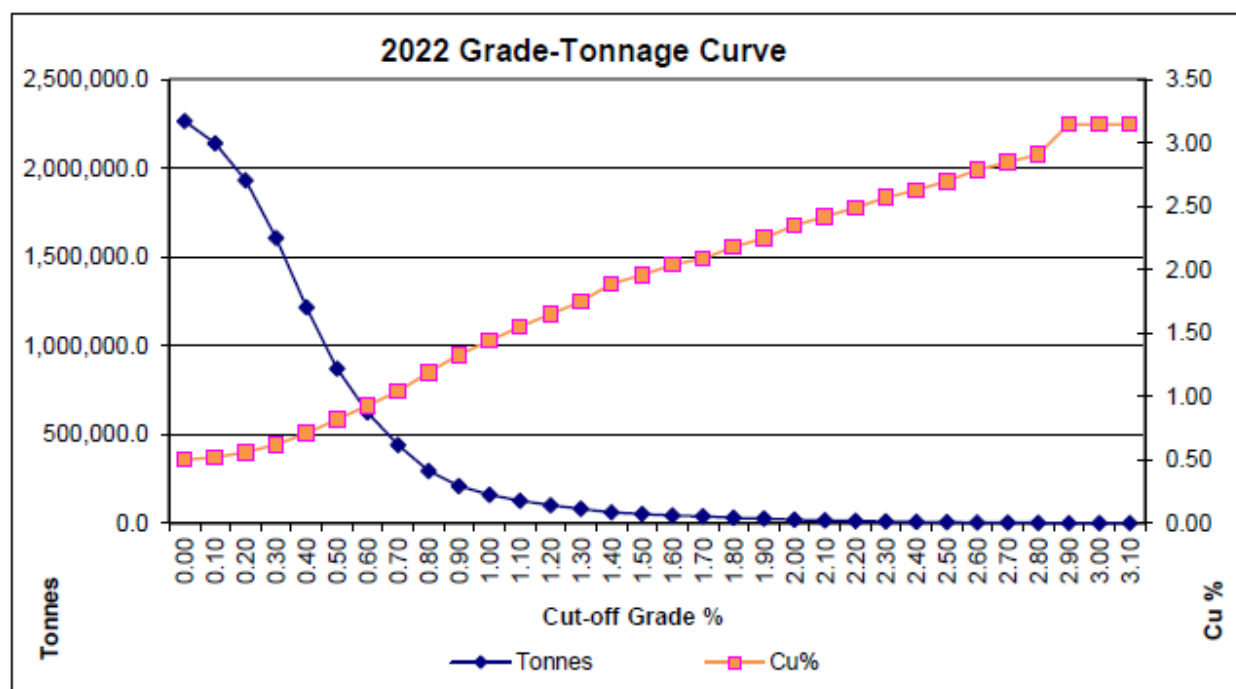


Figure 6. 2022 Grade-Tonnage Curve. Source: BMS

Overall, the drilling campaign and resource upgrade has been highly successful with existing resources having the potential to support a mine life of several years of future copper sulphate pentahydrate production. This is expected to be confirmed by the current metallurgical testwork which is assessing the leachable copper content of these resources.

The Company has a large tenure position in the Chillagoe region with numerous copper prospects including advanced projects such as Cardross where a maiden copper resource is currently being estimated. The potential to operate for several years on existing ore resources is encouraging as it potentially provides adequate time for the Company to advance new copper projects such as Cardross to maintain copper sulphate pentahydrate production well into the future.

This announcement has been approved by the Disclosure Committee of R3D Resources Limited.

Further Information:

Stephen Bartrop

Managing Director

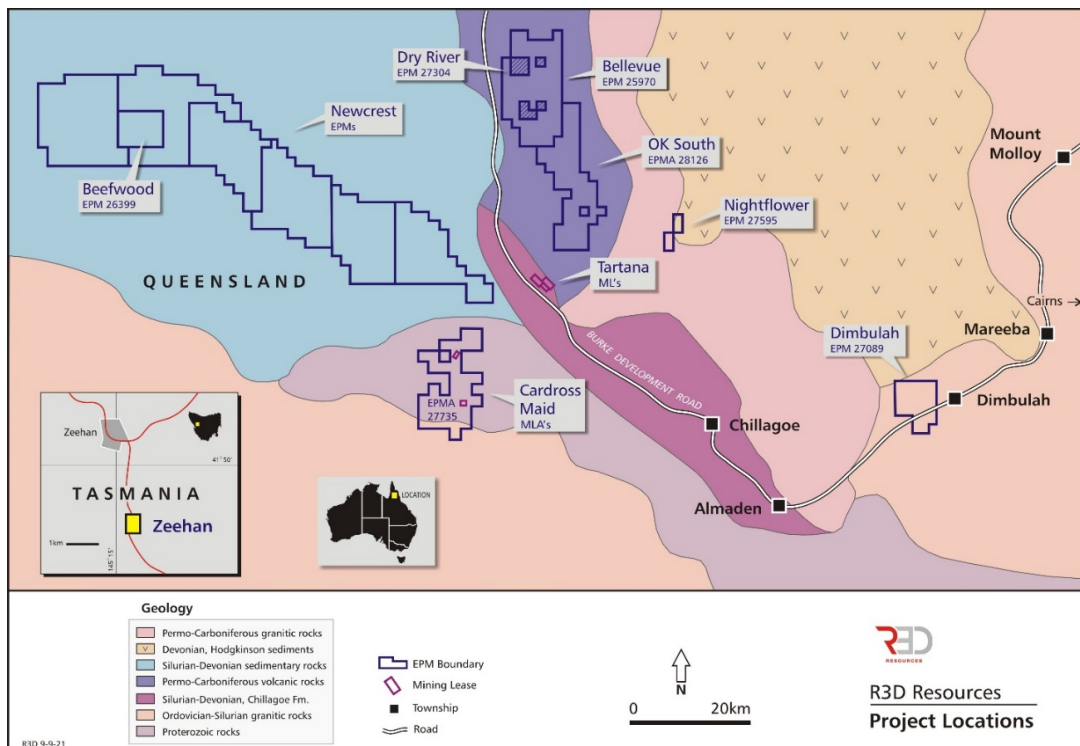
R3D Resources Limited

M: + 61 408 486 163

P: + 61 2 9392 8032

About R3D Resources Limited

R3D Resources is a significant copper-gold explorer and developer in the Chillagoe Region in Far North Queensland. R3D owns several projects of varying maturity, with the most advanced being the Tartana mining leases, which contain an existing heap leach – solvent extraction – crystallisation plant. Work has commenced to restart this plant to provide future cash flow through the sale of copper sulphate. In Tasmania, Tartana has secured permitting to excavate and screen for export low-grade zinc furnace slag/matte from its Zeehan stockpiles in Western Tasmania and has been shipping zinc slag to South Korea. These two projects have the potential to generate a strong cash flow to underpin the R3D’s extensive exploration activities in the Chillagoe region.



Competent Person's Statement

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Wayne (Tom) Saunders who is a Fellow of the Australasian Institute of Mining and Metallurgy (AusIMM), and a Member of the Australian Institute of Geologists (AIG). Mr Saunders has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Saunders is an employee of R3D Resources Limited, and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to Exploration Results and Mineral Resources is based on information compiled by Mr Geoff Reed who is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM (CP)), and a Member of the Australian Institute of Geologists (AIG). Mr Reed has sufficient experience that is relevant to the styles of mineralisation and types of deposit under consideration, and to the activity that is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves.' Mr Reed is a consultant of R3D Resources Limited, and consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Disclaimer Regarding Forward Looking Statements

This ASX announcement contains various forward-looking statements. All statements, other than statements of historical fact, are forward-looking statements. Forward-looking statements are inherently subject to uncertainties in that they may be affected by a variety of known and unknown risks, variables and factors which could cause actual values or results, performance or achievements to differ materially from the expectations described in such forward-looking statements.

R3D Resources does not give any assurance that the anticipated results, performance or achievements expressed or implied in those forward-looking statements will be achieved.

Table 1. *Drillholes and drillhole intersections used in the MRE*

Drillhole	midx	midy	midz	From (m)	To (m)	Intersection (m)	Cu (%)
NARC01	208708.4	8125652	210.69	15.0	33.0	18.0	1.95
NARC02	208696.1	8125643	208.00	18.0	36.0	18.0	0.53
NARC03	208673.3	8125631	205.38	18.0	38.0	20.0	1.06
NARC04	208679.1	8125703	210.87	13.0	31.0	18.0	0.73
NARC06	208660.4	8125681	207.11	12.9	35.0	22.1	0.56
NARC11	208719.8	8125658	213.09	12.0	30.0	18.0	0.76
NARC16	208648.3	8125614	205.36	17.6	37.0	19.4	0.34
NARC21	208601.0	8125707	208.98	3.0	25.0	22.0	0.40
TDH1	208636.1	8125586	203.86	12.7	40.4	27.7	0.19
TRC059	208759.9	8125603	211.07	12.0	38.0	26.0	0.10
TRC060	208740.4	8125591	220.61	11.0	16.0	5.0	0.36
TRC061	208737.6	8125590	204.34	13.0	51.0	38.0	0.15
TRC062	208720.3	8125579	197.35	22.0	57.0	35.0	0.43
TRC063	208700.7	8125566	199.54	19.0	53.0	34.0	0.81
TRC064	208681.2	8125554	198.71	13.1	58.0	44.9	0.17
TRC065	208666.0	8125543	202.79	15.0	46.0	31.0	0.01
TRC066	208646.0	8125529	206.73	15.0	37.0	22.0	0.07
TRC067	208604.3	8125594	212.13	12.0	20.0	8.0	0.12
TRC068	208617.7	8125600	210.17	14.0	26.0	12.0	0.52
TRC069	208625.9	8125604	210.24	12.0	29.0	17.0	0.22
TRC070	208638.3	8125613	205.07	17.0	37.0	20.0	0.37
TRC071	208650.3	8125620	205.50	17.0	36.0	19.0	0.19
TRC072	208663.6	8125625	205.07	19.0	37.0	18.0	0.80
TRC073	208674.3	8125631	205.43	18.0	38.0	20.0	0.88
TRC074	208684.1	8125636	205.78	19.0	37.0	18.0	0.47
TRC074	208680.1	8125633	196.72	37.0	39.9	2.9	0.83
TRC075	208696.5	8125634	204.37	20.0	43.0	23.0	0.32
TRC076	208711.3	8125641	207.29	17.0	40.0	23.0	0.34
TRC078	208674.4	8125719	215.29	12.0	20.0	8.0	0.94
TRC079	208665.2	8125703	208.94	12.0	31.0	19.0	0.22
TRC080	208651.5	8125689	213.71	13.0	18.0	5.0	0.60
TRC081	208646.6	8125678	206.28	14.0	34.0	20.0	0.60
TRC082	208639.6	8125664	205.93	14.0	35.0	21.0	0.84
TRC083	208621.5	8125646	205.74	11.0	37.9	26.9	0.18
TRC084	208612.5	8125634	205.44	11.0	38.0	27.0	0.14
TRC085	208601.6	8125620	207.05	12.0	30.0	18.0	0.17
TRC086	208590.6	8125605	210.64	13.0	22.0	9.0	0.08
TRC10	208753.4	8125480	214.01	12.0	34.0	22.0	0.46
TRC11	208759.6	8125484	207.41	10.3	44.0	33.7	0.59
TRC12	208788.3	8125502	215.66	17.0	28.0	11.0	0.27
TRC13	208788.7	8125496	219.49	20.4	21.0	0.6	0.17
TRC13	208779.4	8125490	208.31	21.0	52.0	31.0	0.64
TRC14	208791.5	8125502	206.83	32.0	44.0	12.0	0.39
TRC15	208716.1	8125511	204.28	9.0	52.0	43.0	0.32
TRC16	208716.8	8125513	206.96	19.0	49.0	30.0	0.52
TRC17	208732.0	8125527	208.58	18.9	52.0	33.1	0.81
TRC18	208681.3	8125564	209.08	19.2	40.0	20.8	0.65
TRC19	208677.7	8125554	209.40	21.8	40.0	18.2	0.52
TRC20	208658.3	8125562	206.55	15.6	40.0	24.4	0.65
TRC21	208721.2	8125583	206.89	18.0	40.0	22.0	0.17
TRC22	208714.9	8125512	207.25	20.0	51.0	31.0	0.54
TRC23	208777.8	8125592	215.33	21.0	30.0	9.0	0.19
TRC25	208654.3	8125595	205.11	15.0	50.0	35.0	0.35
TRC26	208673.9	8125641	205.10	23.1	48.0	24.9	1.07
TRC27	208639.7	8125645	204.69	19.0	46.0	27.0	1.71
TRC28	208648.9	8125651	206.88	15.0	33.0	18.0	2.66
TRC47	208620.4	8125691	207.18	11.4	40.0	28.6	0.91
TRC48	208617.8	8125688	211.78	10.0	28.0	18.0	1.41
TRC49	208671.9	8125668	207.29	18.0	43.0	25.0	0.42
TRC50	208622.6	8125723	208.95	4.1	35.0	31.0	0.39
TRC51	208590.1	8125715	209.79	3.4	34.0	30.6	0.74
TRC53	208600.9	8125681	208.05	7.9	39.0	31.1	0.84
TRC54	208624.0	8125637	207.65	13.9	40.0	26.1	0.40
TRC55	208791.0	8125441	207.30	27.0	37.0	10.0	0.35
TRC56	208804.6	8125451	213.28	16.0	39.4	23.4	0.95
TRC8	208757.2	8125479	209.08	9.7	45.0	35.3	0.30
TRC9	208748.6	8125475	203.80	30.4	39.0	8.6	0.07
TRC9	208753.2	8125478	198.30	39.0	46.0	7.0	0.32
TRDH11	208590.0	8125715	210.06	1.5	22.9	21.3	0.59
TRDH14	208737.9	8125567	203.60	14.0	51.8	37.8	0.29
TRDH7	208679.0	8125608	203.51	16.8	36.6	19.8	0.18

JORC Code, 2012 Edition

Section 1 Sampling Techniques and Data

Criteria	Commentary
Sampling techniques	<ul style="list-style-type: none"> RC – riffle splits Majestic Diamond – ¼ core cut – Outokumpu. ¼ to ½ core CEC – diamond core was used in the total Majestic inferred resource but only for zonal trends in the supergene model. Rock chip – channel – Majestic R3D 2022 Program – RC splits
Drilling techniques	<ul style="list-style-type: none"> 5.5in RC and Diamond Core R3D 2022 Program – RC utilizing truck mounted Drill Rig and Compressor
Drill sample recovery	<ul style="list-style-type: none"> Exceeds 98% through supergene zone. 86% RC total excluding 0-2 m when establishing a 2m casing in every hole. All samples were 3-5 kg. R3D 2022 Program – RC recoveries exceed 95% in bedrock, except where cavities from undocumented underground workings, whilst more variable in overlying fill material from 60=95%
Logging	<ul style="list-style-type: none"> Detailed logging The geology of all previous holes was standardized to the Majestic methodology which also matched the detailed geological mapping. R3D 2022 Program – logging has been completed for normal drill control
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> Analabs Townsville: <ul style="list-style-type: none"> Dry, Fine Pulverise – GP032 Cu by GA145 – Mixed Acid Ore Grade AAS. Co, As, Ag by Ga140 - where applicable Au by GG308 – 30g Fire assay fusion AAS finish. Specific Gravity – OM 605 Air Pycnometer R3D 2022 Program - All chips have been washed and cleaned of drill mud and polymers prior to logging, photographing and storing.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> Analabs Townsville – standard methods for copper ore grade assay Metallurgical samples – Cu by ICP587 R3D 2022 Program – RC samples were dispatched to SGS Laboratories in Townsville and tested for copper, silver, and gold when silver assayed > 10ppm. Contract with laboratory in place to complete ore grade base metal assays.
Verification of sampling and assaying	<ul style="list-style-type: none"> Internal duplicate samples (98%+ correlation) Check sampling during metallurgical testing. Composite metallurgical feed grade sampling matches 95% RC assaying R3D 2022 Program – No repeat assays or laboratory assays undertaken to date. R3D currently has external base metal standards on site. These were inserted at a rate of each 20th sample (5%) in the RC sampling. Repeat and other QAQC steps will be based on assay results.
Location of data points	<ul style="list-style-type: none"> Fully surveyed theodolite which was tied into mining and topographic features. Later differential GPS controls completed on some of the Solomon Copper infill drilling. R3D 2022 Program – Handheld GPS reading 10+ satellites with a nominal accuracy of 5m was used for initial location of collar. R3D has completed a drone LIDAR over the whole of the four mining leases. This will enable to improve accuracy of the collar location down to DGPS quality. A Public Survey Mark (PSM) is located between Tartana and King Vol for survey control.
Data spacing and distribution	<ul style="list-style-type: none"> 50m lines 12.5 – 25m along lines. R3D 2022 Program – Sampling was completed at 1m intervals for the RC chips

Criteria	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> • Right angles to prevailing geological strike • Holes drilled angled 45-65. Average 60% true width • R3D 2022 Program – The drilling was designed to test the steeply dipping copper zones at right angles to the surface strike.
Sample security	<ul style="list-style-type: none"> • Onsite supervision at all times • Delivered to laboratory designated secure transport. • R3D 2022 Program – Security is in place at the mine site and a reliable transport agent has been engaged to transport the samples to the laboratory in Townsville.
Audits or reviews	<ul style="list-style-type: none"> • Multiple audits conducted by Majestic staff as well as Solomon Copper both before and after commencement of mining. • Tartana completed traverses across the supergene exposures in the northern and central portions of the Tartana Flats pit. • R3D 2022 Program – Auditing of previous drilling and surface geology and geochemistry is currently underway to validate such that R3D further elevate the Tartana sulphide mineralisation and oxide and supergene JORC resources.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	Commentary
Mineral tenement and land tenure status	<ul style="list-style-type: none"> • Four granted Mining Leases at Tartana - ML4819, 4820, 5312, and 20489.
Exploration done by other parties – drilling only	<ul style="list-style-type: none"> • CEC – diamond drilling results used in the deeper majestic primary resource calculations • Outokumpu – Deep diamond drilling Tartana Flats and partly Tartana Hill • Dominion – limited to Queen Grade zinc – not in the Majestic Resource Statement • Adam – Drilling at Queen Grade only • Aztec – resampling and relogging at Queen Grade only • Solomon Copper – RC and diamond completed on Tartana Hill. Postdate Majestic drilling. Shallow RC results match the majestic shallow RC results – however survey control and check assays were not completed.
Geology	<ul style="list-style-type: none"> • Porphyry copper intruded into structurally deformed sediment. • Within the Tartana Hill resource area – structural complexity was low. • Mineralising intrusive currently exposed in the southern pit area. • Weathered oxide copper – red ochre, limited malachite and azurite
Drill hole Information	<ul style="list-style-type: none"> • 5.5in RC completed by Majestic and Solomon Copper. • All samples were collected ex cyclone and riffle split on site. • Later metallurgical samples were resplit before larger samples were collected for check assay and test work. • Majestic RC drilling completed by Drilltorque Townsville is one campaign with no issues. • NQ4 completed by Outokumpu • BQ to NQ by CEC. • Downhole surveys only completed by Outokumpu that demonstrated a consistent lift down hole. Corrections were applied to all CEC diamond hole traces but not to the Majestic RC holes due to their shallow depths. Application of the lift correction fixed major issues in the older non JORC CEC Ore Reserves and brought all Tartana Hill intersections into the one zone.

Criteria	Commentary
Data aggregation methods	<ul style="list-style-type: none"> R3D 2022 Program – RC drilling by AED contractors Completed on a range of cut off grades. Minimum intersection taken as four metres. Intersections in the collar of each hole were individually evaluated to exclude soil, dump and scree contamination or pad fill. R3D 2022 Program – Drill intervals were determined for zones averaging >5,000 ppm copper
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> Average 60% of true width. R3D 2022 Program – R3D sampled all mineralized zones (as defined by as a minimum of 1% total sulphide and/or shearing). Non mineralised sections (as defined by hte geological chip inspection) will be completed only where they abut mineralized zones.
Diagrams	<ul style="list-style-type: none"> Full maps, plans, cross sections R3D 2022 Program – see main body of report
Balanced reporting	<ul style="list-style-type: none"> Yes. Multiple reports by multiple companies and independent geologists.
Other substantive exploration data	<ul style="list-style-type: none"> Past mine data. All above companies completed additional exploration and development including geological mapping, geochemistry, surveying, geophysics and shallow to deep open hole percussion drilling. This drilling is excluded from any calculations due to poor recoveries. Tartana Hill and Tartana Flats mineralisation 9estensions to the north of the Hills open cut) are also well defined by detailed IP geophysics. Clutha also completed early drill and exploration – drill collars were not able to be located so has been excluded from the database.
Further work	<ul style="list-style-type: none"> R3D 2022 Program – Incorporate this RC drill assay data into upgraded resource estimates at Tartana pit..

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	Commentary
Database integrity	<ul style="list-style-type: none"> CEC old data – contained in open file reports registered with the Queensland Government. Converted to a standardized format by Outokumpu and retained in excel spreadsheets. All Majestic data was manually logged onto paper and then transferred to excel spreadsheets. All Majestic paper records are still in existence and held by the author. Majestic laboratory assays were supplied digitally as well as paper records. Later Solomon Copper data has been recorded on both paper files and excel spreadsheets. All Majestic RC and Solomon Copper diamond is fully photographed. Outokumpu diamond core was photographed but only select photographs of specific structural features have been retained. R3D 2022 Program – RC drilling data and assays compiled by R3D Resources R3D Resources have compiled all existing spreadsheets into a Vulcan database for modelling and for verification

Criteria	Commentary																																																												
Site visits	<ul style="list-style-type: none"> TS involved in the various programs such as Outokumpu, Aztec, Majestic and R3D campaigns as well as the early Solomon Copper development to bring the mine into production have been to site 																																																												
Geological interpretation	<ul style="list-style-type: none"> Sheeted vein and structural deformation along bedding planes with oblique structures outside of the resource area. Validated by mining. R3D has also completed structural mapping of the exposures on the open cut walls – but this is east of the resource area. The CPs also traversed the pit floor in the supergene zone and noted significant copper mineralisation. As part of the current site environmental management the surface was ripped and also limed. Surficially malachite is now widespread but shallow in the exposed section of the supergene zone. 																																																												
Dimensions	<ul style="list-style-type: none"> 380m by 20m by 150m indicated and inferred mineral resource 																																																												
Estimation and modelling techniques	<ul style="list-style-type: none"> A Mineralised Envelope was modelled using supergene from geology logs as 2022 drilling programme. The 3D wireframe file of the single domain was created in Vulcan and snapped to the drill holes 68 drillholes were used to inform the MRE <table border="1" data-bbox="614 969 1418 1294"> <thead> <tr> <th>Hole Type</th> <th>Drill hole Series</th> <th>Drill hole Number</th> <th>Resource Metres</th> </tr> </thead> <tbody> <tr> <td>RC</td> <td>NARC</td> <td>6</td> <td>155.5</td> </tr> <tr> <td>RC</td> <td>TRC</td> <td>58</td> <td>1,292.2</td> </tr> <tr> <td>DD</td> <td>TDH</td> <td>1</td> <td>27.7</td> </tr> <tr> <td>DD</td> <td>TRDH</td> <td>3</td> <td>78.9</td> </tr> <tr> <td>Total</td> <td></td> <td>68</td> <td>1554.3</td> </tr> </tbody> </table> <ul style="list-style-type: none"> A Vulcan block model was created by BMS for the MRE with a block size of 5 m NW-SE × 5 m NE-SW × 5 m vertical with sub-cells of 1 m × 1 m × 1 m. The block model was constrained to a single domain. Parameters of the model are shown below. Copper was modelled through the block model. <table border="1" data-bbox="614 1487 1418 1769"> <thead> <tr> <th>Model Name</th> <th>X</th> <th>Y</th> <th>Z</th> </tr> </thead> <tbody> <tr> <td>Origin</td> <td>209000</td> <td>8125300</td> <td>400</td> </tr> <tr> <td>Offset</td> <td>-600</td> <td>-300</td> <td>-600</td> </tr> <tr> <td>Offset</td> <td>-100</td> <td>100</td> <td>0</td> </tr> <tr> <td>Block Size (sub-blocks)</td> <td>5 (1)</td> <td>5 (1)</td> <td>5 (1)</td> </tr> </tbody> </table> <table border="1" data-bbox="614 1803 1418 2094"> <thead> <tr> <th>Variables</th> <th>Description</th> </tr> </thead> <tbody> <tr> <td>Cu</td> <td>unCut Grade - reportable</td> </tr> <tr> <td>Min_Domain</td> <td>Mineralisation domain</td> </tr> <tr> <td>Avg_dist</td> <td>Average distance to samples</td> </tr> <tr> <td>zone</td> <td>Insitu, mined etc</td> </tr> <tr> <td>holecount</td> <td>Number of drill holes</td> </tr> <tr> <td>Numsam</td> <td>Number of Samples used for Block grade interpolation</td> </tr> <tr> <td>BD</td> <td>Bulk Density</td> </tr> </tbody> </table>	Hole Type	Drill hole Series	Drill hole Number	Resource Metres	RC	NARC	6	155.5	RC	TRC	58	1,292.2	DD	TDH	1	27.7	DD	TRDH	3	78.9	Total		68	1554.3	Model Name	X	Y	Z	Origin	209000	8125300	400	Offset	-600	-300	-600	Offset	-100	100	0	Block Size (sub-blocks)	5 (1)	5 (1)	5 (1)	Variables	Description	Cu	unCut Grade - reportable	Min_Domain	Mineralisation domain	Avg_dist	Average distance to samples	zone	Insitu, mined etc	holecount	Number of drill holes	Numsam	Number of Samples used for Block grade interpolation	BD	Bulk Density
Hole Type	Drill hole Series	Drill hole Number	Resource Metres																																																										
RC	NARC	6	155.5																																																										
RC	TRC	58	1,292.2																																																										
DD	TDH	1	27.7																																																										
DD	TRDH	3	78.9																																																										
Total		68	1554.3																																																										
Model Name	X	Y	Z																																																										
Origin	209000	8125300	400																																																										
Offset	-600	-300	-600																																																										
Offset	-100	100	0																																																										
Block Size (sub-blocks)	5 (1)	5 (1)	5 (1)																																																										
Variables	Description																																																												
Cu	unCut Grade - reportable																																																												
Min_Domain	Mineralisation domain																																																												
Avg_dist	Average distance to samples																																																												
zone	Insitu, mined etc																																																												
holecount	Number of drill holes																																																												
Numsam	Number of Samples used for Block grade interpolation																																																												
BD	Bulk Density																																																												

Criteria	Commentary																																
	<table border="1" style="margin-bottom: 10px;"> <tr> <td>Mined</td> <td>Mined or Insitu</td> </tr> <tr> <td>ox</td> <td>oxidation</td> </tr> <tr> <td></td> <td></td> </tr> </table> <ul style="list-style-type: none"> • Inverse Distance (IVD) interpolation with an oriented ellipsoid search was used to estimate Cu and Au grade in the single domains for fresh rock as a check block model • A first pass long axis radius of 29 m with a minimum number of informing samples of 10 was used. The major axis radius was increased to 58 m for the second pass. A third pass with an increased search radius of 1,032 m and a decrease in the minimum number of samples from 8 to 2 was required to fill blocks within the extremities of the resource wireframes (see tables below) • - ~30% of the resource volume filled in the 1st pass, ~60% in the 2nd pass and the remainder in the 3rd pass for Tartana Creek • No high-grade copper cuts were applied to Tartana Creek or Tartana deposits • A bulk density value of 2.65 t/m³ was applied to Tartana Supergene • Search and estimation parameters below <table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>Pass</th> <th>Min Sample</th> <th>Max Sample</th> <th>Distance (m)</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>8</td> <td>40</td> <td>29</td> </tr> <tr> <td>2</td> <td>8</td> <td>40</td> <td>59</td> </tr> <tr> <td>3</td> <td>2</td> <td>40</td> <td>1032</td> </tr> </tbody> </table> <table border="1" style="margin-bottom: 10px;"> <thead> <tr> <th>Domain</th> <th>Strike</th> <th>Plunge</th> <th>Dip</th> <th>Discretisation</th> </tr> </thead> <tbody> <tr> <td>700</td> <td>240</td> <td>0.5</td> <td>0.5</td> <td>3x:3y:3z</td> </tr> </tbody> </table> <ul style="list-style-type: none"> • To check that the interpolation of the Block Model correctly honoured the drilling data and domain wireframes, BMS carried out a validation of the estimate using the following procedures: <ul style="list-style-type: none"> - Comparison of volumes defined by the domain wireframes and the associated Block Model - A comparison of the composited sample grade statistics with Block Model grade statistics for the single domain - Visual sectional comparison of drill hole grades versus estimated block grades. • The volumes were almost identical. The overall volume difference is less than 1%. BMS considered this to be an acceptable result. • A visual section comparison was undertaken of drill hole grades versus estimated block grades, which revealed satisfactory comparable grades. 	Mined	Mined or Insitu	ox	oxidation			Pass	Min Sample	Max Sample	Distance (m)	1	8	40	29	2	8	40	59	3	2	40	1032	Domain	Strike	Plunge	Dip	Discretisation	700	240	0.5	0.5	3x:3y:3z
Mined	Mined or Insitu																																
ox	oxidation																																
Pass	Min Sample	Max Sample	Distance (m)																														
1	8	40	29																														
2	8	40	59																														
3	2	40	1032																														
Domain	Strike	Plunge	Dip	Discretisation																													
700	240	0.5	0.5	3x:3y:3z																													
Moisture	<ul style="list-style-type: none"> • Not applicable. Supergene zone sits in the wet and dry season fluctuation zone. No recovery issues were noted in the RC drilling. 																																
Cut-off parameters	<ul style="list-style-type: none"> • Supergene zone. All Majestic holes that contributed to the Tartana Hills inferred resource were evaluated on: <ul style="list-style-type: none"> ○ Upper cut off - location in the weathering X water table taken as 5-10% oxidation. ○ Lower cut off – based on presence of relatively untarnished sulphide species (pyrite and chalcopyrite). Or below grade. 																																

Criteria	Commentary
	<ul style="list-style-type: none"> ○ Within the horizon the presence of red ochre, supergene copper minerals such as chalcocite, heavily tarnished primary sulphides or unexplained copper grades. Tartana is a low carbonate deposit and traditional copper oxide minerals such as azurite and malachite are rare. ○ In all, 14 Majestic RC were included in the modelling. ○ No minimum thickness was applied to the supergene horizon as the upper surface is exposed in the pit. ○ The same 3 X 3 m block was used in the X and y axis on 50m cross section spacing. ○ Anisotropic IDP with an inverse power of 2. A search ellipse with a major axis of 40m and minor axis skewed 85 deg (Exact Majestic specifications) ● Tartana completed the same exercise using the identical specifications. ● Tartana also completed an additional exercise but adding in six Solomon Copper RC holes. This exercise gave a tonnes and grade figure within five percent of the previous model but was used as the final figure as it gave a more robust verification as the additional holes were infill between previous 50m line spacing.
<i>Mining factors or assumptions</i>	<ul style="list-style-type: none"> ● Already partly mined. Solomon Copper mined additional ore to the NE of the Majestic inferred resource that did not have sufficient drill density at the time. Mine blocks were selected by a combination of pXRF sampling of exposed faces (wall and floor) plus blast hole assaying (pXRF plus laboratory assaying)
<i>Metallurgical factors or assumptions</i>	<ul style="list-style-type: none"> ● Fully tested in several methods. ● Majestic completed extensive sampling using the RC product testing all three zones. Results indicated excellent recoveries from the oxide and supergene zones with low acid consumption. ● Solomon Copper mined only oxide ore due to their treatment methodology in relation to the production of copper pentasulphate. ● Tartana Resources have reviewed the Majestic testwork and have developed an upgraded pentasulphate circuit that utilizes both oxide and supergene ore.
<i>Environmental factors or assumptions</i>	<ul style="list-style-type: none"> ● Fully operational mine with granted Environmental Authority
<i>Bulk density</i>	<ul style="list-style-type: none"> ● Measured and tested (picometer). Very little variance so a density of 2.65 was used for all Majestic calculations – 2.65 was again used by R3D. ● Mined
<i>Classification</i>	<ul style="list-style-type: none"> ● Inferred Resource. ● Given the supergene horizon is exposed in the northern pit floor, has no strip ratio and has proven metallurgy; a resource/reserve upgrade only required shallow drill testing. ● 2022 Program – Indicated and inferred resource ● Mineral Resource Estimates have been classified as Inferred according to JORC Code 2012 guidelines based on the drilling density, grade continuity and level of geological understanding ● Grade-tonnage curves representing all blocks in the model for copper are shown above
<i>Audits or reviews</i>	<ul style="list-style-type: none"> ● Multiple audits whilst in production
<i>Discussion of relative accuracy/ confidence</i>	<ul style="list-style-type: none"> ● Drill density sufficient for inferred. ● Sampling of 2 adits as well as costeans did increase the confidence factors in the original resource estimate. ● Confidence is also enhanced due to exposure of the resource in the

Criteria	Commentary
	<p>northern portion of the Tartana Hill open cut.</p> <ul style="list-style-type: none"> • The Tartana deposit has been tested with high-quality drilling, sampling and assaying. Drilling and logging have defined a mineralised envelope to provide an accurate volume. The relative accuracy of the MRE is reflected in the reporting of the Mineral Resource. The Mineral Resource has been classified as an Inferred Mineral Resource as per the JORC Code (2012) guidelines • These MREs are global in nature until relevant tonnages and relevant technical and economic evaluations are required and have been undertaken

References:

Saunders, W.T., 1995. Majestic Resources NL. Ore Reserve and Exploration Drilling Programme.

Saunders, W.T., 1995. Majestic Resources NL. Tartana Copper Project. Progress Report on Exploration and Reverse Circulation Drilling Programme.

Frank, P.H., 1995. Majestic Resources NL. Tartana Copper Project Resource Estimate, Exploration Programme and Budget.

Electrometals Mining Limited., 1997. Majestic Resources NL./ Tartana Project Final Report Copper Leach Programme.

Saunders, W.T., 1990. Outokumpu Exploration PL. Tartana Copper Prospect, Far North Queensland.

Saunders, W.T., 1991. Outokumpu Exploration PL. Tartana Copper Prospect, 1990 Diamond Drilling Programme.

Jones, B.H. 1971. Carpentaria Exploration Company PL. Technical Report No 205. Final Report Authority to Prospect A to P 340M Tartana Extended

Duck, B.H., 2007. Solomon Mines PL. Tartana Copper Project Mining Leases 5312, 4819, 4820, Chillagoe District, North Queensland. Report on RC Drilling Program November 2006.

Stevens, M., 2006. Stevens and Associates. Tartana Copper Project Mining Leases 5312, 4819, 4820, Chillagoe District, North Queensland. Review of Exploration Data and Assessment of Resource Potential.