

27 October 2022

13.2Mt CuEq Resource at Lone Star Copper-Gold Project

- Lone Star's maiden Mineral Resource returns 13.2Mt @ 0.42% Cu & 0.23 g/t Au for 0.58% CuEq.
- The independently estimated Mineral Resource (categorised as 73% Indicated and 27% Inferred), extends from surface and remains open at depth.
- Within the Global Mineral Resource sits a high-grade portion of 1.25Mt @ 1.54% Cu & 0.67 g/t Au for 2.03% CuEq.
- Pit optimisation studies highlight attractive open pit mining scenarios with the underground potential to be tested with further drilling to commence in December.
- High-grade mineralisation is open at depth and will be targeted to test for potential extensions and underground resources.

Marquee Resources Limited ("**Marquee**" or "the Company") (ASX:MQR) is pleased to announce the maiden Mineral Resource Estimate for the Lone Star Copper-Gold Project, Washington State, USA ("Lone Star" or "The Project"). The Mineral Resource is reported inside a conceptual pit shell at an internal cut-off grade of 0.112% copper equivalent. Based on these criteria, the Lone Star deposit contains an Indicated Mineral Resource of 9.7 Mt at 0.45% copper and 0.24 g/t gold and an Inferred Mineral Resource of 3.5 Mt at 0.31% copper and 0.20 g/t gold. The Mineral Resource is presented below in Table 1.

Executive Chairman Comment:

Marquee Executive Chairman, Mr. Charles Thomas, commented: "The completion of the Mineral Resource Estimate has highlighted the excellent opportunity that the Lone Star deposit presents. The result exceeded our expectations on tonnage and identifying in excess of 1.2Mt of high-grade material, which is open at depth, is a great opportunity to expand the resource as we look forward to the next round of drilling.

"This is a great start to our efforts at Lone Star and we look forward to keeping the market updated with progress as we move into the next stage of exploration at Lone Star."

Lone Star Mineral Resource Estimate

Mining Plus Pty Ltd (Mining Plus) was requested by Marquee Resources Ltd (Marquee) to prepare an independent Mineral Resource Estimate for the Lone Star Copper-Gold Project in Washington State, USA. The Mineral Resource Estimate is stated in accordance with the provisions of the JORC Code (2012). The Competent Person is Mr. Brian Hartman, P.Geo., owner and Principal Geologist of Ridge Geoscience, LLC as a subcontractor to Mining Plus. Mr. Hartman has more than 5 years' experience in the estimation and reporting of Mineral Resources for gold and base metals mineralisation throughout the USA and internationally.

The Lone Star Mineral Resource estimate was completed using Leapfrog Geo version 2021.2.4 software in UTM coordinates. The block model was constrained by interpreted three-dimensional wireframes of the lithologies and mineralised horizons. Copper and gold were estimated into blocks using Inverse Distance



Weighting Squared interpolation.

The Mineral Resource is reported inside of a conceptual pit shell at an internal cutoff grade of 0.112% copper equivalent. Based on these criteria, the Lone Star deposit contains an Indicated Mineral Resource of 9.7 Mt at 0.45% copper and 0.24 g/t gold and an Inferred Mineral Resource of 3.5 Mt at 0.31% copper and 0.20 g/t gold. The Mineral Resource is presented below in Table 1.

Classification	Tonnes (Mt)	CuEq%	Cu%	Au g/t
Indicated	9.7	0.62	0.45	0.24
Inferred	3.5	0.45	0.31	0.20
Total	13.2	0.58	0.42	0.23

Table 1 - Lone Star Mineral Resource at a 0.112% CuEq Cut-off

Notes:

- 1. All Mineral Resources figures reported in the table above represent estimates as of 7 October 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.
- 2. Mineral Resources are reported on a dry in-situ basis at a 0.112% CuEq cut-off. Reporting cut-off grade was based on an economic pit shell assuming prices of US\$3.25/lb and US\$1,600/oz for copper and gold, respectively, assumed metallurgical recoveries of 90% and 90% respectively, mining costs of US\$2.00/tonne and processing costs of US\$7.00/tonne. An internal cut-off grade of 0.112% copper equivalent is needed to overcome processing costs.
- 3. Average SG values were assigned based on copper grade zones and/or lithologies as follows: waste = 2.74, low-grade zone = 2.80, high-grade zone = 3.05, overburden = 1.90.



The following is a summary of material information used to estimate the Mineral Resource, as required by Listing Rule 5.8.1 and JORC 2012 Reporting Guidelines.

1.1 Drilling & Database

The drill hole database used for the resource model included:

- Collar surveys
- Down hole surveys
- Assay information
- Density information
- Lithology information

A total of 60 drill holes were included in the modern Lone Star database, of which 13 were drilled in 2006 and 47 were drilled in 2021-2022. Two holes drilled in 2006 encountered drilling problems and were subsequently twinned. The two original holes were not used in the resource estimate. All 58 remaining drill holes used in the resource estimate are diamond drill holes, with a total combined length of approximately 8,880 m. Assays are available from 56 of the 58 drill holes. Two short drill holes in the north-western part of the deposit were unmineralized and not sampled. Unsampled portions of all holes were assumed to be barren, and both copper and gold grades are set to zero.

An additional 239 holes were drilled on the property between 1908 and 1990. These historic drill holes were <u>not</u> used in the mineral resource estimate because after investigating them, it was concluded they lack proper data verification and validation demanded by modern industry standards.

1.2 Geological Interpretation, Modelling and Grade Shells

Logged lithologies were simplified into the following main groups:

- Overburden
- Unmineralized upper-plate volcanics and volcaniclastics
- Unmineralized andesite
- Mineralized rhyolite and serpentinite package
- Unmineralized footwall andesite
- Weakly mineralized footwall serpentinite (only occurs in the northwest)
- Tertiary dike

Stratigraphy is vertically offset in several areas, most prominently by an arcuate fault or caldera collapse feature that down dropped the south-eastern portion of the deposit relative to the northern area (Figure 1). This down-dropped area contains the thickest package of mineralisation intersected to date. It appears that the northern and western area of mineralisation has largely been eroded away. Smaller magnitude offsets are observed in the northern part of the deposit. The offsets have resulted in the geological model being broken into five separate structural zones (Figure 2). Logged lithologies were used to interpret three-dimensional wireframe solids for each of the groups above within each structural zone, except for the scattered tertiary dikes.

The main mineralized zones are hosted in a package of dominantly rhyolite with lesser serpentinite, that gently dips towards the southeast at 20-25 degrees. These two lithologies were ultimately grouped together for the purposes of resource estimation after analysis of grade distributions revealed no material differences in grade occurrence or intensities within either lithology.



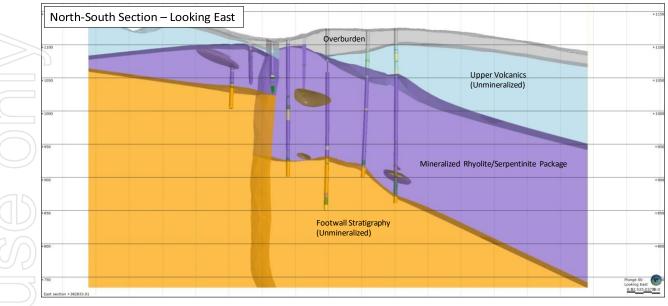
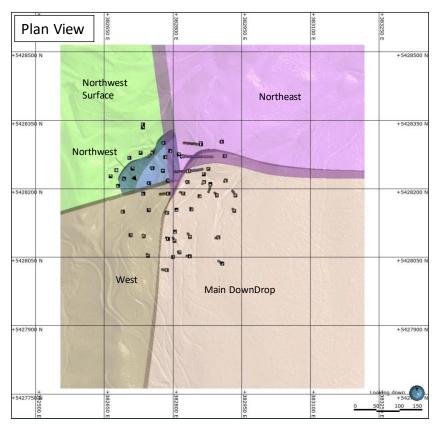


Figure 1 - Representative Section Showing Major Lithologies

Figure 2 - Structural Zones



Copper and gold assay statistics, histograms, and log probability plots were reviewed. A low-grade copper zone was defined as >0.18% Cu, with an internal high-grade zone defined as >1.0% Cu. A low-grade gold zone was defined as 0.05 g/t Au with an internal high-grade zone defined as >1.0 g/t Au. These grade shells were generated using 2 m composites within the mineralised rhyolite/serpentinite package, an indicator RBF



interpolant values above or below the cutoff, and a probability of 50%. The resultant shapes were manually adjusted as needed to better fit the interpretation. The process was repeated for each structural zone using a unique search orientation for each area. All grade zone solids and eventual grade estimates were clipped to the rhyolite/serpentinite package and overburden surfaces. Two representative sections showing the copper grade domains are shown in Figure 3 and Figure 4 below. A 3D perspective view of the copper grade domains is shown in Figure 5.

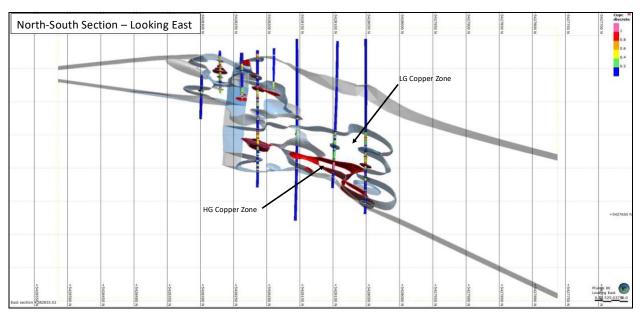
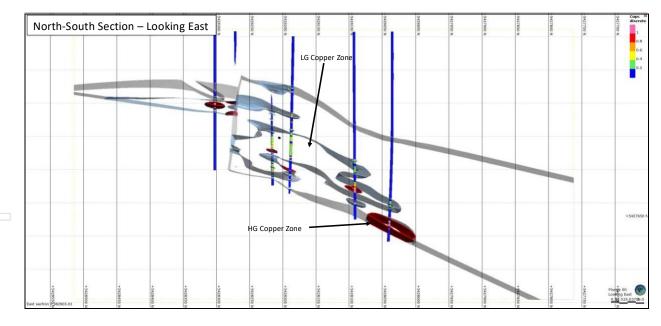
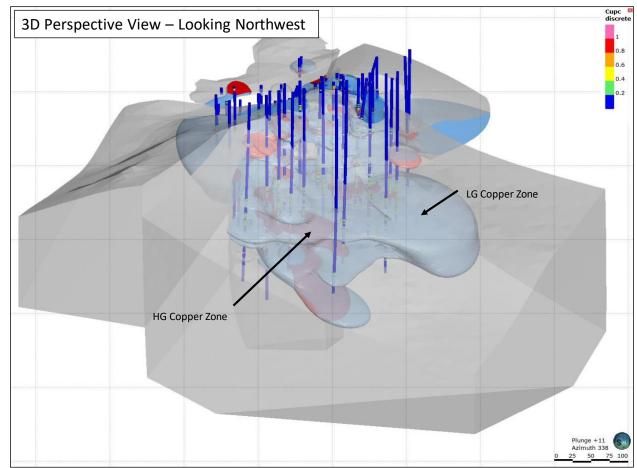


Figure 3 - Representative Section Showing Copper Grade Domains

Figure 4 – Representative Section Showing Copper Grade Domains









1.3 Bulk Density

SG measurements from 2006 drilling were used to generate a weak correlation with copper grade. This correlation was used to calculate an average SG for waste (2.74), low-grade (2.80), and high-grade (3.05) zones. An SG of 1.9 was assumed for unconsolidated overburden. The SG values are considered reasonable for this level of study, but more work needs to be completed to better understand the variability in densities to more accurately understand the variability in ore and waste tonnes.

1.4 Assay Statistics

Data analysis was performed by creating histogram and cumulative probability plots of the copper and gold data within each structural zone. Assay statistics are shown in Table 2 and Table 3 below.



Domain	Zone	Count	Min (%)	Max (%)	Mean (%)	SD	CV
	Main Downdrop	183	0.01	24.61	2.12	2.70	1.28
	Northeast	25	0.03	11.94	2.76	2.81	1.02
HG	Northwest	2	1.15	3.73	2.44	1.83	0.75
	NW Surface	9	0.02	4.04	1.63	1.33	0.81
	West	10	0.13	5.42	1.63	1.37	0.84
	Main Downdrop	1143	0.00	17.79	0.49	0.63	1.29
	Northeast	172	0.01	2.88	0.46	0.37	0.80
LG	Northwest	44	0.01	1.90	0.45	0.39	0.87
	NW Surface	21	0.01	1.34	0.44	0.42	0.95
	West	72	0.00	2.05	0.47	0.40	0.85
	Main Downdrop	618	0.00	4.06	0.05	0.16	2.96
	Northeast	81	0.00	0.44	0.06	0.07	1.09
Outside	Northwest	213	0.00	2.41	0.02	0.08	4.16
	NW Surface	26	0.00	0.38	0.09	0.08	0.88
	West	34	0.00	0.35	0.02	0.06	2.85

Table 2 - Lone Star Copper Assay Statistics within Copper Grade Domains

Table 3 - Lone Star Gold Assay Statistics within Gold Grade Domains

Domain	Zone	Count	Min (g/t)	Max (g/t)	Mean (g/t)	SD	CV
	Main Downdrop	59	0.03	136.00	4.49	12.49	2.78
	Northeast	22	0.18	11.71	3.37	3.71	1.10
HG	Northwest	-	-	-	-	-	-
	NW Surface	5	0.05	3.29	1.44	1.61	1.11
	West	9	0.02	4.27	1.57	1.53	0.97
	Main Downdrop	1436	0.00	9.87	0.25	0.43	1.74
	Northeast	142	0.01	2.01	0.20	0.23	1.16
LG	Northwest	59	0.02	1.40	0.17	0.25	1.44
	NW Surface	48	0.01	2.11	0.29	0.44	1.53
	West	88	0.00	3.74	0.27	0.40	1.51
	Main Downdrop	449	0.00	14.79	0.02	0.30	14.14
	Northeast	114	0.00	0.23	0.03	0.02	0.91
Outside	Northwest	199	0.00	0.40	0.01	0.02	3.15
	NW Surface	3	0.00	0.14	0.05	0.09	1.66
	West	19	0.00	0.14	0.00	0.02	4.14

1.5 Composites

Copper and gold assays were weight-averaged into 2m composites across the individual grade domains. Residual segments shorter than 1m have their length distributed among the other intervals. Table 4 and Table 5 show the composite summary statistics.



Domain	Zone	Count	Min (%)	Max (%)	Mean (%)	SD	CV
201111	Main Downdrop	118	0.20	17.67	2.06	1.93	0.94
		-					
	Northeast	19	0.87	6.94	2.56	1.76	0.69
HG	Northwest	2	1.15	2.99	2.23	1.30	0.58
	NW Surface	4	1.24	1.89	1.55	0.28	0.18
	West	7	1.11	2.58	1.65	0.61	0.37
	Main Downdrop	766	0.01	6.83	0.48	0.42	0.87
	Northeast	106	0.17	1.17	0.45	0.22	0.49
LG	Northwest	31	0.04	0.94	0.45	0.25	0.56
	NW Surface	7	0.12	0.75	0.45	0.22	0.50
	West	47	0.09	1.05	0.47	0.22	0.47
	Main Downdrop	917	0.00	2.65	0.05	0.11	2.23
	Northeast	64	0.00	0.19	0.07	0.05	0.81
Outside	Northwest	374	0.00	0.70	0.02	0.05	2.51
	NW Surface	20	0.00	0.49	0.07	0.12	1.71
	West	75	0.00	0.18	0.03	0.05	1.92

Table 4 - Lone Star Copper Composite Statistics within Copper Grade Domains

Table 5 - Lone Star Gold Composite Statistics within Gold Grade Domains

Domain	Zone	Count	Min	Max	Mean	SD	CV
	Main Downdrop	39	0.08	30.84	4.48	6.32	1.41
	Northeast	15	1.26	9.57	3.21	3.71	0.92
HG	Northwest	-	-	-	-	-	-
	NW Surface	2	1.03	2.18	1.67	0.81	0.48
	West	5	1.06	2.50	1.65	0.63	0.38
	Main Downdrop	956	0.00	3.03	0.25	0.29	1.19
	Northeast	91	0.05	1.90	0.23	0.31	1.35
LG	Northwest	52	0.05	0.96	0.18	0.18	1.01
	NW Surface	18	0.03	0.70	0.25	0.21	0.85
	West	60	0.06	1.37	0.26	0.23	0.89
	Main Downdrop	816	0.00	3.78	0.02	0.16	7.70
	Northeast	83	0.00	0.06	0.03	0.02	0.59
Outside	Northwest	354	0.00	0.16	0.01	0.01	2.01
	NW Surface	11	0.00	0.14	0.01	0.02	2.83
	West	64	0.00	0.04	0.00	0.01	2.31

1.6 High-Grade Composite Restriction

Composited data was used to generate cumulative probability and histogram plots. A review of the results showed that some high-grade outliers were spatially discontinuous from the remainder of the data set and that there was justification for restricting their range of influence. Composite values above the restricted value were limited to an influence range of 30% of the primary search distances, ranging from 15-30 m. Beyond that distance, the high-grade composites were capped to the restricted value when used to estimate grade. A summary of the restriction is shown below in Table 6.



		Three	shold	% Composite	es Restricted
Domain	Zone	Cu %	Au g/t	Cu	Au
	Main Downdrop	7.00	12.00	1.7%	7.7%
	Northeast		6.00		20.0%
HG	Northwest				
	NW Surface				
	West				
	Main Downdrop	1.30	0.83	2.6%	4.8%
	Northeast		0.50		6.6%
LG	Northwest		0.60		1.9%
	NW Surface				
	West		0.80		3.3%
	Main Downdrop	0.70	0.05	0.4%	3.7%
	Northeast				
Outside	Northwest	0.20		0.5%	
	NW Surface		0.01		9.1%
	West		0.005		20.3%

Table 6 – Lone Star High-Grade Composite Restriction

1.7 Spatial Analysis

Variogram models were completed on the low-grade domains within the main down dropped block to determine the orientation and spatial continuity of the composited copper and gold values. Nested spherical models were fit to the directional variograms. A summary of the results is shown in Table 7.

	Rotation			Structure 1				Structure 2				
Domain	Dip	Dip Azi	Pitch	Nugget	Sill	Major (m)	Semi-Major (m)	Minor (m)	Sill	Major (m)	Semi-Major (m)	Minor (m)
Main Downdrop – LG Cu	27	130	113	0.4	0.38	35	44	26	0.23	75	77	60
Main Downdrop – LG Au	30	130	65	0.25	0.25	58	50	28	0.50	93	93	45

Due to the smaller number of composites within other structural zones, variography results were poor. It was ultimately decided to utilise Inverse Distance Weighting for all structural zones, using the variography results as a guide for ellipse orientation and search ranges. When used alongside the nested grade domains and outlier restrictions, IDW results provide a globally unbiased and adequate grade representation for this level of study. Further variography analysis and use of Ordinary Kriging is recommended after additional drilling has been completed.

1.8 Model Setup

The block model was created using Leapfrog Edge version 2021.2.4 in UTM coordinates. The model is not rotated. Table 8 provides the block model limits and size. The parent block size is 5 m x 5 m x 2 m, and blocks were further sub-blocked to a minimum of 1.25 m x 1.25 m x 0.50 m along the lithology and grade domain boundaries.



		=	
Blocks	Х	Y	Z
Parent Block Size (m)	5	5	2
Sub-Block Count	4	4	4
Minimum Size (m)	1.25	1.25	0.5
Extents	х	Y	Z
Base Point	382560	5427765	1180
Boundary Size (m)	655	745	448
Size in Blocks	131	149	224

Table 8 - Lone Star Block Model Setup

1.9 Interpolation Plan

The interpolation plan for the Lone Star Mineral Resource estimation model was completed using Inverse Distance Squared Weighting (IDW) rhyolite/serpentinite package within five structural zones. The estimation used 2m composites. Composite sharing across grade domain boundaries (high-grade, low-grade, and outside) was not allowed. All interpolations used a search orientation based on the geometry of the domains within each structural zone. The search parameters are shown in Table 9 below.

				E	llipsoid Ranges (n	n)	Ellipsoid Directions		N	Number of Samples		Outlier Restrictions		
Zone	Numeric Values	Grade Domain	Pass	Maximum	Intermediate	Minimum	Dip	Dip Azimuth	Pitch	Min	Max	Max per DH	Distance (%)	Threshold
		Outside	1 2	100 200	100 200	50 100	32 32	130 130	65 65	5 3	14 14	2	30 15	0.05
	Au	HG	1	40	40	20	32	130	65	1	14	2	30	12
		LG	1	100	100	50	32	130	65	5	14	2	20	0.83
Main		10	2	200	200	100	32	130	65	3	14	2	10	0.83
Downdrop		Outside	1 2	80 160	80 160	30 60	32 32	130 130	113 113	5 3	14 14	2 2	30 15	0.7 0.7
	Cu	HG	1	50	50	20	32	130	113	2	14	2	30	7
		-	2	50 80	50 80	20 30	32 32	130	113 113	1	14 14	2	15 30	7
		LG	2	160	160	60	32	130	113	3	14	2	15	1.5
			1	100	100	50	16	120	87	5	14	2		
		Outside	2	200	200	100	16	120	87	3	14	2		
	Au	HG	1	60	60	30	16	120	87	1	14	2	30	6
		LG	1	100	100	50	16	120	87	5	14	2	30	0.5
		20	2	200	200	100	16	120	87	3	14	2	15	0.5
Northeast		Outside	1	80	80	30	16	120	87	5	14	2		
			2	160	160	60	16	120	87	3	14	2		
	Cu	HG	1 2	60 60	60 60	30 30	16 16	120 120	87 87	2	14 14	2		
			1	80	80	30	10	120	87	5	14	2		
		LG	2	160	160	60	16	120	87	3	14	2		
		0.4414	1	100	100	50	9	169	95	5	14	2		
	Au	Outside	2	200	200	100	9	169	95	3	14	2		
	Au	LG	1	100	100	50	9	169	95	5	14	2	30	0.6
		50	2	200	200	100	9	169	95	3	14	2	15	0.6
Northwest		Outside	1	80	80	30	9	169	95	5	14	2	30	0.2
	C .		2	160 50	160 50	60 20	9	169 169	95 95	3	14 14	2	15	0.2
	Cu	HG		50 80	50 80	30	9	169	95		14			
		LG	1 2	160	160	60	9	169	95 95	5	14	2 2		
	1	Outside	1	100	100	50	20	163	90	5	14	2	30	0.01
			2	200	200	100	20	163	90	3	14	2	15	0.01
	Au	HG	1	50 100	50 100	25 50	20 20	163 163	90 90	1	14 14	2		
		LG	1 2	200	200	100	20	163	90 90	5	14 14	2		
Northwest			1	80	80	30	20	163	90	5	14	2		
Surface		Outside	2	160	160	60	20	163	90	3	14	2		
	C .		1	40	40	20	20	163	90	2	14	2		
	Cu	HG	2	40	40	20	20	163	90	1	14	2		
		LG	1	80	80	30	20	163	90	5	14	2		
		20	2	160	160	60	20	163	90	2	14	2		
		Outside	1	100	100	50	27	165	92	5	14	2	30	0.005
	Au	HG	2	200 40	200 40	100 20	27 27	165 165	92 92	3	14 14	2	15	0.005
	- Cu		1	100	100	50	27	165	92	5	14	2	30	0.8
		LG	2	200	200	100	27	165	92	3	14	2	15	0.8
West	-		1	80	80	30	27	165	92	5	14	2		
		Outside	2	160	160	60	27	165	92	3	14	2		
	Cu	HG	1	50	50	20	27	165	92	2	14	2		
	cu	ng	2	50	50	20	27	165	92	1	14	2		
		LG	1	80	80	30	27	165	92	5	14	2		
	1	-	2	160	160	60	27	165	92	3	14	2		

Table 9 Search Parameters



1.10 Model Validation

The Lone Star block model was validated by the following methods:

- Visual comparison of color-coded block grades to drill hole composite grades in sectional views
- Global comparison of a Nearest Neighbor (NN) model with the IDW model
- Swath plot analysis comparing NN and IDW grades

The visual comparison of block model grades with composite grades for copper and gold show a good correlation between values. Figure 6 shows color-coded block model grades with the drill hole grades. The visual comparison shows a good correlation between values and no large discrepancies are apparent.

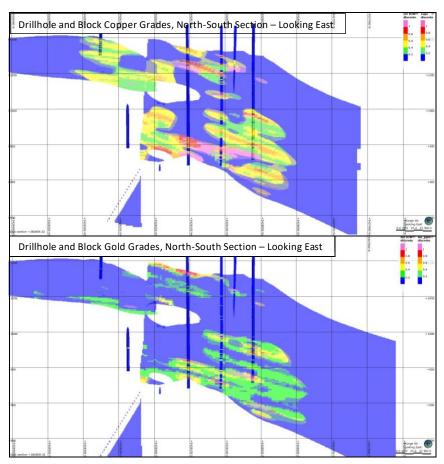


Figure 6 - Representative Section Showing Drillhole and Block Cu and Au Grades

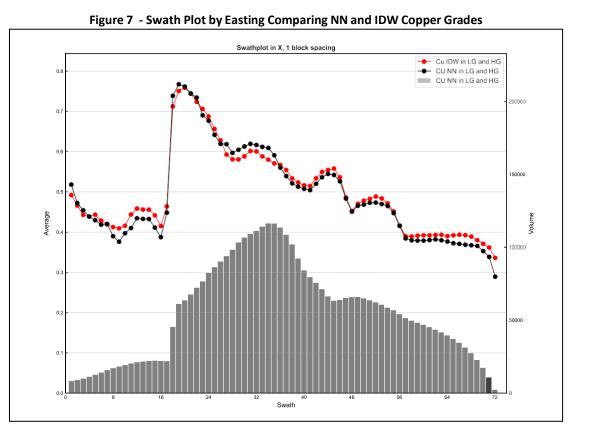
Mining Plus generated a NN model for copper and gold to serve as a check against the resource model. The NN interpolation method simply assigns a block the same grade as its closest composite. These models are intended to represent a theoretical unbiased estimate of the average grade when no cut-off grade is imposed and is a good basis for checking performance of different estimation methods. The NN model utilized the same search criteria as the OK model except uses a single 2 m composite to estimate a block. A comparison of NN and IDW grades was made for all LG and HG domain blocks at a zero cut-off and is summarized below in Table 10. Copper and gold grades compare well. The NN gold grades are slightly higher due to the high-grade restriction that was applied to the IDW estimates.



Method	Cu %	Au g/t
NN	0.54	0.27
IDW	0.55	0.25

Table 10 - Comparison of NN and IDW Estimates at 0% Cut-off for Combined LG and HG Domains

Swath plots comparing the LG and HG domain NN and IDW grades were generated along northing, easting, and elevation. The swaths demonstrate good comparison between NN and IDW copper and gold grades, indicating that the block model is a reasonable representation of the informing data. Swaths by easting for copper and gold are shown below in Figure 7 and Figure 8, respectively. The trends shown by the composite data (represented by the NN model) are honored by the block model. The comparisons show the effect of the interpolation, which results in smoothing of the block grades, compared to the nearest neighbor grades. Gold IDW grades are lower than NN grades due to the outlier restrictions applied during IDW estimation.





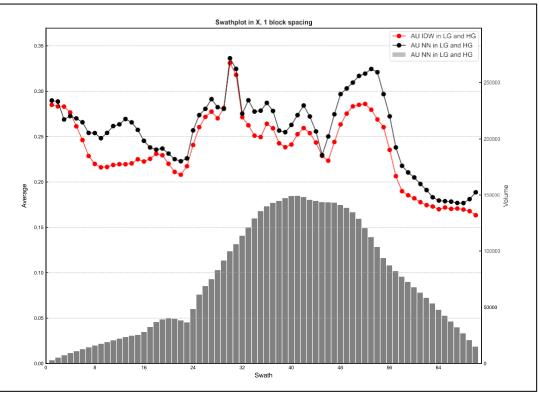


Figure 8 - Swath Plot by Easting Comparing NN and IDW Gold Grades

1.11 Resource Classification

Mineral Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated, and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource.

As an initial step to defining the Mineral Resource classification, Mining Plus used the following guidelines:

- 1. Indicated classification was assigned to blocks that were estimated using at least three drill holes, where the average distance to the closest three drill holes was within approximately 50m.
- 2. Inferred classification was assigned to blocks that used at least two drill holes and the average distance to the closest three drill holes was less than approximately 110m.

After applying the above criteria, the boundaries of the classification were smoothed to ensure spatial continuity and to be consistent with the understanding of the deposit and confidence in the grade estimates. The Resource classification is shown in Figure 9.



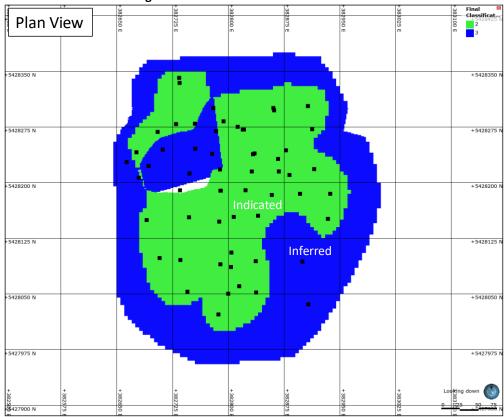


Figure 9 - Lone Star Resource Classification

1.12 Mineral Resource Tabulation

To satisfy 'reasonable prospects for eventual economic extraction', the Mineral Resource is reported inside of a conceptual pit shell at an internal cutoff grade of 0.112% copper equivalent. The pit shell was generated using the criteria shown in Table 11 below.

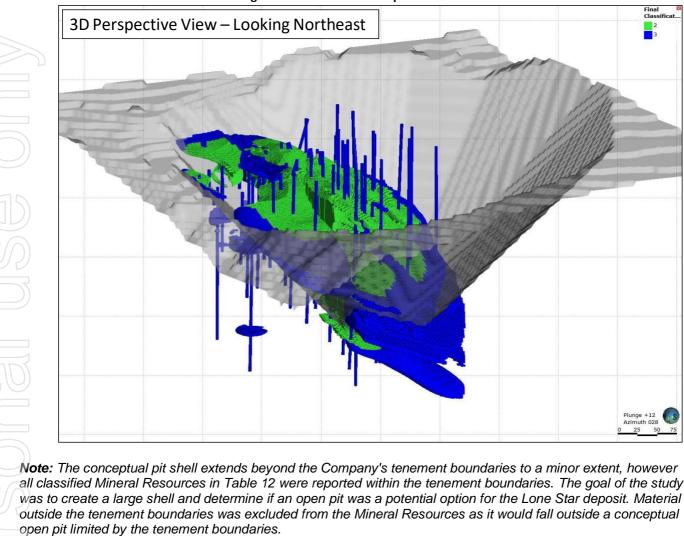
Parameters	Unit	Value
Overall Wall Angle	0	45
Cu Price	USD/lb	\$3.25
Au Price	USD/oz	\$1,600
Mining Cost	USD/t	\$2.00
Processing Cost	USD/t	\$7.00
Cu Selling Cost	USD/lb	\$0.10
Au Selling Cost	USD/oz	\$50
Cu Recovery	%	90%
Au Recovery	%	90%

Table 11 - Parameters Used for Conceptual Pit Shell

The conceptual pit shell is shown in Figure 10 below.







Based on the assumed metal prices, the copper equivalent formula is $CuEq\% = Cu\% + (Au g/t \times 0.7176)$. A copper equivalent of 0.112% is required to overcome the US\$7.00 processing cost. Based on this cutoff within the conceptual pit shell, the Lone Star deposit contains an Indicated Mineral Resource of 9.7 Mt at 0.45% copper and 0.24 g/t gold and an Inferred Mineral Resource of 3.5 Mt at 0.31% copper and 0.20 g/t gold. The Mineral Resource is presented below in Table 12.

Classification	Tonnes (Mt)	CuEq%	Cu%	Au g/t
Indicated	9.7	0.62	0.45	0.24
Inferred	3.5	0.45	0.31	0.20
Total	13.2	0.58	0.42	0.23

Notes:

+12

^{1.} All Mineral Resources figures reported in the table above represent estimates as of 7 October 2022. Mineral Resource estimates are not precise calculations, being dependent on the interpretation of limited information on the location, shape and continuity of the occurrence and on the available sampling results. The totals contained in the above table have been rounded to reflect the relative uncertainty of the estimate. Rounding may cause some computational discrepancies.



Mineral Resources are reported on a dry in-situ basis at a 0.112% CuEq cut-off. Reporting cut-off grade was based on an economic pit shell assuming prices of US\$3.25/lb and US\$1,600/oz for copper and gold, respectively, assumed metallurgical recoveries of 90% and 90% respectively, mining costs ofUS\$2.00/tonne and processing costs of US\$7.00/tonne. An internal cutoff grade of 0.112% copper equivalent is needed to overcome processing costs.
 Average SG values were assigned based on copper grade zones and/or lithologies as follows: waste = 2.74, low-grade zone = 2.80, high-grade zone = 3.05, overburden = 1.90.

1.13 Remaining Block Inventory

The remaining material lying outside of the conceptual pit shell that was preliminarily classified as indicated and inferred totals approximately 2.4 Mt as shown in Table 13 below. This material is not included in the Mineral Resource tabulation.

Classification	Tonnes (Mt)	CuEq%	Cu%	Au g/t
Indicated	0.4	0.41	0.23	0.25
Inferred	2.1	0.48	0.37	0.16
Total	2.4	0.47	0.35	0.17

Table 13 - Remaining Block Inventory Outside of Pit Shell at a 0.112% CuEq Cut-off



Lone Star Copper-Gold Mine (Washington State, USA)

Marquee Resources Ltd recently entered into an earn-in agreement to acquire up to 80% of the Lone Star Copper-Gold Project (see MQR ASX Release dated 5th Nov 2021).

The Lone Star Property and deposit is located in Ferry County, Washington, USA. It is adjacent to Golden Dawn Minerals Inc. Lexington Property on the British Columbia side of the Canada - United States border where Golden Dawn is actively developing the Lexington-Grenoble deposit. Exploration across the Lone Star property to date includes 252 diamond and percussion drill holes for a total of 23,702 metres of drilling.

The Lone Star deposit is interpreted as a series of eight shallow to moderately dipping en-echelon overlapping zones hosted within a dacitic and minor serpentinite unit. Zones are composed of sheeted and stockwork pyrite-chalcopyrite veins, veinlets and disseminations carrying gold.

The 234-hectare Lone Star copper-gold Project is centered on an area 40 kilometres north north-west of Republic, Washington and adjacent to the Canada-USA border. The property is 12 kilometres west south-west of Grand Forks, British Columbia and 12 kilometres south-east of Greenwood, British Columbia, Canada. The claims are currently only accessible from the USA side although in the mid 1970's an active haul road linked the Lone Star deposit north to the Phoenix Mine in Canada.

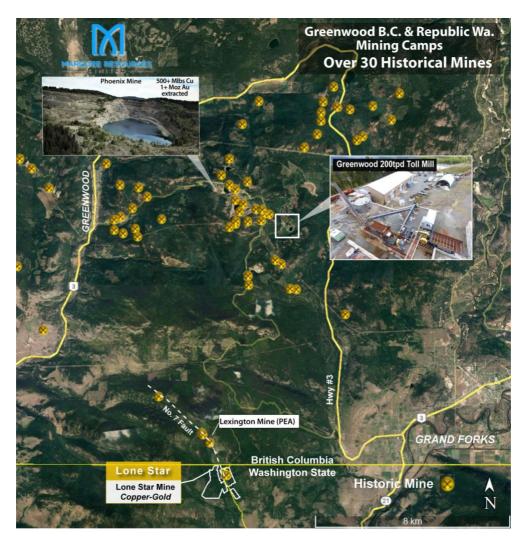


Figure 11 -Lone Star Project Location



COMPETENT PERSON STATEMENT

The information in this report which relates to the Lone Star Mineral Resource Estimate is based on information compiled by Mr. Brian Hartman, P.Geo., who is a Registered Member of the Society for Mining, Metallurgy & Exploration, a Professional Geologist registered with the Association of Professional Geoscientists of Ontario, is the owner and Principal Geologist of Ridge Geoscience LLC and subcontractor to Mining Plus. Mr. Hartman is the Competent Person for this Mineral Resource estimate and has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

The information in this report which relates to Exploration Results is based on information compiled by Dr. James Warren, a Competent Person who is a member of the Australian Institute of Geoscientists. Dr. Warren is the Chief Technical Officer of Marquee Resources Limited. Dr. Warren has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code of Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr. Warren consents to the inclusion in this report of the matters based on the information in the form and context in which it appears.

Forward Looking Statements

Statements contained in this release, particularly those regarding possible or assumed future performance, costs, dividends, production levels or rates, prices, resources, reserves or potential growth of Marquee Resources Limited (ASX: MQR), are, or may be, forward looking statements or statements about the future matters for the purposes of the Corporations Act or any other applicable law. Statements regarding plans with respect to MQR's projects are forward looking statements and can generally be identified by the use of words such as 'project', 'foresee', 'plan', 'expect', 'aim', 'intend', 'anticipate', 'believe', 'estimate', 'may', 'should', 'will' or similar expressions. There can be no assurance that the MQR's plans for its projects will proceed as expected and there can be no assurance of future events which are subject to risk, uncertainties and other actions that may cause MQR's actual results, performance or achievements to differ from those referred to in this document. While the information contained in this document has been prepared in good faith, there can be given no assurance or guarantee that the occurrence of these events referred to in the document will occur as contemplated. Accordingly, to the maximum extent permitted by law, MQR and any of its affiliates and their directors, officers, employees, agents and advisors disclaim any liability whether direct or indirect, express or limited, contractual, tortuous, statutory or otherwise, in respect of, the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and do not make any representation or warranty, express or implied, as to the accuracy, reliability or completeness of the information in this document, or likelihood of fulfilment of any forward-looking statement or any event or results expressed or implied in any forward-looking statement; and disclaim all responsibility and liability for these forward-looking statements (including, without limitation, liability for negligence).

This ASX Release has been approved by the Board of Directors.

harles Thomas

Charles Thomas - Executive Chairman Marquee Resources info@marqueeresources.com.au



JORC Code, 2012 Edition – Table 1

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. 	 A total of 60 drill holes were included in the modern Lone Star database, of which 13 were drilled in 2006 Merit Mining and 47 were drilled in 2021-2022 by Marquee Resources Ltd. The sampling has been carried out using HQ diamond drilling. Two holes drilled in 2006 encountered drilling problems and were subsequently twinned. The two original holes were not used in the resource estimate. All 58 remaining drill holes used in the resource estimate are diamond drill holes, with a total combined length of approximately 8,880 m. Assays are available from 56 of the 58 drill holes. Two short drill holes in the north-western part of the deposit were unmineralized and not sampled. Unsampled portions of all holes were assumed to be barren, and both copper and gold grades are set to zero. Diamond drill core samples were taken over selective intervals ranging from 0.3m to 1.6m (typically 1.5m). Qualitative care taken when sampling diamond drill core to sample the same half of the drill core. HQ core is processed by on-site geologists who geologically log, photograph, cut and then finally sample as per company procedure.
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).	 Diamond drilling was completed by Falcon Drilling INC. of Nevada. Diamond drill core is HQ size (63.5mm diameter). Core orientation was completed using a Reflex Gyro Tool.
Drill sample recovery	• Method of recording and assessing core and chip sample recoveries and results assessed.	 Drill core sample recoveries are measured and recorded in drill log sheets. General sample weights are comparable and any bias is considered to be



Criteria	JORC Code explanation	Commentary
	 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. 	insignificant
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. 	 lithology, structure, mineralisation, alteration and veining. Drill core logging is qualitative in nature and based upon geologists observations of drill core retained in core trays.
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. 	submitted for 30 element geochemical analysis.
Quality of assay data and laboratory tests		 Diamond drill core samples underwent sample preparation and geochemical analysis by MSA Laboratories, Langley, British Columbia, Canada. Au was analysed by 50g fire assay with an ICP-AES finish (MSA method FAS 224) A 30-element multielement suite was analysed by ICP-MS following four acid digest (MSA method ICP-240). Certified analytical standards and blanks were inserted at appropriate intervals (generally 1 in 30)



Criteria	JORC Code explanation	Commentary
	 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. 	All QAQC samples display results within acceptable levels of accuracy
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. 	 Significant intercepts are cross-checked with the logged geology and drill-cor after final assays were received Primary drill data is collected digitally through and transferred to the maste Access database Drill core has been logged and sampled in feet and converted to metr intervals for the purpose of this release.
Location c 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. 	 Collar coordinates have been recorded with a handheld RTK GPS with a accuracy of +/- 10cm. Downhole surveys are taken every 100ft (30.48m) using a Gyro survey tool. All coordinates are presented in NAD83/UTM Zone 11N
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. 	 Drill hole spacing is variable and has been outlined in the body of the text an figures.
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 	 Drill hole orientations were designed to test perpendicular or subperpendicular to the orientation of the interpreted mineralisation. The drill holes were oriented within 15⁰ of orthogonal to the interpreted dip an strike of the known mineralisation. The orientation of drilling is not considered to introduce any bias to the sampling.
Sample security	The measures taken to ensure sample security.	 Individual calico bags from the diamond drilling are placed in polyweave bag and palletised for collection and delivery by a verified courier company for shipment to the laboratory.



Criteria	JORC Code explanation	Commentary
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 Mining Plus conducted a review of sampling techniques during a site visit in April 2022. No material issues were identified and the sampling techniques were considered industry standard and appropriate for this level of study.
· · ·	orting of Exploration Results 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 mineral concessions of the Lone Star Project consists of 17 Patented Claims covering 260.12 acres.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 1951 Attwood Copper Mines Ltd. started assembling a large land package in the area. By 1953 they acquired the Lone Star property from Eugene Mining Co. Attwood opened the old workings and conducted mapping, sampling and a diamond drilling program. 1955 Granby Mining optioned the Richmond and Lone Star from Attwood and conducted a diamond drilling program at the old workings. 1959 An airborne geophysical survey was flown over the Lexington property by Lundberg Exploration. 1961 Richmond and Lone Star were optioned to Moneta Porcupine who conducted drilling and geophysical surveys. 1962 King Midas Ltd. assembled many of the old Crown-granted claims, carrying out surface and underground exploration on Lincoln and Mabel. 1967-70 Lexington Mines Ltd. acquired the Lexington property and expanded the land package to include all of the current Canadian claims. Lexington Mines Ltd. completed an extensive program of geological, geochemical and



 geophysical surveys, bulldozer trenching, diamond drilling and undergrenehabilitation resulting in the discovery of the Grenoble deposit and to During this period Silver Standard and Kenogamiss Gold Mines optioner Richmond, exploring the ground between Richmond and Lone Star proper by drilling and geophysics. 1969 Falconbridge surveyed the Lone Star and claims to the south. 1970-71 Israel Continental conducted a drill program on Richmond and I Star properties. 1972 Granby optioned the Lexington property forming a joint venture Coastal Mining and optioned the Richmond and Lone Star properties. 1972 Granby optioned the Lexington property forming a joint venture Coastal Mining and optioned the Richmond and Lone Star properties. 1974 Aelenian Resources optioned the Lexington property and drilled in Grenoble deposit area in 1975. 1977-78 Granby Mining Co. open pitted the Lone Star property, trucking a 400.000 tons to Phoenix. 1974 Aelenian Resources acquired the key Lexington claims and drove a tes into the Grenoble deposit in 1980. Twenty underground holes were drilled the Grenoble deposit in 1980. Twenty underground holes were drilled the Grenoble deposit in 1980. Twenty underground holes were drilled the Grenoble deposit in 1981 Teak. Corp. optioned Grenoble's holdings in addition to the Richmare a claim and completed 47 drillholes by 1983. 1981 According to a report by Machin Mish this writer was not ab locate but quoted from by McDougal (1988) indicates that at that time the I Star deposit had an Indicated Resource of 3, 345,000 grading 0.95%. Cu was mentioned a cuch drig day of 0.5% Cu. This is not a declared resource on the property should not be relied upod to 0.5% Cu. This is not a declared resource and the providem the property should not be relied upod, however, early data indicate gold content varies from 0.0 a cut-drift demons economic viability. Grant continues to say that gold and silver were gene on analysed, however, ea
not analysed, newever, early data indicate gold content values not of



Criteria	JORC Code explanation	Commentary
	JORC Code explanation	 0.046 opt Au. 1984-86 Canadian Pawnee Oil Corp. acquired much of the Lexington proper 1986-88 Surface geophysical and geochemical surveys and 33 diamond drillholes were completed on Lexington. 1989-91 U.S. Borax and Kennecott Exploration carried out the last detail geological mapping and drilling program on the Lone Star, bringing the to number of percussion and diamond drillholes in the Lone Star area to date in excess of 300. 1991 Britannia Gold Corp. assembled the various holdings into the curr Lexington property. 1991 Ebisch reports for Kennecott Exploration Company a geologic resour on the Lone Star "Pit Zone" of 19.4 million tons averaging 0.52 % Cu and 0.0 opt Au with a 0.30 % Cu cut-off. The stripping ratio at the Pit Zone would >6:1 waste to ore. It is also mentioned that it would be difficult to increat resources to the south and east as there is a considerable increase in war in those directions. Daughtry (1991) suggests a steeper higher grade zone present southeast of the pit grading 1.45% Cu. All of the above is no declared resource on the property and should not be relied upon but rema a historic figure. The writer has not prepared nor confirmed this resour estimation and as it pre-dates National Instrument 43-101, it does not com with N143-101 requirements for mineral resource estimation. 1993-97 Britannia Gold conducted a systematic exploration program on th Lexington property including data compilation, detailed mapping of the Goosmus Shear Zone, surface induced polarization and magnetome surveys, underground rehabilitation and mapping, re-logging of previd drilholes, buildozer trenching and diamond drilling. 1992 Wortman conducted a study of proposed mining methods on the Grenoble deposit. A simple mechanized mining system of 27,000 tonnes/ya for a mine life of 3-4 years was proposed. An operating cost of \$72/tonne a a capital cost of \$1.23 million were estimated.
		 1995 Bren-Mar Resources Ltd. formed a joint venture with Britannia Gold Co and together completed a 900 metre long decline and 29 undergroud drillholes in 1996-1997 to assess the Grenoble deposit mineralization. T

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Criteria JC	RC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	 definition of the mineralized body geometry, evaluation of grade continuity ar assessment of ground stability conditions. Water quality and ARD samplin data were also collected by Britannia. 1997 A permit was granted to conduct a 2,000 tonne bulk sample on the Grenoble deposit, however, Britannia Gold Corp./Bren-Mar Resources Ltd. d not initiate the bulk sample. 2002 Gold City Industries Ltd. (GC) acquired the Lexington and Lone St Properties in 2002. Between August 2002 and December 2004 Gold Cit focused entirely on the Lexington Property. Work undertaken include conducting metallurgical and ARD test work, water quality samplin submitting a dewatering application (subsequently granted March 31, 2003; submitting a 10,000 tonne bulk sample application on Lexingtor (subsequently granted December 19, 2003), conducting a six hole surface diamond drill program in 2003 and a 40 hole surface diamond drill program 2004, re-interpreting Lexington drill data, rehabilitating the Lexington port and the initial 25 metres of timbering, and identifying a new site for a mill art tailings. Klohn-Crippen Consultants Ltd. were contracted to do a geotechnic report on the tailings site on the Zip claims, prepare a mill layout and flowshee submit a permit application for the mill and tailings facility (which was subsequently granted subject to detailed engineering drawings and having a NI 43-101 compliant resource estimate and a preliminary mine plan complete by Snowden Mining Consultants on Lexington). 2005 Merit acquired the Lexington and Lone Star properties from Gold Ci and conducted a 19 hole diamond drill program on the Lexington depois was prepared by Snowden Mining Consultants to include the 2004 drill result. 2006 Merit conducted an 11 hole diamond drill program on the Lone Star property totalling 834 metres to verify historic drilling and geologic interpretations for a high grade shoot model. A resource calculation was prepared by P&E Mining Consultants Inc.
		an overprinting porphyry copper system. It has been interpreted that the upper IV unit or "dacite" unit at Lexington is within an upper thrust plate that slid over



Criteria	JORC Code explanation	Commentary
Ð		mineralization within the basal part of this upper plate. This thrust would like be a sub thrust of the No. 7 Fault. Units within the upper IV unit or "dacite" up preferentially sheared along bedding planes creating structurally prepare routes for future fluid flow. On the Lexington property 1 kilometre to the nort a low grade gold-copper-molybdenum porphyry system immediately overlie the Lexington-Grenoble deposit with similar metal association to the Lexington-Grenoble deposit. It is interpreted that subsequent to the thrustir event, rising hydrothermal porphyry copper-gold-molybdenum fluids invade the structural setting, focusing the majority of the metal into concentrate zones at Lone Star within the upper IV unit.
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. 	
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 	 Significant intercepts have been reported using a length weighted cut-off grad >0.4% Cu and a maximum of 4m internal dilution has been applied.



Criteria	JORC Code explanation	Commentary
Relationship between mineralisatio n 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'). 	 All intersections reported are down hole. All drill holes were oriented close to orthogonal the interpreted strike and/or dip of the mineralised zones and/or targets.
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. 	 Refer to figures in the text
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 holes with assays received have been reported
Other substantive exploration data	 Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances. 	• N/A
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).	 Marquee intends to rapidly advance the Lone Star project by additional drilling to potentially extend the resource and to bring the deposit to feasibility study level.
	• Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	
)		



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. 	 All geological data is collected in digital format using codes specifically designed for the project. This data is downloaded to a central database where data validation processes are implemented. Laboratory analysis results were received electronically directly from the laboratory and loaded straight into the database Data extracted from the database was validated spatially using Micromine. The master database uses a back-end Microsoft SQL Server database, which is relational and normalised. The following data integrity categories exist: Entity Integrity: No duplicate rows in a table, eliminated redundancy and chance of error Domain Integrity: Enforces valid entries for a given column by restricting the type, the format or a range of values Referential Integrity: Logging rules and validation codes set up by the company, preventing overlapping intervals or depths greater than end of hole etc.
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. 	 A site visit was conducted by Mr. Brian Hartman (Competent Person) and Mr. Gabriel Monty of Mining Plus, on the 20th April 2022 No material matter were noted from the site visit.
Geological interpretatio n	 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 geology of the Lone Star deposit for the Mineral Resource Estimate was interpreted by the Competent Person, in conjunction with Marquee geologists. Logged lithologies were simplified, as per the body of the release, with the logged lithologies used to interpret three-dimensional wireframe solids for each of the groups. The main mineralized zones are hosted in a package of dominantly



	JORC Code explanation	Commentary
D	• The factors affecting continuity both of grade and geology.	 rhyolite with some serpentinite that gently dips towards the southea at 20-25 degrees. These two lithologies were ultimately grouped together for the purposes of resource estimation after analysis of grade distribution revealed no material differences in grade occurrence or intensities within either lithology.
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.	
Estimation and modelling rechniques	 The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used. The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data. The assumptions made regarding recovery of by-products. Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation). In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed. 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 	 UTM coordinates. The model is not rotated. Table 8 provides the bloc model limits and size. The parent block size is 5 m x 5 m x 2 m, an blocks were further sub-blocked to a minimum of 1.25 m x 1.25 m 0.50 m along the lithology and grade domain boundaries. Variogram models were completed on the low-grade domains with the main down dropped block to determine the orientation and spati continuity of the composited copper and gold values. Nested spheric models were fit to the directional variograms. A summary of the resul is shown in Table 7. Due to the smaller number of composites with



Criteria	JORC Code explanation	Commentary
		 discontinuous from the remainder of the data set and that there was justification for restricting their range of influence. Composite values above the restricted value were limited to an influence range of 30% of the primary search distances, ranging from 15-30 m. Beyond that distance, the high-grade composites were capped to the restricted value when used to estimate grade. A summary of the restriction is shown below in Table 6. The interpolation plan for the Lone Star Mineral Resource estimation model was completed using Inverse Distance Squared Weighting (IDW) rhyolite/serpentinite package within five structural zones. The estimation used 2m composites. Composite sharing across graded domain boundaries (high-grade, low- grade, and outside) was not allowed. All interpolations used a search orientation based on the geometry of the domains within each structural zone. The search parameters are shown in Table 9. The Lone Star block model was validated by the following methods: (1) Visual comparison of color-coded block grades to drill hole composite grades in sectional views, (2) Global comparison of a Nearest Neighbor (NN) model with the IDW model, and (3) Swath plot analysis comparing NN and IDW grades.
		 As an initial step to defining the Mineral Resource classification, Mining Plus used the following guidelines: Indicated classification was assigned to blocks that were
		estimated using at least three drill holes, where the average distance to the closest three drill holes was within approximately 50m.
		 Inferred classification was assigned to blocks that used at least two drill holes and the average distance to the closest three drill holes was less than approximately 110m.
Moisture	• Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Mineral Resources are reported on a dry in-situ basis
Cut-off parameters	• The basis of the adopted cut-off grade(s) or quality parameters applied.	 Composited data was used to generate cumulative probability and histogram plots. A review of the results showed that some high-grade outliers were spatially discontinuous from the remainder of the data set
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Criteria	JORC Code explanation	С	ommentary
			and that there was justification for restricting their range of influence Composite values above the restricted value were limited to an influence range of 30% of the primary search distances, ranging from 15-30 m. Beyond that distance, the high-grade composites were capped to the restricted value when used to estimate grade. A summary of the restriction is shown below in Table 6.
Mining factors or assumptions	 Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made. 	•	To satisfy 'reasonable prospects for eventual economic extraction' the Mineral Resource is reported inside of a conceptual pit shell at ar internal cutoff grade of 0.112% copper equivalent. The pit shell was generated using the criteria shown in Table 11. Based on the assumed metal prices, the copper equivalent formula is CuEq% = Cu% + (Au g/t x 0.7176). A copper equivalent of 0.112% is required to overcome the US\$7.00 processing cost. Mining Plus used the software Whittle to perform the pit optimizations The software Vulcan was also used to evaluate the indicated and inferred resources of each pit shells. The original block size of the BM was 5 x 5 x 2 meters. To create a realistic mineable block size, the model was re- blocked to 5 x 5 x 6 meters. No underground potential was explored during this effort and the deposit remains open at depth. The goal of the pit optimisation was to create a large resource shell and determine if an open pit was a potential option for the Lone Sta deposit. To achieve this, the operating cost were set relatively low and the metal recoveries high. $\frac{Parameters}{Cu Price} USD/lb $3.25 \\ Au Price} USD/oz $1,600 \\ Mining Cost USD/t $2.00 \\ Processing Cost USD/t $7.00 \\ Cu Selling Cost USD/t $5.010 \\ Au Selling Cost USD/lc $5.010 \\ Core $1.000 \\ Core 1
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Criteria	JORC Code explanation	Commentary
		 Cu Recovery % 90% Au Recovery % 90% The results show that the pit is highly sensitive to the price of copper at \$1.69/lb (Revenue Factor(RF) = 52%), where the pit grows significantly larger. Above the \$1.69/lb copper price, the pit becomes less sensitive to the price increases and grows steadily to reach approximately 81M tonnes at Revenue Factor (RF) 100%. This sensitivity to the copper price is due to a larger pocket of ore located approximately 200 meters below the surface. At the \$1.69/lb copper price, this pocket becomes economical and significantly increases the size of the pit. the strip ratio greatly increases from 3.5 to over 5 at the RF 52%. This is caused by the ore being located at depth which increases the amount of waste stripping significantly to access the ore.
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.	Mineral Resource estimate.
Environmen- tal 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. 	 mined in 1977-78. A few benches are still visible on the north-east side of the pit but are heavily altered and eroded. The west part of the pit has no more visible benches. The pit is surrounded by dense forest and some trees are growing on the historic benches. The pit will need heavy rehabilitation to be used again and the benches and roads around the pit are currently only able to accommodate small vehicles.
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			 The site is accessible by a single lane dirt road. The access road is not well maintained and can only be accessed with 4-wheel drive vehicles. The region around the site consists of farmlands and mountainous forests. Significant upgrades will be needed to improve the access to the site for further mine activities to start.
	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. 	• SG measurements from Merit Mining 2006 drilling were used to generate a weak correlation with copper grade. This correlation was used to calculate an average SG for waste (2.74), low-grade (2.80), and high-grade (3.05) zones. An SG of 1.9 was assumed for unconsolidated overburden. The SG values are considered reasonable for this level of study, but more work needs to be completed to better understand the variability in densities to more accurately understand the variability in ore and waste tonnes.
	Classificatio	 The basis for the classification of the Mineral Resources into varying confidence categories. Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data). Whether the result appropriately reflects the Competent Person's view of the deposit. 	 Mineral Resources are subdivided, in order of increasing geological confidence, into Inferred, Indicated, and Measured categories. An Inferred Mineral Resource has a lower level of confidence than that applied to an Indicated Mineral Resource. An Indicated Mineral Resource has a higher level of confidence than an Inferred Mineral Resource but has a lower level of confidence than a Measured Mineral Resource. As an initial step to defining the Mineral Resource classification, Mining Plus used the following guidelines: Indicated classification was assigned to blocks that were estimated using at least three drill holes, where the average distance to the closest three drill holes was within approximately 50m. Inferred classification was assigned to blocks that used at least two drill holes and the average distance to the closest three drill holes. After applying the above criteria, the boundaries of the classification



Criteria	JORC Code explanation	Commentary
		 were smoothed to ensure spatial continuity and to be consistent with the understanding of the deposit and confidence in the grade estimates. The Resource classification is shown in Figure 9. Based on the assumed metal prices, the copper equivalent formula is CuEq% = Cu% + (Au g/t x 0.7176). A copper equivalent of 0.112% is required to overcome the US\$7.00 processing cost. Based on this cutoff within the conceptual pit shell, The Lone Star deposit contains an Indicated Mineral Resource of 9.7 Mt at 0.45% copper and 0.24 g/gold and an Inferred Mineral Resource of 3.5 Mt at 0.31% copper and 0.20 g/t gold.
Audits or reviews	• The results of any audits or reviews of Mineral Resource estimates.	 No external audits or reviews have been completed on the Minera Resource Estimate at this stage.
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 Lone Star block model was validated by the following methods: Visual comparison of color-coded block grades to drill hole composite grades in sectional views Global comparison of a Nearest Neighbor (NN) model with the IDW model Swath plot analysis comparing NN and IDW grades The visual comparison of block model grades with composite grades for copper and gold show a good correlation between values. Figure 6 shows color-coded block model grades with the drill hole grades. The visual comparison shows a good correlation between values and ne large discrepancies are apparent. Mining Plus generated a NN model for copper and gold to serve as a check against the resource model. The NN interpolation method simpl assigns a block the same grade as its closest composite. These models are intended to represent a theoretical unbiased estimate of the average grade when no cut-off grade is imposed and is a good basis for checking performance of different estimation methods. The NN model utilized the same search criteria as the OK model except uses a single 2 m composite to estimate a block. A comparison of NI and IDW grades was made for all LG and HG domain blocks at a zero.
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cut-off and is summarized below in Table 10. Copper and gold grades compare well. The NN gold grades are slightly higher due to the highgrade restriction that was applied to the IDW estimates.

• Swath plots comparing the LG and HG domain NN and IDW grades were generated along northing, easting, and elevation. The swaths demonstrate good comparison between NN and IDW copper and gold grades, indicating that the block model is a reasonable representation of the informing data. Swaths by easting for copper and gold are shown below in Figure 7 and Figure 8, respectively. The trends shown by the composite data (represented by the NN model) are honoured by the block model. The comparisons show the effect of the interpolation, which results in smoothing of the block grades, compared to the nearest neighbor grades. Gold IDW grades are lower than NN grades due to the outlier restrictions applied during IDW estimation.