



ÇORUM COPPER PROJECT

Technical Report on the Mineral Resource Estimate for the Çorum Copper Project, Turkey

Report prepared for:	AVOD ALTIN MADENCILIK ENERJI INSAAT Yıldırım Mahallesi 35.Sokak No:62 Menemen İzmir, Turkey
Author:	Gavin Chapman, BSc, PgradCert (Geostats)
Peer review:	Oliver Bertoli, MSc MAusIMM, GAA Sean Aldrich, MSc, MAusIMM
Competent Person:	René Sterk, MSc, MAIG (RPGeo), FAusIMM CP(Geo), MSEG, UMREK (112)
Date: Effective Date:	10 August 2022 1 July 2022

www.rscmme.com



Executive Summary

AVOD Altın Madencilik Enerji İnş.San.ve Tic A.Ş. (AVOD) commissioned RSC to carry out an updated mineral resource estimate (MRE) for the Çorum Copper Project (the Project) and prepare a technical report (the Report) in accordance with the UMREK Code (2018). This Report includes all the technical background information and analysis of the data, and it can therefore be used as a stand-alone document. The Report's effective date is 1 July 2022.

The Çorum Copper Project is situated at the border of the Çorum and Yozgat provinces in Turkey and lies about 200 km east of Turkey's capital city, Ankara. The Project covers 13.75 km² and is held as exploration licence 200712071, which expires 6 March 2024. AVOD is currently exploring two prospects (Area A and Area B) that are 600 m apart.

Some mining occurred in the 1950s; however, no information is available about the location, extent, or historical production. No exploration was carried out in the area between the 1950s and when AVOD acquired the licence (200712071) in 2013. AVOD initiated exploration in 2013, completing geophysical surveys that were followed by mapping and three diamond drilling programmes during 2017, 2018 and 2021. In 2017, AVOD drilled five diamond drillholes for a total of 599 m to test the northern extension of the historical mining area. In 2018, AVOD drilled 20 diamond drillholes for a total of 1,380.5 m testing two exploration targets (Area A and Area B). In 2021, AVOD drilled 42 diamond drillholes for a total of 1,855 m in Area A and Area B. All drillholes were drilled using triple tube PQ with HQ tails.

The data informing the MRE are based on the 2018 and 2021 diamond drilling campaigns within Area A and Area B. All new drilling results, including mineralised intercepts since the 1 April 2020 MRE, are presented in Appendix A.

The broadly horizontal distribution of copper (Cu) mineralisation at the Project suggests that Cu mineralisation was precipitated from hydrothermal fluids after the deposition of the basalt flows. Copper enrichment occurs in two forms: primary and secondary. Primary Cu mineralisation at Çorum is associated with basalt in the form of disseminated, semi-massive and thin zones of massive sulphides, and was likely deposited not long after the basaltic flow was emplaced. The secondary Cu mineralisation at Çorum has formed by more recent weathering of the primary mineralised rock. These controls on mineralisation have been incorporated into the estimation strategy.

Risks to the Project have been compiled and rated in section 9 of this Report, and recommendations provided in section 12. They are based on RSC's assessment of current data quality, drill spacing, grade and geological continuity, and estimation parameter settings.

The results of the umpire reanalysis, completed by an independent laboratory, indicates that the original 2018 and 2021 Cu results are conservative compared to the umpire reanalysis results. A mean-grade comparison and review of QQ plots between the original assay data and the reanalysis data reveals that the 2018 Cu concentrations are biased 4% low in Area A and ~17% low in area B compared to the umpire results. The comparison suggests that Cu results obtained in 2021 are reasonably comparable to the umpire results (~2% low in Area A and ~4% low in Area B). The Competent Person has some concerns about the accuracy of Cu concentrations at Area B (which is primarily modelled on the 2018 data) and the 2018 drilling at Area A, and this has been considered in the classification of the Mineral Resource. Overall, considering that biases



are all low biases, the overall tonnage and grade in the estimation are therefore probably slightly conservative, and reflects a minor potential upside.

Estimation domains were modelled based on an assessment of the multi-element geochemical dataset, through Principal Component Analysis (PCA) using a Gaussian Mixture Model of the elements iron (Fe), Cu and sulphur (S). Four geochemically distinct populations were identified in the sample data. The geochemical groups are interpreted as a solid proxy for further geological domain resolution in lithological units and displayed a strong correlation with lithology logs and mineralisation style (oxidic/sulphidic).

The MRE was completed using ordinary kriging (OK). A block size of $25 \text{ m} \times 25 \text{ m} \times 5 \text{ m}$ was used, with a minimum subblock size of $5 \text{ m} \times 5 \text{ m} \times 1 \text{ m}$.

The Competent Person has classified an Indicated Mineral Resource of 2.5 Mt at 1.43% Cu, and an Inferred Mineral Resource of 5 Mt at 1.7% Cu, reported at a cut-off grade of 0.3% for oxide material and 0.35 % for fresh (Table 1). The Mineral Resource is reported as a global resource and has been classified in accordance with the UMREK Code (2018). There is no material classified as Measured.

For the Inferred portion of the Resource (5 Mt at an average grade of 1.6% Cu), geological evidence is sufficient to imply, but not verify, geological and grade continuity. The Inferred portion of the Resource is based on exploration, sampling and testing information gathered through appropriate techniques from drillholes. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. Confidence in the Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters to be used for detailed planning in Pre-Feasibility or Feasibility Studies.

For the Indicated portion of the Resource (2.5 Mt at an average grade of 1.43% Cu), grade and densities are estimated with sufficient confidence to allow the application of Modifying Factors, in sufficient detail, to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from drillholes, and is sufficient to assume geological and grade continuity between points of observation where data and samples are gathered.

Copper mineralisation remains open in Area A and there is excellent exploration potential to increase the Mineral Resource further.

A Scoping Study based on the MRE is currently being prepared by RSC and will be reported in accordance with the UMREK code (2018).



Area	Resource Category	Oxidation	Mass (Mt)	Av Cu %	Contained Cu Metal kt
	Indicated	Oxide	—	—	—
A	muicated	Sulphide	2.5	1.43	35
Alea A	Informed	Oxide	—	—	—
	inierieu	Sulphide	3	1.4	40
	Indicated	Oxide	—	—	—
Area P	Indicated	Sulphide	—	—	—
Alea D	Informed	Oxide	1	2.9	30
	Interred	Sulphide	1	1.1	10
	Indicated	Oxide	—	—	—
Total	Indicated	Sulphide	2.5	1.43	35
TOLAT	Informed	Oxide	1	2.8	30
	inierieu	Sulphide	4	1.4	50
	Indicated		2.5	1.43	35
Total	Inferred		5	1.6	80
		TOTAL	7.5	1.6	115

Table 1: Çorum Cu Project Mineral Resource Classification.

Notes:

• The MRE is reported at a cut-off grade of 0.3% Cu for oxide and 0.35% Cu for fresh.

• The Mineral Resource is contained within license 200712071.

• The effective date of the estimate is 1 July 2022.

Estimates are rounded to reflect the level of confidence, in accordance with the UMREK code.
 All Indicated Resources have been rounded to the nearest half million tonnes and all Inferred Resources have been rounded to the nearest million tonnes.

• The Mineral Resource is reported as a global resource.



Contents

1	Intro	oduction and Terms of Reference	12
	1.1	Scope	12
	1.2	Qualifications, Experience and Reliance on Other Experts	12
	1.3	Independence Declaration	13
	1.4	Sources of Information	13
	1.5	Site Visit	13
	1.6	Disclaimer	13
2	Pro	ect General Summary	15
	2.1	Project Description and Location	15
	2.2	Tenure & Ownership	16
	2.3	State Rights and Royalties	17
	2.4	Environmental Liabilities and Permits	17
	2.5	Access	17
	2.6	Climate	17
	2.7	Physiography	18
	2.8	Vegetation	18
	2.9	Local Resources & Infrastructure	18
3	Hist	ory and Previous Work	19
	3.1	Tenure & Operating History	19
	3.2	Exploration History	19
	3.3	Production History	19
	3.4	Previous Studies	19
	3.4.	1 2018 - Dünya Grup	19
	3.4.	2 2018 - DMT	21
	3.4.	3 2018 - Dirk H. Wagner Mining Consulting	23
	3.4.	4 2020 - Bordokum Mining and Addison Mining Services	24
	3.4.	5 2020 - RSC	24
	3.4.	6 RSC Comments on Previous Studies	25
4	Geo	logical Setting and Mineralisation	26



	4.1	Regional Geology	26
	4.2	Local Geology	28
	4.3	Deposit Geology	28
	4.4	Controls on Mineralisation	31
	4.5	Mineral Deposit Model & Comparable Deposits	34
5	Expl	pration by AVOD	35
	5.1	Geophysics	35
	5.2	Mapping and Geology	36
	5.3	Soil Sampling	36
	5.4	Stream sediment sampling	36
	5.5	Trenching	36
	5.6	Drilling Programmes	36
	5.6.1	2017 Drilling Programme	36
	5.6.2	2018 Drilling Programme	38
	5.6.3	2021 Drilling Programme	40
	5.7	Mineral Processing and Metallurgical Testing	42
	5.8	Surveying, Topography, DTM	42
	5.9	Petrography	42
6	Sam	pling, Data Processes, Quality	43
	6.1	Sample Preparation, Analysis	43
	6.2	Data Quality & Quality Objectives	43
	6.3	Quality Assurance	44
	6.3.1	Location Data	45
	6.3.2	Density Data	46
	6.3.3	Primary Sample	47
	6.3.4	First Split	47
	6.3.5	Second Split	48
	6.3.6	Third Split	48
	6.3.7	Analytical Process	49
	6.4	Quality Control	50
	6.4.1	Location Data	50



6.4.2 Density Data	51
6.4.3 Primary Sample	51
6.4.4 First Split	51
6.4.5 Second Split	
6.4.6 Third Split	
6.4.7 Analytical Process	53
6.4.7.1 Certified Reference Materials	53
6.4.7.2 Blanks	54
6.5 Quality Acceptance Testing	
6.5.1 Location Data	
6.5.2 Density Data	
6.5.3 Primary Sample	
6.5.4 First Split	
6.5.5 Second Split	
6.5.6 Third Split	
6.5.7 RSC comments on First, Second and Third Split Precision	
6.5.8 Analytical Process	60
6.5.8.1 Certified Reference Materials	60
6.5.8.2 Independent (Umpire) Laboratory Validation of Cu Grade	61
6.6 Data Verification	64
6.7 Security & Chain of Custody	
6.8 Summary Data Quality	
7 Mineral Resources	68
7.1 Informing Data	
7.2 Interpretation and Model Definition	
7.2.1 Geological Domains	
7.2.2 Estimation Domains	
7.2.3 Domain Extrapolation	72
7.3 Summary Statistics and Data Preparation	73
7.3.1 Cu Grade Summary Statistics	73
7.3.2 Density	74
7.4 Spatial Analysis and Variography	75



7.5 Block Model	77
7.6 Search Neighbourhood Parameters	77
7.7 Estimation	77
7.7.1 Cu Grade	77
7.7.2 Density	80
7.8 Validation	80
7.9 Sensitivity Testing	84
7.10 Classification	85
7.10.1 Classification	85
7.10.2 Cut-off grade	
7.10.3 Mining and Metallurgical Methods and Parameters	86
7.10.4 RPEE	87
7.10.5 Comparison with Previous Resource Estimates	87
8 Environmental	
9 Risks	89
10 Exploration Potential	
10.1 Area A	
10.2 Licence-Wide Exploration	
11 Interpretation and Conclusions	
12 Recommendations	
13 References	
Appendix A	
New drilling results including mineralised intercepts since 1 April 2020 MRE.	
Appendix B	102
Collar information of drillholes used in estimation of the Çorum MRE	102
Appendix C	103
Conceptual Parameters Used in the Pit Optimisation	103



List of Tables

Table 1: Çorum Cu Project Mineral Resource Classification	3
Table 2: Status of the mineral licence that comprises the project.	17
Table 3: Boğazkale monthly climate. Source: https://en.climate-data.org/asia/turkey/Çorum/Boğazkale-15860/	18
Table 4: Reserves determined by Duzgun (2018), at a 1% Cu cut-off	20
Table 5: Summary of visible and possible tonnes and grades.	20
Table 6: Operational cost per ton from Duzgun (2018).	21
Table 7: Mineral resource estimate at a 1% Cu cut-off (JORC, 2012), from Lowicki and Teigler (2018).	22
Table 8: Mineable resource, from Wagner (2018)	23
Table 9: Bordokum Mining and Addison Mining Services 2020 Çorum Cu Project Inferred mineral resource	24
Table 10: RSC 2020 Çorum Cu Project Inferred Mineral Resource by Area	24
Table 11: Summary of previous technical studies at 1% Cu cut-off	25
Table 12: Summary of 2017 diamond drilling programme	36
Table 13: Details on holes drilled at the Project in 2018.	39
Table 14: Details on holes drilled at the Project in 2021.	41
Table 15: Summary of QA review by RSC.	45
Table 16: Analytical methods and detection limits 2021	49
Table 17: Analytical methods and detection limits 2018.	50
Table 18: Summary statistics for density values within mineralised oxide and fresh domains	57
Table 19: Precision of the first-split duplicates for Cu.	58
Table 20: Precision of the second-split duplicates for Cu	59
Table 21: Precision of the third-split duplicates for Cu.	59
Table 22: Precision of the first, second and third split duplicates	60
Table 23: CRM results for Cu by 4-acid digest at Argetest.	61
Table 24: Mean-grade comparison of the Original Cu and Co assay data and re-assay values	62
Table 25: Summary of QA/QC review, for the purpose of classification in the indicated and inferred resource categor	ту 66
Table 26: Summary statistics of Cu concentrations within estimation domains.	74
Table 27: Summary statistics of the 2021 density values within mineralised oxidation domains.	75
Table 28: Cu variogram parameters	75
Table 29: Block model definitions	77
Table 30: Search neighbourhood parameters	77
Table 31: Summary statistics of Cu concentrations within estimation domains of the block model estimate	78
Table 32: Density values of each oxidation domain.	80
Table 33: Mean comparison of sample and estimated Cu grades.	80
Table 34: Comparison of estimates using alternative variogram models compared to the original model	84
Table 35: Çorum Cu Project Mineral Resource Classification	86



Table 36: Comparison of Previous Resource Estimates.	87
Table 37: Overview of risk factors affecting the MRE	89
Table 38: Drill collar details of exploration holes with returned laboratory results at Çorum (UTM ED50 Zone 36N)	99
Table 39: Exploration drilling intersections from the Çorum project, using a 0.3% Cu cut-off,	100
Table 40: Collar information of drillholes used in estimation of the Çorum MRE (UTM ED50 Zone 36N)	102
Table 41: Conceptual mining parameters used in the pit optimisation.	103







List of Figures

Figure 1: Location of the Çorum Project (UTM ED50 Zone 36N).	15
Figure 2: Location of Area A and Area B within the Çorum licence	16
Figure 3: Block model and classification (Red: Visible; Green: Possible; Duzgun (2018))	20
Figure 4: Wireframes modelled by DMT, from Lowicki and Teigler (2018)	22
Figure 5: Simplified geological map of Turkey with major faults and ophiolitic complexes	27
Figure 6: Geological map of central Turkey showing the central part of the IAESZ and major geological units	27
Figure 7: Geological map of the Project and surrounding area. Geology is mapped at 1:500,000	28
Figure 8: Geological map of the project. Geology source: AVOD.	29
Figure 9: Basalt lava flow with pillow textures (Area A), (30-cm hammer for scale)	30
Figure 10: Area A. Looking north toward GERD-08.	30
Figure 11: Iron hydroxides/oxides and Cu oxides within basaltic flows, Area A	32
Figure 12: Schematic model of the mineralisation process at Çorum.	32
Figure 13: Area B, GERD-54 20.7 m to 27.8 m with abundant oxide Cu mineralisation.	33
Figure 14: Area B. Looking north. Photo shows mineralised basalt with azurite veining and post mineralisation faultin	ıg 33
Figure 15: Magnetics map over Area A, depth 10 m.	35
Figure 16: Location of the drill collars from the 2017 drilling campaign at the Çorum Project	37
Figure 17: Location of the drill collars from the 2018 drilling campaign at the Çorum Project	38
Figure 18: Location of the drill collars from the 2021 drilling campaign at the Çorum Project	40
Figure 19: Sample preparation and analytical process for the 2018 drilling programme (left and 2021 drilling program	nme
(right)	43
Figure 20: RSC QA review workflow	44
Figure 21: First split equipment used by AVOD: jaw crusher (left) and aggregate splitter (right)	48
Figure 22: Relative difference plot of Cu grades (%) of the 2018 (left) and 2021 (right) first split duplicates	52
Figure 23: Relative difference plot of Cu grades (%) of the 2018 (left) and 2021 (right) second split duplicates	53
Figure 24: Relative difference plot of Cu grades (%) of the 2018 (left) and 2021 (right) third split duplicates	54
Figure 25: Shewhart control plots for Cu in OREAS 623 during 2018 analysis (top) and 2021 analysis (bottom) at Arg	getest.
	55
Figure 26: Shewhart control plot for Cu in OREAS 6908 during 2021 analysis at Argetest.	55
Figure 27: Scatterplot comparison of pairwise density values recorded by the Archimedes and Core Tray methods d	uring
2021	57
Figure 28: Scatter plot of 2018 (left) and 2021 (right) first split duplicates and originals indicates overall good precision	on 58
Figure 29: Scatter plot for the 2018 (left) and 2021 (right) second split duplicates and the respective originals	59
Figure 30: Scatter plot for the third split duplicates and the respective originals	60
Figure 31: QQ plots of Cu % for the 2018 and 2021 datasets within estimation domains	62
Figure 32: QQ plots of Co ppm for the 2018 and 2021 datasets within estimation domains	63



Figure 33: QQ plot of 2018 (left) and 2021 (right) Cu assay and Cu umpire reanalysis concentrations	. 64
Figure 34: Flow diagram for sample custody.	. 65
Figure 35: Cross-section view to the south of the geological model at Area B	. 68
Figure 36: 2-D bi-plot of Cu, S and Fe against Co identifying four distinct geochemical cluster groups	. 70
Figure 37: Box plots displaying the distribution of Cu %, Fe % and S % (left to right)	. 70
Figure 38: Cross-section view to the northeast of Area A (top), and to the south at Area B (bottom),	. 71
Figure 39: Cross-section view to the northeast of Area A (top), and to the south at Area B (bottom),	. 72
Figure 40: Plan view of the extent of the modelled mineralised domain at Area A (black mesh) within the extent of the	
geophysical low anomaly.	. 73
Figure 41: Histograms of Cu % within estimation domains.	. 74
Figure 42: Experimental semi-variogram models for Cu grade within estimation domain A0 (left) and B0 (right)	. 76
Figure 43: Experimental semi-variogram models for Cu grade within estimation domain B1 (left) and B2 (right)	. 76
Figure 44: Contact analysis plots for estimation domains A0, B0, B1 and B2	. 78
Figure 45: Perspective view to the northwest of the Çorum Resource Block Model at Area A.	. 79
Figure 46: Perspective view to the northeast of the Çorum Resource Block Model at Area B.	. 79
Figure 47: Swath plots displaying the average sample (black) and estimated (red) Cu grade for estimation domain A0	. 81
Figure 48: Swath plots displaying the average sample (black) and estimated (red) Cu grade for estimation domain B1	. 82
Figure 49: Cross-section views to the north displaying visual comparison of Cu block grades and drillhole data at Area B	В
(top) and Area A (bottom)	. 83
Figure 50: Perspective view to the north displaying sample kriging weights (top) and sample grades (bottom)	. 84
Figure 51: Plan view of the extent of the modelled mineralised domain at Area A (yellow)	. 92



1 Introduction and Terms of Reference

1.1 Scope

AVOD Altın Madencilik Enerji İnş.San.ve Tic A.Ş. (AVOD) commissioned RSC to undertake an independent mineral resource estimate (MRE) on the Çorum Copper Project, and to report the estimate in accordance with the UMREK Code (2018). This Report includes all the technical background information and analysis of the data, and it can therefore be used as a stand-alone document.

Public reports or public announcements issued by AVOD, that refer to the resource estimation specified in this Report, will be required to be reported in accordance with the UMREK Code (2018) and will need to contain specific information on:

- geology and geological interpretation;
- sampling and subsampling techniques;
- estimation methodology;
- cut-off grades;
- criteria used for classification; and
- mining and metallurgical methods and parameters.

This information may be extracted from this Report, to support such public reports or announcements. In addition, such public reports should contain a 'Table 1', the information for which can be extracted from this Report. RSC notes that specific written consent for the final version of the public report is required from the Competent Person before it is made public by AVOD.

1.2 Qualifications, Experience and Reliance on Other Experts

The work completed and the subject of this Report was carried out by RSC geologists and was managed by René Sterk. Mr Sterk is the Competent Person for this Report and has supervised all the technical work that forms the subject of this Report.

René Sterk is the managing director of RSC, an independent consulting group based in Dunedin, New Zealand and one of its principal geologists. He is a Fellow and a Chartered Professional Geologist (CP(Geo)) with the AusIMM. René holds an MSc in Structural Geology and Tectonics from the Vrije Universiteit Amsterdam, Netherlands and specialises in resource estimation, grade control, reconciliation, QA/QC and successful sampling. He has a strong skillset in exploration management for gold and base metals. He has significant experience in the estimation of gold (alluvial, shear-zone, carlin, epithermal and porphyry), base metals, seabed mineralisation (nodules) and industrial minerals (garnet sand, HMS, diatomite). René has published papers and provided training on public reporting, sampling, QA/QC, and resource estimation.

Olivier Bertoli, Olivier's specialist training in Applied Mathematics and Geostatistics from the Paris School of Mines, is complemented by 27 years of experience as a practice-leading Geostatistician. Olivier worked for five years as Technical Director of the QG Group (co-founder), five years as Technical Director of Tensing Pty Ltd (co-founder) and for seven years



with geostatistical software specialists Geovariances (including four as its CEO). As a consultant, Olivier completed many projects for major mining companies in diverse locations and geological settings.

Sean Aldrich is a Member of the Australasian Institute of Mining and Metallurgy and a principal geologist with RSC. Mr Aldrich gained an MSc degree in Earth Sciences from the University of Waikato, New Zealand in 1995, and has practised continuously as a mining geologist, exploration geologist, manager and consultant for mining and exploration firms in a range of commodities since that time. He has explored and developed Cu volcanic massive sulphide (VMS) deposits in Oman.

Gavin Chapman holds a BSc from the University of New England and a Graduate Certificate in Geostatistics from Edith Cowan University. Gavin has experience in data management, geological modelling and mineral resource estimation. He has worked for New Zealand's largest gold producer as an underground geologist, mine geologist and project geologist. Gavin has worked on resource estimates for a wide range of commodities.

1.3 Independence Declaration

The relationship of RSC with AVOD is based on a purely professional association. This report was prepared in return for fees based on agreed commercial rates, and the payment of these fees is in no way contingent on the results of this Report.

1.4 Sources of Information

The information in this Report is based on data supplied by AVOD, which includes its own exploration data and reports, as well as legacy data and reports for exploration previously carried out by other companies.

1.5 Site Visit

RSC staff first visited the Project in July 2019. Mr Aldrich (UMREK Competent Person) inspected the geology and 2019 drill sites. He also visited the analysing laboratory (Ankara) and the core storage facility.

Mr Grimshaw and Mr Goodship visited the Project in April 2021 to review the implementation of standard operating procedures (SOPs) during drilling.

1.6 Disclaimer

The opinions, statements and facts contained herein are effective as of 1 July 2022, unless stated otherwise in the Report.

Given the nature of the mining industry, conditions can significantly change over relatively short periods of time. Consequently, actual results and performances may be more, or less favourable, in the future and their disclosure represents no legal opinion of the authors.

For disclosure of information relating to socio-political, environmental, and other related issues, the authors have relied on information provided to RSC.



Results of evaluation and any opinions or conclusions made by RSC are not dependent upon prior agreements or undisclosed understandings concerning future business dealings with AVOD.

The authors of this Report are not qualified to provide extensive comment on legal issues associated with the Çorum Project described in this Report.

Similarly, the authors are not qualified to provide extensive comment on risks of any nature (operational, sovereign, terrorist or otherwise) associated with the Çorum Project.

This document contains certain statements that involve several risks and uncertainties. There can be no assurance that such statements will prove to be accurate; actual results and future events could differ materially from those anticipated in such statements.

The information, conclusions, opinions, and estimates contained herein are based on:

- information available to RSC at the time of preparation of this Report;
- assumptions, conditions, and qualifications set out in this Report; and
- data, reports, and other information supplied by AVOD and other third-party sources.

The opinions, conclusions and recommendations presented in this Report are conditional upon the accuracy and completeness of the existing information.

No warranty or guarantee, be it express or implied, is made by RSC with respect to the completeness or accuracy of the legal, mining, metallurgical, processing, geological, geotechnical and environmental aspects of this Report. RSC does not undertake or accept any responsibility or liability in any way whatsoever to any person or entity in respect of these parts of this Report, or any errors in or omissions from it, whether arising from negligence or any other basis in law whatsoever.

RSC reserves the right, but will not be obligated, to revise this Report and conclusions, if additional information becomes known to RSC, after the date of this Report.

AVOD has reviewed draft copies of this Report for factual errors. Any changes made, because of these reviews, did not include alterations to the conclusions made. Therefore, the statements and opinions expressed in this document are given in good faith and in the belief that such statements and opinions are not false and misleading at the date of this Report.

RSC assumes no responsibility for the actions of the company or others with respect to distribution of this Report.



2 Project General Summary

2.1 Project Description and Location

The Çorum Copper Project is situated at the border of the Çorum and Yozgat provinces in Turkey and lies about 200 km east of Turkey's capital city, Ankara (Figure 1). AVOD is currently exploring two prospects (Area A and Area B, Figure 2) that are 600 m apart. The closest large settlement is Boğazkale which lies about 1 km west of the project. The Project covers 13.75 km² and is held as exploration licence 200712071. The historic site of Hattusas, the capital of the Hittite Empire during the Bronze age, is situated in the northwest portion of the licence. The prospects lie over 1.5 km southeast of this site but are not visible from Hattusas.



Figure 1: Location of the Çorum Project (UTM ED50 Zone 36N).





Figure 2: Location of Area A and Area B within the Çorum licence.

2.2 Tenure & Ownership

AVOD controls 100% of the Çorum Project through its ownership of exploration licence 200712071, which covers 1,375 ha

Table 2). The licence applies to mineral Group 4 c and includes the following:

- sub-section (a): industrial minerals, including boron, sodium, lithium and calcium;
- sub-section (b): energy source minerals including lignite and anthracite resources;
- sub-section (c): precious metals, including gold (Au), silver (Ag), Cu and iron (Fe); and
- sub-section (ç): radioactive minerals and other radioactive substances containing elements such as uranium, thorium and radium.

RSC understands that the land where the project is situated is privately owned, and AVOD expects that purchasing the land required to undertake mining operations will not present any significant issues.



Table 2: Status of the mineral licence that comprises the project.

Exploration Licence	Ownership	Status	Minerals	Date granted	Expiry date	Surface area (ha)	
200712071	100% AVOD	active	Group 4c	6/03/2019	6/03/2024	1,375	

2.3 State Rights and Royalties

The right to explore and extract from mines is granted through mining licences issued by the state under the Mining Law (Mining Law No. 3213, of 4 June 1985). RSC anticipates that a royalty of approximately 3% of the total annual Cu sales of the mine will be payable to the Treasury. RSC has made this assumption when compiling inputs for a preliminary optimisation study; it is based on a desktop analysis of comparable operations.

2.4 Environmental Liabilities and Permits

RSC is not aware of any environmental restrictions to explore within the Project area.

Key environmental legislation concerning mining activities include the Environmental Law No. 2872 (dated 11 August 1983) and the Environmental Impact Assessment Regulation (published in the Official Gazette No. 29186, dated 25 November 2014) (EIA Regulation). An approved environmental impact assessment (EIA) must be obtained before commencing mining activities, and it is a prerequisite for the issuance of any other licence or permit that could be legally required.

2.5 Access

The Project can be accessed via the Boğazkale-Yozgat Road which transects the south of the Project area. Areas A and B, discussed in this Report, are situated in the hills east of this road and are 2.5 km to 4 km from Boğazkale. Much of the wider Project area is accessible via several unsealed roads and farm tracks. RSC understands that the land where the project is situated is privately owned, in the form of approximately 12 smallholding farms.

2.6 Climate

The climate is classified as Csb Köppen climate classification (<u>http://koeppen-geiger.vu-wien.ac.at/present.htm</u>), which is a continental/Mediterranean climate with warm dry summers and cool wet winters. Boğazkale has an annual rainfall of 451 mm and an average temperature of 10 °C. July and August are the warmest months with average temperatures of 20.2 °C and 20.4 °C, respectively. The coldest month is January with an average temperature of -1.0 °C. Precipitation varies by 50 mm between the driest month (August, 8 mm), and the wettest month (December, 58 mm) (Table 3; Source: https://en.climate-data.org/asia/turkey/Corum/Boğazkale-15860/).



	Jan	Feb	Mar	Ар	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Avg. Temp. (°C)	-1	0.4	4.5	9.5	14.4	17.4	20.2	20.4	16.2	11.2	6.1	1.6
Min. Temp. (°C)	-5.2	-4.1	-1.1	3.2	7.2	9.9	12.2	12.1	8.0	3.8	0.4	-2.3
Max. Temp. (°C)	3.2	5	10.1	15.8	21.0	25.0	28.3	28.7	24.5	18.7	11.9	5.6
Precipitation (mm)	51	46	48	49	57	40	14	8.0	18	25	37	58

Table 3: Boğazkale monthly climate. Source: https://en.climate-data.org/asia/turkey/Çorum/Boğazkale-15860/.

2.7 Physiography

Altitudes in the licence area range from 1,100–1,400 m above sea level and the terrain is hilly with moderate to occasionallysteep slopes. Flat agricultural fields are located in the northwest of the licence area. The Büyükkale river drains through the southern portion of the licence area towards the northeast.

2.8 Vegetation

The vegetation of the licence area includes a small forestry block, farmland and hilly shrubland.

2.9 Local Resources & Infrastructure

Çorum is a northern Anatolian city and is the capital of the Çorum Province of Turkey. Çorum is located inland in the central Black Sea Region of Turkey and is approximately 250 km from Ankara and 600 km from Istanbul. The city has a population of some 530,000 with a broad range of shops and services. The nearest airport is in Ankara, which connects internationally.



3 History and Previous Work

3.1 Tenure & Operating History

Some mining occurred in the 1950s; however, no information is available about the location, extent, or historical production. RSC inspected a mine site in the Project area during a 2019 site visit and noted only very minor excavations and no evidence of mine infrastructure.

3.2 Exploration History

No exploration was carried out in the area between the 1950s and when AVOD acquired the licence (200712071) in 2013.

3.3 Production History

Historical production records are not available for the Project area.

3.4 Previous Studies

3.4.1 2018 - Dünya Grup

AVOD commissioned Dünya Grup Gayrimenkul Değerleme (Dünya) to undertake a 'reserve determination' and valuation report (Duzgun, 2018). The date of the report is 20 November 2018. The report and classification of the resources and reserves was not reported in any internationally accepted reporting code, such as the JORC Code (2012) or NI 43-101.

A 'reserve determination' was undertaken by Duzgun (2018) on information collected from 20 diamond drillholes, which included 13 drilled with a PQ rod diameter and seven drilled with HQ rod diameter. A total of 615 samples were used. Duzgun (2018) split the data into two areas: West Zone (Area A) and East Zone (Area B).

Geological domaining was undertaken using Netpromine software. The mineralised domains were based on assays from drillhole samples. The domains' lateral extent was controlled by IP geophysics, which resulted in the domain being extended 15–30 m beyond the drillholes in the West Zone. In the West Zone, the deposit was split into three domains: West Zone 1– 3 (Table 4). The Eastern Zone was also split into three domains: East Zone — Oxidic; East Zone — Sulphide Top and East Zone — Sulphide Sub (Table 4). Modelling was undertaken on 8 m x 8 m x 8 m blocks, with sub-blocking down to 1 m x 1 m x 1 m. Estimation of Cu grades was undertaken using a nearest neighbour method.

Based on the estimation, Duzgun (2018) estimated a reserve of 2.7Mt at 2.0 Cu % at a 1% Cu cut-off (Table 4). Duzgun (2018) also attempted to estimate the wider potential of the both the West and East Zones. This was classified into two categories: 'visible' and 'possible' (Figure 3, Table 5).



Solid model name	Average Cu Grade (%)	Tonnage (Tonnes)
West Zone 1	1.42	4,761
West Zone 2	1.76	1,098,118
West Zone 3	1.47	308,191
East Zone — Oxidic	2.76	887,280
East Zone — Sulphide Top	1.60	358,189
East Zone — Sulphide Sub 1	0	0
East Zone — Sulphide Sub 2	1.45	48,383
Total	2.0	2,704,922

Table 4: Reserves determined by Duzgun (2018), at a 1% Cu cut-off.



Figure 3: Block model and classification (Red: Visible; Green: Possible; Duzgun (2018)).

	Amount (Ton)	Cu (%)	AI (%)	Fe (%)	Zn (ppm)	Au (ppm)	Ag (ppm)
Visible Resource Amount	2,880,595	1.94	5.73	16.70	474	0.02	1.17
Possible Resource Amount	1,403,344	1.96	5.50	16.95	311	0.02	0.69
Total Resource Amount	4,283,940	1.78	5.65	16.78	421	0.02	1.01

The valuation undertaken by Duzgun (2018) was based on the reserve determination. The ore sale price used was USD 6,181 per tonne at 99% purity. A concentrate grade of 18% Cu was assumed for the Project, which gives a Cu concentrate sale price of USD 1,112.58 per ton. Duzgun (2018) estimated the operational cost per ton below in Table 6.



Duzgun (2018) determined the fair-market value of the Project as TRY 565,515,000 excluding taxes. At the time of reporting, the exchange rate between TRY and USD was 5.35, giving a Project value in USD 105,703,738.

Type of Expense	Cost Per Ton (TRY)	Total Cost (TRY)
Pickling Cost	21.91	3,879,400
Tüvenan Ore Production Cost	59.16	10,474,080
Blasting Cost	34.81	6,162,800
Process Cost	877.40	155,328,463
Labour and Personnel Expenses	45.67	8,086,574
State Right	118	20,891,520
Shipping cost	169.66	30,035,137
Port Expenses	62.20	11,011,427
Corporate Tax (22%)	1003.96	177,733,314
Withholding, Severance Pays, Stamp Duty and Other Legal Liabilities and Unforeseen Expenses (8%)	365.08	64,630,296
Total (TRY)	2757.85	488,233,011
Total (USD at 5.35)	515.49	91,258,507

Table 6: Operational cost per ton from Duzgun (2018).
---	--------

3.4.2 <u>2018 - DMT</u>

AVOD commissioned DMT GmbH & Co. KG (DMT) to carry out separate resource estimates using the drilling carried out by AVOD (Lowicki and Teigler, 2018). The report and classification of the resources (Lowicki and Teigler, 2018) was undertaken in accordance with the JORC Code (2012). The resource report also included a report by Wagner (2018) on the preliminary economic assessment (PEA) of the Çorum Copper Project. The PEA (Wagner, 2018) was not reported in accordance with any internationally accepted reporting code, such as the JORC Code (2012) or NI 43-101.

DMT also provided guidance for the 2018 drilling programme and SOPs for the sampling practices and analyses of the samples.

Lowicki and Teigler (2018) undertook a resource estimation based on geological logging and assays from 20 drillholes. In total, 615 assays and 209 density analyses were available for the estimation. DMT divided the resource into three bodies (Body A, Body B1 and Body B2). Body A covers all drilling at Area A, and Bodies B1 and B2 divide the mineralisation at Area B into oxidised and non-oxidised material (Figure 4). Wireframing was undertaken using a 1% Cu cut-off grade, and wireframes were linked between drillholes to create 3-D bodies. Due to limited geological knowledge, the wireframes were not extrapolated past the drillholes.

No block modelling was undertaken, and the resource is based on averaged Cu grades and density.

DMT produced a resource estimate in November 2018 which states a mineral resource of 2.7 Mt at an average grade of 2.0% Cu (Table 7). DMT categorised the entire resource as Inferred.



DMT also recommended further work was needed to improve the classification of the resource estimate. Recommendations included:

- further geological mapping of the prospect;
- extension of IP surveys;
- infill and extensional drilling;
- improved understanding of the structural controls of the deposits;
- producing a block model;
- investigating the extent of historical mining activities;
- obtaining a digital terrain model (DTM);
- investigating the mineral composition of the Cu mineralisation; and
- undertaking processing tests for sulphide and oxide mineralisation.



Figure 4: Wireframes modelled by DMT, from Lowicki and Teigler (2018).

Category	Area	Body ID and Type of Mineralisation	Cu Grade (%)	Tonnage (Mt)
Inferred	Area A	Body A (sulphidic body in Area A)	1.7	1.6
Inferred	Area B	Body B1 (sulphidic body in Area B)	1.4	0.3
Inferred	Area B	Body B2 (oxidised body in Area B)	2.9	0.8
Total Inferred	Area A+B	All 3 bodies A (sulphidic), B1 (sulphidic) and B2 (oxidised)	2.0	2.7

Table 7: Mineral resource	estimate at a 1% Cu	u cut-off (JORC.	2012), from Lowid	ki and Teigler (2018	8).
			 , _		



3.4.3 <u>2018 - Dirk H. Wagner Mining Consulting</u>

A PEA was prepared by Dirk H. Wagner Mining Consulting, which is based on the findings in the mineral resource report by Lowicki and Teigler (2018). The economic assessment proposes open pit mining of both 'Orebody A' and 'Orebody B'.

Wagner (2018) calculated a waste volume of 2.15 Mm³ with an assumed density of 2.5 t/m³, giving a total waste tonnage of 5.38 Mt. Most of the waste is from slope areas that are based on an overall slope angle of 40 degrees.

Wagner (2018) assumed the following mining factors to derive a realistic production scenario:

- overall resource recovery: 90%;
- production losses: 5%;
- dilution orebody A: 10%, and
- dilution orebody B: 5%.

Applying the above factors results in a 'mineable' resource of around 2.5 Mt @ 1.87% Cu. The overall stripping ratio (waste: ore) is 2.2 (Table 8).

Wagner (2018) estimated the mine to operate for 10 years with an annual production rate of 250,000 t of ore. Mining activities would be outsourced to contractors. Wagner (2018) notes that options for a processing plant were under consideration, but further tests would be needed to determine which processing approach was required. RCS notes that Wagner (2018) does not provide a site plan or discuss where the processing plant, waste rock heaps and tailings should be placed.

Mining costs assumed by Wagner (2018) were based on other hard rock projects in Turkey and information received from AVOD. Wagner (2018) assumed that mining would cost 1.65 USD per m³ of rock. This equates to 3.63 TRY/t cost for waste mining (2.5 t/m³ density), 2.48 TRY/t for sulphide ore mining (3.66 t/m³ density) and 3.49 TRY/t for oxide ore mining (2.6 t/m³ density). The processing costs assumed by Wagner (2018) are based on other hard rock projects in Turkey and Wagner (2018) adjusted to reflect the size of the operation. A total cost of 15 USD/t or 82.5 TRY/t was applied.

		Ore Tonnes	Cu %
	А	1,600,000	1.7
Resource	B1	3,000,000	1.4
	B2	800,000	2.9
Total		2,700,000	2
	А	1,505,000	1.55
'Mineable resource'	B1	269,000	1.33
	B2	718,000	2.76
Sulphide Ore		1,774,000	1.51
Oxide Ore		718,000	2.76
Total		2,492,000	1.87

Table 8: Mineable resource, from Wagner (2018).

Notes:

• The resource recovery rate was calculated to be 90% with production loses of 5%.

• Dilution within Area A was assumed to be 10% and 5% within Area B.



Further capital expenditure was estimated at 30 M USD and this cost was dominated by the cost of the processing plant (20 M USD). Wagner (2018) estimated the Project cash flow, before taxes, was 96 M USD with an internal rate of return of 39% and payback of 4.1 years.

3.4.4 2020 - Bordokum Mining and Addison Mining Services

AVOD commissioned Bordokum Mining and Addison Mining Services to complete an MRE for the Çorum copper Project in 2020 (Hogg et al., 2020). The estimation was based on the results of the 2018 drilling campaign (20 diamond drillholes) and was completed using wireframing of discrete domains within a block model and ordinary kriging. The MRE and technical report were prepared in accordance with the UMREK Code (2018). Domains were extrapolated with a consistent thickness up to 50 m from the bounds of existing drilling. The total estimated resource contained approximately 8.6 Mt @ 1.8% Cu (Table 9). The MRE is reported at a cut-off grade of 1% for oxide, 1.2% for mixed and 0.8% for fresh. The cut-off grades were based on assumed and estimated operating costs and metallurgical recoveries.

 Table 9: Bordokum Mining and Addison Mining Services 2020 Çorum Cu Project Inferred mineral resource by estimation domain.

Area	Oxidation	Tonnes (Mt)	Average Cu Grade (%)	Cu Metal Content (kt)
Α	Sulphide	4.6	1.5	69
В	Oxide	1.6	3.3	55
В	Mixed	0.6	1.8	12
В	Sulphide	1.7	1.1	19
Total		8.6	1.65	150

3.4.5 <u>2020 - RSC</u>

AVOD commissioned RSC to carry out an MRE for the Çorum Copper Project and prepare a technical report in compliance with the JORC Code (2012) (Aldrich & Sterk, 2020). The estimation was based on the results of the 2018 drilling campaign (20 diamond drillholes). The MRE was completed using ordinary kriging within a sub-blocked model. Estimation was constrained to samples within estimation domain wireframes. Wireframes were closed off at ~25 m from the drillholes (i.e. half the drillhole spacing). RSC estimated an Inferred mineral resource at Çorum of 4.4 Mt @ 1.9% Cu at a 1% Cu cut-off (Table 10).

Area	Tonnes Mt	Average Cu Grade %	Cu Metal Content kt
Area A	2.2	1.7	36
Area B	2.3	2.1	48
TOTAL	4.4	1.9	85



3.4.6 RSC Comments on Previous Studies

There is reasonable consistency between the various legacy studies carried out on the Project. Duzgun (2018) estimated 4.3 Mt @ 1.8 Cu %; Lowiki and Teigler (2018) estimated 2.7 Mt @ 2.0 Cu %, Hogg et al. (2020) estimated 8.6 Mt @ 1.8% Cu, and Aldrich & Sterk (2020) estimated 4.4 Mt @ 1.9% Cu (Table 11). Wagner (2018) also reported a potential minable resource of 2.5 Mt @ 1.9 Cu % (Table 11) and Duzgan reported a potential minable resource of 2.7 Mt @ 2.0 Cu % (Table 11).

Lowiki and Teigler (2018) restricted the domaining to the drillhole traces, significantly restricting the volume of the deposit to 2.7 Mt. In comparison, Hogg et al. (2020) extrapolated wireframes up to 50 m from drillholes, leading to an overestimation of tonnes compared to other MREs based on the 2018 drilling data (Duzgun, 2018; Lowiki and Teigler, 2018; and Aldrich & Sterk, 2020). RSC considers the Hogg et al. (2020) estimate to be overstated, as the 2021 step-out drilling of approximately 50 m partially closed-off mineralisation in Area A and completely closed-off mineralisation in Area B. The total resource ('visible' and 'possible') estimated by Duzgun (2018) and MRE by Aldrich & Sterk (2020) resulted in comparable tonnages (4.3 Mt and 4.4 Mt, respectively) having undertaken a similar approach to extrapolation of grades within the models.

RSC notes that the previous studies by Duzgun (2018), Lowiki and Teigler (2018), and Hogg et al. (2020) used the uncorrected drillhole collar data (section 6.5.1).

Study	Date	Mineral Resource	Mining Study
Duzgun	2018	4.3 Mt @ 1.8% Cu	2.7 Mt @ 2.0% Cu
Lowiki and Teigle; Wagner	2018	2.7 Mt @ 2.0% Cu	2.5 Mt @ 1.9% Cu
Hogg et al.	2020	8.6 Mt @ 1.8% Cu	
Aldrich & Sterk	2020	4.4 Mt @ 1.9% Cu	

Table 11: Summary of previous technical studies at 1% Cu cut-off.



4 Geological Setting and Mineralisation

4.1 Regional Geology

Turkey is made up of four major tectonic blocks: Pontides, Anatolide-Tauride, Kirşehir block and Arabain Platform (Okay and Tüysüz, 1999; Okay, 2008). The geology of Turkey is very complex. The four major tectonic blocks can be further subdivided into smaller tectonic terranes. The Project occurs in the Sakarya terrane which is part of the larger Pontide block (Figure 5).

These four tectonic units are separated by suture zones that formed during the closure of the Tethys oceans. A major Neotethyan suture zone in Turkey is the Izmir-Ankara-Erzincan Suture Zone (IAESZ) which separates Eurasian Pontide domains in the north from Gondwana-derived Anatolide-Tauride domains in the south (Figure 5).

The Project is situated in the IAESZ. The IAESZ trends roughly east-west and stretches through all of Turkey (Figure 5). Towards the west, the IAESZ becomes the Vardar suture and in the east, it transitions into the Sevan-Akera suture zone. Blocks and slivers of ophiolitic material occur along the IAESZ (Sarıfakıoğlu et al., 2017). In the central portion of the IAESZ is the Ankara mélange, a subduction-accretion complex (Bailey and McCallien, 1950; Figure 6). In addition to ophiolitic material, the Ankara mélange contains seamount and oceanic plateau rocks, and blocks of metamorphic rocks: epidote-glaucophane, epidote-chlorite and epidote-actinolite schists (Sarıfakıoğlu et al., 2014).

In the area of Boğazkale, the Ankara mélange trends ESE and is exposed over a width of about 6–10 km. Near the town of Boğazkale, the Ankara mélange contains blocks of ophiolitic and Permian–Triassic limestone rocks derived from the Sakarya terrane in the north (Figure 6, Sarıfakıoğlu et al., 2017). Blocks of ophiolitic rocks are made of serpentinised peridotite, lavas, and radiolarite. The ages of the radiolaria in the different blocks span from late Triassic to early Cretaceous (late Carnian–middle Norian, late Valanginian–early Barremian, and Valanginian–early Aptian). The Ankara mélange is thrust southward along a low-angle fault onto rocks that formed in an island-arc setting, composed of Campanian–Maastrichtian limestone, sandstone, volcaniclastic and volcanic rocks (Sarıfakıoğlu et al., 2017). The thickness of the island arc units varies, from pinched out in the west to exposed over a horizontal distance of about 6 km in the east. Both the Ankara mélange and the Cretaceous island-arc sequence tectonically rest on top of the Lower–Middle Eocene flysch deposit that is exposed in the south. In the north, the Ankara mélange is juxtaposed against the Karakaya Complex; although, this tectonic contact is mostly covered by younger Cenozoic sediments (Figure 6).





Figure 5: Simplified geological map of Turkey with major faults and ophiolitic complexes. Pontide tectonic belt comprises Sakarya continent and the Istanbul zone. IPSZ: Intra-Pontide suture zone; IAESZ: Izmir-Ankara-Erzincan suture zone; EO: Eldivan ophiolite; KO: Kargı ophiolite; CO: Çicekdağ ophiolite; AOM: Ankara mélange; ITSZ: Inner-Tauride suture zone; BZSZ: Bitlis-Zagros suture zone. Other abbreviations stand for different ophiolites. Figure modified after Sarıfakıoğlu et al. (2017).



Figure 6: Geological map of central Turkey showing the central part of the IAESZ and major geological units. Modified after Sarıfakıoğlu et al. (2017).



4.2 Local Geology

Lithologies encountered within the licence are of marine and ophiolitic origin, and the most abundant rock type in the area is basalt, followed by seafloor sediments (radiolarite, Figure 7). The occurrence of deep-sea carbonate sediments at some sites suggests sediment deposition above the carbonate compensation depth (<4,000 m) and likely related to the regional shortening and shallowing of the Tethys Sea (Bosellini and Winterer, 1975; Parlak and Robertson, 2004). Ultramafic lithologies are encountered only east of the Project where Lowicki and Teigler (2018) also note the presence of a very small lens of massive chromite.



Figure 7: Geological map of the Project and surrounding area. Geology is mapped at 1:500,000.

4.3 Deposit Geology

The main lithologies within the deposit are basaltic lava flows and seafloor sediments (radiolarites, Figure 8). These lithologies are typical of those found near surface in semi-active spreading ridges, probably within water less than 4,000 m in depth, and likely related to the regional tectonic shortening and shallowing of the Tethys. The texture of the basalt varies from massive to brecciated and in places pillow basalts are present (Figure 9). The variable physical nature of the basalt is caused by lavas extruded onto/along the seafloor. The basalt flows form lateral bodies hosting complex arrays of massive competent basalt and brecciated basalt. Hyaloclastites formed by quench fragmentation of lava flow surfaces during submarine is common. Here the edges of lava flows are generally brecciated while the inner portions are more massive and



cohesive as a result of slower cooling compared to the edges of the flow. The slower cooling inside the thicker sections of such flows also allowed for porphyritic textures to form, which are primarily defined by feldspar crystals. The bases of the lava flows tend to be brecciated and can include rip-up clasts of seafloor sediments and cherts. The tops of lava flows are typically glassy and brecciated, due to lava being in direct contact with water; this results in rapid cooling and related brecciation (hyaloclastite). The overall strike of lithological contacts in the Project area is N to NE (Figure 8 and Figure 10).

Many lithologies indicate signs of secondary hydrothermal alteration. For example, ultramafic rocks (dunite and harzburgite) have been serpentinised. Additionally, chloritisation and epidotisation, together with veins of calcite and quartz within the ophiolitic rocks, indicate an overprint by a hydrothermal system which was possibly active during deposition of the basalt on the seafloor (Lowicki and Teigler, 2018).



Figure 8: Geological map of the project. Geology source: AVOD.





Figure 9: Basalt lava flow with pillow textures (Area A), (30-cm hammer for scale).



Figure 10: Area A. Looking north toward GERD-08. Photo showing orientation of individual lava flows and outcropping mineralisation. Note: GERD-08 refers to the location of a drillhole collar.



4.4 Controls on Mineralisation

The basaltic flows that host the Cu mineralisation in the Project vary from brecciated to massive to porphyritic. The variation is caused by the variable cooling of basaltic flows (hyaloclastites) as they spread across the seafloor. The basaltic lava flows can also entrain seafloor sediments and other basaltic clasts as the flow is extruded across the seafloor. Pillow lava textures are also present in places. This variety of lava textures and rock rheology of the basalt provides an abundance of accommodation space for mineralised hydrothermal fluids to pass through the newly deposited lava and back to the seafloor.

In outcrop, the most apparent evidence of base metal enrichment is strongly oxidised zones with Fe-hydroxides/oxides and Cu-oxides (Figure 11 to Figure 14). Disseminated pyrite is the most evident form of mineralisation in less weathered outcrops. There are areas with gossanous material that occur in lenses along zones of strong alteration. The textures suggest that the gossan formed from oxidation of sulphide minerals, assumed to be pyrite (Lowicki and Teigler, 2018). Lowicki and Teigler (2018) also noted one of the malachite-stained outcrops was explored by a German based company in the 1950s (test work and results are unknown). RSC also visited the site and observed the strongly oxidised zones with Fe hydroxides/oxides and Cu oxides and noted that no excavations could be seen.

The broadly horizontal distribution of Cu mineralisation at the Project suggests that Cu mineralisation was precipitated from hydrothermal fluids after the deposition of the basaltic flows. Copper enrichment occurs in two forms: primary and secondary.

Primary Cu mineralisation at Çorum is associated with basalt in the form of disseminated, semi-massive and thin zones of massive sulphides, and was likely deposited not long after the basaltic flow was emplaced (i.e. basaltic lava flows were emplaced near active seafloor hydrothermal vents, Figure 12).

The secondary malachite and azurite mineralisation at Çorum has formed by weathering of the primary mineralised rock. During this weathering process, the sulphides are broken down and much of the contained Cu is transported to the water table where it forms oxide minerals like malachite and azurite (Figure 12 and Figure 13). Which particular Cu mineral(s) are precipitated depends on the pH of the groundwater and the redox potential (Barrie et al., 2016) If the Cu is transported into areas of low oxygen, the Cu may reprecipitate as sulphides, in addition to any primary Cu-sulphides potentially already present in this zone. This means that the secondary sulphide mineralisation may cause the rock to be more enriched in Cu than in the primary unweathered sulphide zones.

RSC notes that the Project is also affected by significant post-mineralisation faulting (Figure 8 and Figure 14).

The controls on mineralisation, as discussed above, have been incorporated into the estimation strategy discussed below in section 7.2 In RSC's opinion, the understanding of the local geology and the controls on mineralisation is sufficient to support the classification of Mineral Resources.





Figure 11: Iron hydroxides/oxides and Cu oxides within basaltic flows, Area A.



Figure 12: Schematic model of the mineralisation process at Çorum. A) Primary mineralisation occurred post lava deposition on the sea floor. Hydrothermal fluids migrate through conduits in the basalt (breccia or cooling cracks and joints) and precipitate Cu-rich sulphides. B) Secondary mineralisation occurred via 'recent' weathering. Cu-rich fluids transport Cu throughout the rock column. Above the water table, Cu precipitated in an oxidised environment as oxide or carbonate minerals; below the water table Cu precipitated in a reducing environment as sulphide minerals.





Figure 13: Area B, GERD-54 20.7 m to 27.8 m with abundant oxide Cu mineralisation.



Figure 14: Area B. Looking north. Photo shows mineralised basalt with azurite veining and post mineralisation faulting.



4.5 Mineral Deposit Model & Comparable Deposits

The Project is considered to be a volcanogenic massive sulphide (VMS) deposit. VMS deposits form when seawater is heated by submarine volcanism and flows through the volcanic rocks using a network of conduits, including cooling cracks and joints, and interconnected pore spaces in permeable rocks such as in volcanic breccias. The hydrothermal fluids mobilise metals including Cu, Zn, Pb, Au and Ag. Changes in temperature can cause the metal-laden hydrothermal fluids to precipitate the dissolved metals as sulphide minerals forming deposits. The shape of VMS deposits varies and could be pod or sheet-like.

Because VMS deposits exhibit a broad range of geological and geochemical characteristics, many classification systems have been reported. One such classification system was created by Cox and Singer (1986), where VMS deposits were subdivided into three groups:

- 1) Cyprus-type associated with marine mafic volcanic rocks;
- 2) Besshi-type associated with clastic terrigenous sediment and marine mafic volcanic rocks; and
- 3) Kuroko-type associated with marine felsic to intermediate volcanic rocks.

Besshi-type VMS deposits form in basaltic sheets that are typically interbedded with, or have, intruded turbiditic-tohemipelagic sediments (Cox, 1986; Taylor et al., 1995). These form Cu rich deposits and can also contain small abundances of lead (Pb). Deposits of the Kuroko-type tend to be larger and are generally of higher Cu-grade than Cyprus-type deposits. Kuroko-type VMS deposits form in intermediate to felsic rocks in extensional environments associated with arc volcanism and, in addition to Cu and zinc (Zn), are often also enriched in Pb and Ag (Singer, 1986; Taylor, 1995).

The Cu mineralisation at Çorum bears many similarities to Cyprus-style VMS deposits, also classified as back-arc mafic (Galley et al., 2007) or mafic-ultramafic (Shanks and Koski, 2012). This style of VMS deposits form in intra-oceanic backarc or fore-arc basin and oceanic ridge settings (Koski and Mosier, 2012). At Çorum, the geology is dominated by ophiolitic rocks such as serpentinites, basalts (with pillow lavas and spilitic structures) and deep-sea sediments such as radiolarite.

Cyprus-style deposits have potential for enrichment in Zn, in addition to Cu. The Çorum rocks indicate minor enrichment in Zn relative to N-MORB (normal mid-ocean ridge basalt; Arevalo and McDonough, 2010). RSC notes that less than 1% of the 2018 and 2021 samples returned Zn grades greater than 1% and the average grade is 0.05% Zn across all samples; hence, the Zn 'enrichment' at Çorum is negligible.

Mineralisation at Çorum is associated with lava flows, which may suggest that it formed below the seafloor, either in the lower part of a vent (i.e. in the alteration halo) or along conduits some distance away from any main vent.


5 Exploration by AVOD

5.1 Geophysics

In 2013 AVOD commissioned Aktif Yerbilimleri A.S. (AY) to carry out a magnetics survey over what is now Area A (Figure 15). Subsequently, AVOD contracted the governmental institution, General Directorate of Mineral Research and Exploration (MTA), to undertake a ground geophysics survey using induced polarisation (IP), which produced maps and sections of chargeability and resistivity. The raw data and the processed maps in .kmz file format were provided to RSC.

The 2013 IP studies carried out by MTA were undertaken over seven profiles on the field over Area A, with electrodes spaced at 50 m. A progressive dipole-dipole electrode array was used. The total survey length was 8,000 m and eight levels of measurements were taken.

The results from the IP survey identified a continuous zone of high resistivity and high chargeability anomalies which extended northeast 600–700 m, with an average east-west width of 100 m. MTA (2013) estimated the IP anomaly could extend to a depth of 150 m.



Figure 15: Magnetics map over Area A, depth 10 m.



5.2 Mapping and Geology

Following the positive findings of the geophysical surveys, in 2016 AVOD commissioned DMT to undertake geological mapping and grab-sample programmes around Area A. During these programmes, Cu mineralisation was discovered at Area B, approximately 700 m east of Area A.

5.3 Soil Sampling

AVOD has not undertaken soil sampling.

5.4 Stream sediment sampling

AVOD has not undertaken stream-sediment sampling.

5.5 Trenching

AVOD has not undertaken trenching.

5.6 Drilling Programmes

5.6.1 <u>2017 Drilling Programme</u>

In 2017, AVOD drilled five diamond drillholes for a total of 599 m to test the northern extension of the historical mining area, east of Area A. Hole depths ranged between 50 and 250 m (Table 12). This initial programme was completed using a Delta 2500 drill rig supplied by Asyatek Drilling. Drillholes were drilled using triple tube PQ with HQ tails. Selected full core samples were taken. Samples were analysed by Argetest in Ankara, a laboratory that is certified to ISO Quality Management System (ALS: ISO 9001:2015).

Table 12: Summary of 2017 diamond drilling programme. RSC repositioned coordinates are given in UTM ED50 Zone

Drillhole	Easting	Northing	RL	PQ	HQ	Depth	Azimuth	Dip	Samples
HST-1A	640511	4430984	1283.7	62.9	37.1	100	330	-60	4
HST-1B	640511	4430984	1283.7	61.6	188.4	250	235	-65	4
HST-1C	640511	4430984	1283.7	75	0	75	150	-60	4
HST-2B	640492	4431077	1282.4	73.8	50.2	124	335	-60	4
HST-2C	640492	4431077	1281.3	45.9	4.1	50	140	-50	4
DH3	6400586	4430860	1297.8	350		350	325	-65	0

36N.



The drillholes were surveyed using a handheld GPS of unknown type which has a typical accuracy of ± 5 m (UTM ED50 Zone 36 North). Drillhole angles and azimuth were set by field staff using unknown tools. No downhole surveying was undertaken after the drillhole was completed.

Logging included recording geology, alteration and mineralisation over the entire length of the drillhole. Geological and mineralogical attributes have been extrapolated where core loss occurred. Logging is qualitative, using broad descriptive terminology for the degree of mineralisation and alteration. RSC notes that recovered core and geotechnical properties, such as rock quality density (RQD), were not recorded and core photography was not undertaken.



Figure 16: Location of the drill collars from the 2017 drilling campaign at the Çorum Project. Drillholes HST-1A, HST-1B and HST-1C were taken from the same location as were drillholes HST-2B and HST-2C.

Samples were taken over selective 1-m intervals based on visual indications of mineralisation. The orientation of the drilling is typically perpendicular to the mineralisation. Only four samples per drillhole were collected, and the samples taken were not continuous. Sample boundaries were assigned to complete metre intervals; as a result, samples crossed geological and mineralisation boundaries. Samples were submitted by AVOD to Argetest in Ankara as full core samples.



5.6.2 2018 Drilling Programme

In 2018, AVOD drilled 20 diamond drillholes for a total of 1,380.5 m. In total, 11 of these were drilled at Area A and nine at Area B. Holes ranged in depth from 57.7 m to 105 m and the average depth of the drillholes was 69 m (Table 13). The drillhole collars do not follow a grid pattern, and their locations were placed to gain maximum information about the geology of the two areas (Figure 17). Inclination of holes was around 60° or 90° and their azimuth was either towards ESE–SE or W–NW. This programme was completed using a Tetra 2500 drill rig by Asyatek Drilling. All drillholes were drilled using triple tube PQ; however, seven drillholes were completed using HQ, when drilling became difficult. Of the 1,380.5 m drilled in total, only 185.3 m were drilled using HQ.

AVOD contracted AY to manage the 2018 drilling programme in the Çorum licence which included geological logging, sampling, sample preparation and sample dispatch. All laboratory work was carried out by Argetest in Ankara.



Figure 17: Location of the drill collars from the 2018 drilling campaign at the Çorum Project.



 Table 13: Details on holes drilled at the Project in 2018. RSC repositioned coordinates (section 6.5.1) are given in UTM ED50 Zone 36N.

Hole ID	Easting	Northing	RL	PQ	HQ	Depth	Azimuth	Dip	Samples
GERD-08	640487	4431199	1286	60	0	60	120	-60	37
GERD-17	640417	4431010	1265	31.3	36.6	67.9	0	-90	29
GERD-24	640343	4430901	1255	60	0	60	0	-90	31
GERD-47	641046	4430519	1278	66.1	0	66.1	98	-60	41
GERD-54	640915	4430434	1297	76.6	0	76.6	110	-60	42
GERD-61	641073	4430396	1256	75.6	0	75.6	0	-90	39
GERD-10	640463	4431203	1283	57.7	0	57.7	0	-90	37
GERD-22	640394	4431002	1264	39.7	20.3	60	270	-60	23
GERD-26	640370	4430910	1256	69.7	0	69.7	140	-60	20
GERD-28	640288	4430811	1248	62.3	0	62.3	280	-60	19
GERD-30	640320	4430804	1248	42.4	23.2	65.6	0	-90	16
GERD-32	640259	4430734	1241	60.5	19.1	79.6	0	-90	20
GERD-33	640269	4430707	1242	47.5	16.3	63.8	120	-60	21
GERD-35	604235	4430561	1229	47.9	57.1	105	0	-90	10
GERD-49	640952	4430475	1297	69.4	0	69.4	0	-90	39
GERD-51	640999	4430380	1284	73.7	0	73.7	305	-60	41
GERD-57	641033	4430478	1277	77.1	0	77.1	0	-90	43
GERD-58	641097	4430470	1258	48.3	13.1	61.4	0	-90	30
GERD-60	641076	4430441	1259	57.8	0	57.8	275	-60	39
GERD-63	641022	4430396	1273	71.2	0	71.2	0	-90	38

The drillholes were surveyed using a handheld GPS of unknown type; hand-held GPS typically have an accuracy of ± 5 m (UTM ED50 Zone 36 North). Drillhole angles and azimuth were set by field staff using unknown tools. No downhole surveying was undertaken.

DMT provided AVOD with a logging SOP which details core handling, core recovery, metre marking, photography, geological logging and geotechnical logging (RQD). Geological logging was qualitative, using broad descriptive terminology for the degree of mineralisation and alteration. Geological and mineralogical attributes were extrapolated where core loss occurred. No orientation of the drill core was undertaken.

All drilling was diamond core drilling. Core recovery and RQD were recorded on extraction of the core. Any core loss was either assigned to the bottom of a run or where deformation along the core was indicated. Prior to sampling, the core was geologically logged and the intervals to be sampled were identified. All samples span whole 1-m intervals. All sample intersections were selected by an AVOD Staff Geologist. Sampling was initiated about 2 m above and below visible mineralisation. Sample boundaries were assigned to full metre marks, meaning that samples crossed geological and mineralisation boundaries. The orientation of the drilling is typically perpendicular to the mineralisation.



The density of 2018 core was determined by the 'Archimedes' method prior to crushing and splitting.

The whole 1-m interval was removed from the core tray, crushed to <5 mm, and split using a riffle splitter (50/50). Half the core mass was collected as a sample, the other half was placed as a crushed sample back into the core box.

5.6.3 2021 Drilling Programme

In 2021, AVOD drilled 42 diamond drillholes for a total of 1,855 m (Table 14 and Figure 18). Of the 42 drillholes, 27 were drilled at Area A and 15 at Area B. Holes ranged in depth from 20 m to 70 m, with an average depth of 44 m. The drillhole collars do not follow a strict grid patten, and their locations were designed to infill the 2018 drilling to roughly 40 m x 40 m spacing between drillholes. Inclination of the holes was typically 75° towards the west. One drillhole was drilled approximately vertical. This programme was completed using a Tetra 2500 drill rig by Titan Drilling. All drillholes were drilled using triple tube PQ.

AVOD technical staff managed the 2021 drilling programme including geological logging, sampling, sample preparation and sample dispatch. Geological logging and sampling were undertaken at the core storage facility after the completion of the entire programme.



Figure 18: Location of the drill collars from the 2021 drilling campaign at the Çorum Project.



Hole	Easting	Northing	Elevation	Depth	Azimuth	Dip	A-22	640371	4431059	1271	40	277	•
ID	3		(m)	(m)			A-23	640435	4431078	1255	45	276	
A-01	640184	4430519	1222	20	275	76	A-24	640464	4431141	1260	40	281	Γ
A-02	640243	4430531	1221	50	275	76	A-25	640542	4431179	1291	70	275	
A-03	640312	4430565	1252	65	276	75	A-26	640416	4431231	1282	40	278	Γ
A-04	640256	4430597	1222	45	277	76	A-27	640492	4431288	1274	45	279	
A-05	640207	4430591	1225	25	274	76	B-01	640945	4430430	1298	50	274	
A-06	640246	4430650	1221	25	273	75	B-02	641032	4430431	1266	50	0	
A-07	640283	4430682	1229	50	276	76	B-03	640992	4430449	1270	50	278	
A-08	640216	4430677	1230	20	277	75	B-03	641008	4430514	1205	55	270	
A-09	640315	4430732	1233	40	275	75	D-04	641104	4430514	1295	50	275	
A-10	640325	4430792	1230	55	276	75	B-00	041104	4430504	1200	50	279	
A-11	640220	4430780	1255	30	275	76	B-06	641006	4430323	1271	50	276	
A-12	640264	4430767	1238	35	277	76	B-07	641092	4430345	1239	50	274	
A-13	640369	4430843	1235	35	282	75	B-08	640908	4430369	1293	50	279	
Δ-14	640233	4430842	1262	35	273	75	B-09	641136	4430387	1237	45	278	
۸.15	640320	4430858	1251	35	276	76	B-10	640898	4430428	1299	30	277	
A-15	640412	4430030	1231	45	270	76	B-11	641152	4430476	1233	45	276	
A-10	040412	4430900	1244	40	212	75	B-12	640904	4430480	1307	50	277	
A-1/	640298	4430923	1265	35	269	76	B-14	640967	4430531	1299	50	278	
A-18	640433	4430932	1250	55	279	76	B-15	641094	4430565	1268	50	275	
A-19	640379	4430949	1249	35	278	76	B-16	641038	4430571	1278	50	276	Γ
A-20	640472	4431017	1270	65	280	75						1	
Δ_21	640333	1130000	1260	40	280	77							

The drillholes were surveyed using a handheld GPS of unknown type; hand-held GPS typically have an accuracy of ±5 m (UTM ED50 Zone 36 North). Upon the completion of the drill programme, AVOD contracted a professional surveyor to record the location of drillhole collars by means of a Differential Global Positioning System (DGPS). A DGPS system has an accuracy of less than 10 cm, which is superior to the 5-m accuracy of a typical hand-held GPS.

Drillhole angles and azimuth were set by field staff and drilling operations supervised by the rig geologist. Downhole surveys were collected by the drill crew using Reflex EZ-Trac survey tool.

Geological logging and sampling were not completed on site. Core was stored and shipped to Manisa after completion of the entire drilling programme. At Manisa, core was logged by AVOD technical staff.

Geological logging was qualitative, using broad descriptive terminology for the degree of mineralisation and alteration. Geological and mineralogical attributes have been extrapolated where core loss occurred. No orientation of the drill core was undertaken.

All drilling was diamond core drilling. Core recovery was recorded on extraction of the core. Any core loss was either assigned to the bottom of a run or where deformation along the core was indicated.



Prior to sampling at Manisa, the core was geologically logged and the intervals to be sampled were identified. All samples span whole 1-m intervals. All sample intersections were selected by an AVOD Staff Geologist. Sampling was initiated about 2 m above and below visible mineralisation. Sample boundaries were assigned to full metre marks meaning that samples sometimes crossed geological and mineralisation boundaries.

Density determinations were carried out at AVOD's core storage facility near the town of Manisa by AVOD technical staff. Density determination values were determined by the Core Tray method and the Archimedes method for competent pieces of core.

5.7 Mineral Processing and Metallurgical Testing

No metallurgical test work has been undertaken. RSC recommends a programme of metallurgical test work at an early stage in the Project to ensure good understanding of the recoveries and potential processing methods.

5.8 Surveying, Topography, DTM

During December 2019, a digital terrain model (DTM) was created by Ünal Harita Engineering (http://www.unalharita.com/). The DTM covered both Areas A and B and resulted in significant improvements to topographical surface control for the project. Spatial resolution of the DTM was 3.45 cm per pixel. The coordinate system used was Turef TM36 (EPSG:5256). The data were collected using a DJI Phantom 4 and Topcon GR-5 Advances GNSS receiver, flying at a height of approximately 100 m.

High-definition photography was also collected and captured the recent exploration activity (drill pads and tracks). This improved surface control resulted in a re-evaluation of the 2017 and 2018 drill collars (section 6.5.1).

AVOD contracted a professional surveyor to record the location of the 2021 drillhole collars upon the completion of drilling using a Differential Global Positioning System (DGPS).

5.9 Petrography

AVOD has not undertaken petrography studies.



6 Sampling, Data Processes, Quality

6.1 Sample Preparation, Analysis

Sample preparation steps and analyses undertaken from the 2018 and 2021 drilling programmes are outlined below (Figure 19). The sample preparation and analytical process details for the 2017 drilling programme are not known.



Figure 19: Sample preparation and analytical process for the 2018 drilling programme (left and 2021 drilling programme (right).

6.2 Data Quality & Quality Objectives

Every data collection process implicitly comes with expectations for the accuracy and precision of the data being collected. Data quality can only be discussed in the context of the objective for which the data are being collected. In the minerals industry the term 'fit for purpose' is commonly used to convey the principle that data should suit the objective. In the context of DQOs, fit for purpose could be translated as 'meeting the DQO'.

For the Çorum Project, data should be of a quality that is fit for the purpose of classifying the Mineral Resource in the Indicated category, in accordance with the UMREK Code (2018). Throughout this section, where comments are made on the suitability of processes or quality of data, the Competent Person has evaluated these against the confidence



requirements of Inferred and Indicated categories, and where data were not suitable, has opted not to include material in any resource category (e.g. "unclassified").

6.3 Quality Assurance

Quality assurance (QA) is about error prevention and establishing processes that are repeatable and self-checking. The simpler the process and the fewer steps required the better, as this reduces the potential for errors to be introduced into the sampling process. This goal can be achieved using technically sound, simple prescriptive SOPs and management systems.

In reviewing AVOD's QA systems, to the best of its abilities, RSC and the Competent Person have determined if processes are clearly documented in SOPs; whether SOPs make clear reference to the target quality of the data; whether the SOP is correctly following best practice, whether staff are actually following the SOP by auditing processes in the field; and if any observed discrepancies pose a risk with regards to the objectives (Figure 20).

A summary of the QA checks completed by RSC staff during the 2019 and 2021 site visits is summarised in Table 15.



Figure 20: RSC QA review workflow.



Campaign	2019		2021			
Process	RSC Comment	RSC Comment Risk to estimate confidence		Risk to estimate confidence		
Drillhole collar survey	Not undertaken during site visit. DGPS survey not High undertaken.		SOP(s) in place and used – both AVOD and the DGPS survey company.	Low		
Downhole survey	Not undertaken.	Moderate	SOP(s) in place and used appropriately.	Low		
Primary sampling	Drilling not active during the site visit but SOP(s) discussed.	Low-Moderate	SOP(s) in place and used appropriately.	Low		
Core orientation	Not undertaken.	Low	Not undertaken.	Low		
First Split	Sampling not undertaken during the site visit, but SOP(s) discussed.	Low	Sampling not undertaken during the site visit but SOP(s) discussed.	Low		
Second Split	Analyses had not started at the time of the site visit but SOP(s) in place by Argetest.	Low	Analyses had not started at the time of the site visit but SOP(s) in place by Argetest.	Low-Moderate		
Laboratory analyses	Analyses had not started at the time of the site visit but SOP(s) in place by Argetest.	Low-Moderate	Analyses had not started at the time of the site visit but SOP(s) in place by Argetest.	Low-Moderate		

Table 15: Summary of QA review by RSC.

6.3.1 Location Data

For the 2018 programme, operating procedures for collar and downhole surveys are specified in the document "Standard Operating Procedures On The Copper Project For License 200712071 In The Çorum Province, Turkey" (DMT 2018. The SOP states that following the completion of a drill hole, all drillholes should be downhole surveyed with recordings taken every 50 m and all collar positions must be surveyed by a registered qualified surveyor. The SOP does not include sufficient details on survey procedures or QC measures and does not make suitable reference to any quality objectives. RSC considers the SOP to be of poor standard and not fit for purpose with regards to the objectives.

RSC did not observe the surveying process for the 2018 programme as surveying had been completed prior to the site visit. Based on communications with AVOD, downhole surveys were not undertaken for the 2018 drilling and the collar locations were not surveyed by a registered surveyor.

The Competent Person considers the quality issues associated with the collar positions to pose a risk with respect to the resource classification.



In assessing the risk associated with the absence of downhole survey information RSC has considered the depth of drilling (<100 m), the diameter of core drilling (PQ) and the angle. Eleven out of 20 (55%) of the 2018 drillholes were drilled vertically, while the remaining nine (45%) were drilled at an angle of -60. RSC considers the absence of down-hole surveys for the holes drilled at an angle a low-to-moderate risk to the targeted Indicated resource classification. For the holes that were drilled vertically, RSC considers the absence of down-hole surveys a low risk.

For the 2021 programme, operating procedures for collar and downhole surveys are specified in document "AVOD Collar location pick-up hand-held GPS SOP v1.0" and "AVOD Downhole survey SOP v1.0". RSC considers the SOPs to be of good industry standard and fit for purpose. The SOP does not specifically reference quality objectives; however, it does describe the processes in adequate detail and includes sufficient QC measures. The Competent Person considers the SOP fit for purpose.

RSC geological consultants, Mr M. Grimshaw and Mr A. Goodship, observed the surveying processes in the field during their site visit and found that locations were recorded in accordance with the AVOD SOP. Upon the completion of the drill programme, AVOD contracted a professional surveyor to record the location of drillhole collars by means of a Differential Global Positioning System (DGPS).

The Competent Person considers that the 2021 procedures relating to location data pose a low risk to the data quality objectives.

6.3.2 Density Data

SOPs were provided for the 2018 and 2021 density measuring work. Density determinations were carried out at AVOD's core storage facility near the town of Manisa. All density values represent a dry bulk density, as the test work was undertaken well after the drilling in a dry environment.

The density of 2018 core was determined by the Archimedes method; the 2021 core was determined by a combination of the Core Tray method and the Archimedes method, with the latter only applied for competent pieces of core. The Archimedes density values were calculated by first weighing the dry sample before placing it into water, and the volume of the replaced water measured. The relative density was then calculated from the ratio of the weight against the replaced water. The Core Tray method density values were calculated from the total tray dry core weight divided by the theoretical volume of the PQ core cylinder from start block to finish block for that tray. All density values represent a dry bulk density, as the test work was undertaken well after the drilling. The core was transported from the drill site to Manisa and stored in a dry environment. No wax coatings were used during the test.

The process was not audited during site visits; therefore, RSC cannot comment on whether the SOP was adhered to. RSC considers the SOPs to be of decent standard and describes industry standard practice; however, the documents do not mention the risk of selection bias, in heavily broken ground, lack QC measures and do not refer to the DQO. The Competent Person considers that there is a moderate risk with respect to the quality objectives and this has been taken into account when classifying the resource. These processes should be improved for future drilling programmes.



6.3.3 Primary Sample

Drilling SOPs, covering the assurance of quality of the primary sample, collected at the drill bit in the ground, were not available for review. RSC staff, Mr Grimshaw and Mr Goodship, visited the Project during the 2021 drilling campaign (16 and 17 April 2021) and observed drilling practices during this time. Based on their observations and discussions with the drillers and geologists, RSC considers the sampling to have been carried out to a good standard.

SOPs relating to the supervision of diamond drilling by the rig geologist were provided for the 2018 and 2021 drilling campaigns. The SOPs are of a decent standard and describe industry good practice. The process involves regular visits to the drill site to observe drilling and perform a number of check including:

- ensuring that the drilling crew retrieves core samples from the core barrel using the minimum amount of air pressure to push out the core from the core barrel;
- checking that core samples retrieved from the barrel are immediately transferred to the core trays; and
- making sure that any core loss is properly recorded on the core blocks.

The quality of the primary sample for diamond drilling could only be assessed indirectly through a review of core recovery. RSC considers the core recoveries to be acceptable, with an average of >80% for 2018 samples and >90% for 2021 samples. However, improvements should be introduced to get the recovery well above 90% for any future programmes as ~80% is marginally acceptable.

The Competent Person considers that there is low risk with respect to the quality objectives and this has been taken into account when classifying the resource.

6.3.4 First Split

The first split was completed by AVOD technical staff at the core handling facility by cutting the core in halves. For the 2018 programme, an SOP describing the sampling the drill core using core cutting was available for review. The documented process was not consistently carried out due to the highly broken nature of the drill core and the sampling was adjusted to whole core crushing and splitting. The SOP was not updated for this change. RSC did not observe the crushing and splitting process. From discussions with the geologist, the process involved crushing the entire 1-m sample to less than 5 mm using a 3A Labortuvar Test Cihazlari jaw crusher (Figure 21). The full sample was split from approximately 8 kg down to 1 kg using a 3A Labortuvar Test Cihazlari aggregate splitter (30 litre capacity and 12 mm slots, Figure 21). After the preparation and splitting of each sample, the gear was cleaned with compressed air and brushes to avoid cross contamination between samples. Samples were weighed and placed into labelled plastic bags. A second (repeat) sample was taken from the riffle splitter to monitor the quality of the sample preparation and to assess the sum of natural inherent variability and splitting errors.

A sample sheet containing the sample ID, drillhole ID, interval depth, length of recovered core, the length of sulphide or oxide mineralisation, sample weight and QC samples (repeats, CRMs and blanks) was prepared.

RSC considers the process to follow good industry practice given the highly fractured nature of the samples, although the relatively small split of 1 kg of the 8 kg primary sample may require increasing to reduce variability.



For the 2021 programme, an SOP detailing the first split process was reviewed. The procedure follows the crushing and splitting process carried out in 2018 and includes sufficient detail of the steps involved and QC measures. The first split process was not audited during the site visit; however, the SOP was discussed and was well understood by AVOD technical staff. The SOP does not reference the quality objectives; however, the Competent Person considers it to be fit for purpose and is common practice.

The Competent Person considers the first-split process to pose a low risk with respect to the quality objectives.



Figure 21: First split equipment used by AVOD: jaw crusher (left) and aggregate splitter (right).

6.3.5 Second Split

The second split of the 2018 and 2021 campaigns were undertaken at Argetest, Ankara. An SOP for the second split was not available for RSC to review. RSC made a short visit to the Argetest laboratory in July 2019; however, the laboratory was not processing samples at the time. Based on discussions with site personnel the samples were processed according to Argetest methods DRY 02, PREP-O2. Samples were dried at 80°C, then crushed to 70% passing 2 mm using a Hira Laboratory jaw crusher. The sample was split to approximately 0.5 kg using a bench top riffle splitter. The Competent Person considers the process in line with standard practice and poses a low risk with respect to the quality objectives.

6.3.6 Third Split

The third split of the 2018 and 2021 campaigns were undertaken at Argetest, Ankara. An SOP for the second split was not available to RSC for review. RSC made a short visit to the Argetest laboratory July 2019 and 2021; however, on both occasions the laboratory was not processing samples at the time. Based on discussions with site personnel the third splitting process was carried out by following pulverisation to 85% passing 75 µm in a Hira Laboratory disc mill. The Competent Person considers that there is low risk with respect to the quality objectives.



6.3.7 Analytical Process

All samples were analysed by Argetest in Ankara with method codes AT-4/GAR 03 and AT-4/ AA MA-X (2021 samples, Table 16) and AT-4/GAR 05 and AT-4/ AA MA-X (2018 samples, Table 17). The pulverised 500-g samples were homogenised, and 1 g of sample was digested by multi-acid (HF:HNO3:HCIO4:HCI) digestion, which is designed to digest the entire rock sample. Then the dissolved sample was analysed by ICP-MS (method code: AT-4/GAR 05, 2018 samples) or ICP-OES (method code: AT-4/GAR 03, 2018 samples). If the upper detection limit of this method was reached for Cu, Pb, Zn or Ag, then method AT-4/Over (2018 samples) or AT4/ AA MA-X (2021 samples) was applied for the relevant samples.

An SOP for the analytical process was not available for RSC to review and the process was not audited; therefore, RSC cannot comment on whether the analytical process SOP was adhered to. Without SOPs, and without understanding the detail of the standard analytical processes, it is difficult to understand the laboratory's quality objectives, its processes around QC, or any other potential weaknesses in the process. There may be a residual risk in this that requires addressing for future programmes.

Element	Method	Detection Limit
Ag	AT-4/GAR 03	0.5 ppm
AI	AT-4/GAR 03	0.01%
As	AT-4/GAR 03	1 ppm
Ва	AT-4/GAR 03	1 ppm
Ве	AT-4/GAR 03	2 ppm
Bi	AT-4/GAR 03	5 ppm
Ca	AT-4/GAR 03	0.01%
Cd	AT-4/GAR 03	1 ppm
Co	AT-4/GAR 03	1 ppm
Cr	AT-4/GAR 03	1 ppm
Cu	AT-4/GAR 03	1 ppm
Cu	At-4/AA MA-X	0.01%
Fe	AT-4/GAR 03	0.01%
K	AT-4/GAR 03	0.01%
La	AT-4/GAR 03	1 ppm
Li	AT-4/GAR 03	1 ppm

Table 16: Analytical methods and detection limits 2021.

Element	Method	Detection Limit
Mg	AT-4/GAR 03	0.01%
Mn	AT-4/GAR 03	1 ppm
Мо	AT-4/GAR 03	1 ppm
Ni	AT-4/GAR 03	1 ppm
Р	AT-4/GAR 03	0.00%
Pb	AT-4/GAR 03	2 ppm
S	AT-4/GAR 03	0.01%
Sb	AT-4/GAR 03	5 ppm
Sn	AT-4/GAR 03	5 ppm
Sr	AT-4/GAR 03	1 ppm
Ti	AT-4/GAR 03	0.01%
V	AT-4/GAR 03	1 ppm
W	AT-4/GAR 03	5 ppm
Zn	AT-4/GAR 03	1 ppm
Zn	AT-4/AA MA-X	1 ppm
Zr	AT-4/GAR 03	0.5 ppm



Element	Method	Detection Limit
Mg	AT-4/GAR 03	0.01%
Mn	AT-4/GAR 03	1 ppm
Мо	AT-4/GAR 03	1 ppm
Ni	AT-4/GAR 03	1 ppm
Ρ	AT-4/GAR 03	0.00%
Pb	AT-4/GAR 03	2 ppm
S	AT-4/GAR 03	0.01%
Sb	AT-4/GAR 03	5 ppm

Element	Method	Detection Limit
Sn	AT-4/GAR 03	5 ppm
Sr	AT-4/GAR 03	1 ppm
Ti	AT-4/GAR 03	0.01%
V	AT-4/GAR 03	1 ppm
W	AT-4/GAR 03	5 ppm
Zn	AT-4/GAR 03	1 ppm
Zn	AT-4/AA MA-X	1 ppm
Zr	AT-4/GAR 03	0.5 ppm

Table 17: Analytical methods and detection limits 2018.

6.4 Quality Control

The purpose of quality control (QC) is to detect and correct errors while a measuring or sampling system is in operation. An effective QC programme demonstrates that errors were fixed during operation, and that the system delivering the data was always in control. For those periods where the system was in control, it can then, afterwards, be determined whether the quality, measured by accuracy and precision, was fit for purpose. The process of QC is achieved by inserting and constantly evaluating checks and balances.

RSC notes that independent reviews carried out (several months) after the data have been collected, are not strictly 'quality control'. Accordingly, the review approach taken by RSC in this Report is an *a posteriori* approach aimed at identifying where and when special cause variation has occurred.

6.4.1 Location Data

The 2018 collar pickups do not include any checks or balances to control the quality of the sample location data.

RSC notes that several discrepancies were identified between the 2018 collar locations provided by AVOD, and survey points collected by RSC in 2019 using handheld GPS (see section 6.6 on data verification). Additionally, no downhole surveys were undertaken during the 2018 campaign. RSC has some concerns in regard to lack of quality control of the 2018 collar location data, and this should be improved for future programmes; however, data verification by RSC through accurate aerial photography should have resolved any issues, and the data are likely fit for purpose.

The 2021 SOPs state that quality control of the sample location data should include checks of GPS accuracy during pickup and immediately following by reviewing the recorded position in GIS. No records of errors or results of check measurements or surveys for either campaign were available for review; however, the risk is considered low.



6.4.2 Density Data

No QC checks or balances (repeat measurements and regular measurements standard weights) were inserted during the 2018 or 2021 density measuring process and RSC cannot determine if the process was always in control. This should be improved in future programmes and has been taken into consideration in the classification.

6.4.3 Primary Sample

Core recovery, as a proxy to quality control of drilling control on the primary sample, was routinely recorded on core blocks each run by the driller. The rig geologist was responsible for the day-to-day supervision of the drilling operations including the monitoring of core recoveries and providing feedback to the driller. RSC is not aware if this feedback has been documented or resulted in improvements in sample quality over time. Quality control of the primary sample for diamond drilling could therefore not be reviewed by RSC. This process should be improved in future programmes.

6.4.4 First Split

The first split took place at AVOD's core handling facility where AVOD technical staff split the entire 1 m sample (crushed to 5 mm) using a riffle splitter. Quality control of the first splitting stage was carried out through the collection of sample weights and collection of duplicate samples (1:20 in 2018 and 1:10 in 2021). The relative difference in sub-sample grade, between the primary and the duplicate sample, is conventionally used to assess the variance introduced at this step. However, with grade data usually taking several days or weeks to return, there is no ability to react to errors and fix them as the process delivering the data (i.e. the splitting process) has long since finished.

For Cu, relative differences of the first split range from -15% to +15% in 2018 (Figure 22) and -40% to +30% in 2021 (Figure 22), except for the first duplicate pair with a relative difference of ~-80%. No clear trends are noted in the relative difference plot (except for the first duplicate pair), and the splitting process at AVOD's core handling facility appears to have been in control.





Figure 22: Relative difference plot of Cu grades (%) of the 2018 (left) and 2021 (right) first split duplicates. Plotted by Sample ID. Calculated as (*duplicate – original*) / pair mean.

6.4.5 Second Split

The second splitting process was carried out by Argetest at the laboratory The quality of the second splitting process was monitored through the collection of duplicate samples (1:50). Fourteen duplicate samples were collected in 2018 and eight in 2021. For Cu, relative differences of the first split range from -5% to +5% in 2018 (Figure 23) and -4% to +3% in 2021 (Figure 23). No clear trends are noted in the relative difference plot and the splitting process at AVOD's core handling facility appears to have been in control.

6.4.6 Third Split

The third splitting process was carried out by Argetest at the laboratory following pulverisation to 85% passing 75 µm in a Hira Laboratory disc mill. Quality of the third splitting process was monitored through the collection of sub-sample weights and duplicate samples (1:20). In total, 35 duplicate samples were collected in 2018 and ten duplicates in 2021. For Cu, relative differences of the first split range from -3% to +42% in 2018 (Figure 24) and -7% to +3% in 2021 (Figure 24). No clear trends are noted in the relative difference plot and the splitting process at AVOD's core handling facility appears to have been in control.





Figure 23: Relative difference plot of Cu grades (%) of the 2018 (left) and 2021 (right) second split duplicates. Calculated as (duplicate – original) / pair mean.

6.4.7 Analytical Process

6.4.7.1 <u>Certified Reference Materials</u>

To help determine if the analytical process was in control, it is common practice to measure a variety of commercially available reference materials (e.g. CRMs) at regular intervals. As mentioned above, AVOD inserted a CRM (OREAS623 and OREAS908) in the sample stream every 20 samples. The laboratory carried out seven standard analyses at the end of each batch. A total of 30 samples of OREAS 623 samples were analysed during 2018 and a total of 36 standard samples of OREAS 908 were analysed at Argetest during 2021.

The Shewhart control plots of Cu for both OREAS 623 (Figure 25) and ORES 908 (Figure 26) by 4-acid digest show no sign of special cause variation or trends, indicating that the analytical process appears to have been largely in control.





Figure 24: Relative difference plot of Cu grades (%) of the 2018 (left) and 2021 (right) third split duplicates. Calculated as (duplicate – original) / pair mean.

6.4.7.2 Blanks

AVOD used locally sourced crushed quartz for blank samples during the 2018 and 2021 drilling campaigns. The blank was not certified. In total, AVOD submitted 30 blanks in 2018 and 37 blank samples in 2021 and all blanks were below the detection limit of 1 ppm Cu.

The laboratory inserted a total of 18 blanks in 2018 and a total of 9 blanks in 2021. In all cases the measured Cu content was below the detection limit of 1 ppm.





Figure 25: Shewhart control plots for Cu in OREAS 623 during 2018 analysis (top) and 2021 analysis (bottom) at Argetest.



Figure 26: Shewhart control plot for Cu in OREAS 6908 during 2021 analysis at Argetest.



6.5 Quality Acceptance Testing

Quality testing is where a final judgement on the quality of the data is made. This is done by assessing accuracy and precision of the data for those periods where the process was demonstrated to be in control, and separately for those periods where the process was demonstrated to be not in control. Then, based on the evaluation of accuracy and precision and taking into consideration the data quality objective of classifying an Indicated Mineral Resource Mineral, a final pass/fail decision is made for each data item.

6.5.1 Location Data

A review in January 2020 of the drillhole collars of the 2018 programme, using high resolution images and an updated DTM, revealed significant issues with collar locations. Following this review, RSC repositioned the 2018 collar locations based on the location of drill pads visible in the high-resolution photogrammetry collected in December 2019. The DTM and photogrammetry has an approximate accuracy of ±10 mm vertical and ±5 mm horizontal at the control points. The accuracy reduces away from these points. Considering the relatively simple, flat-lying geometry of the mineralisation, limited structural complexity, and generally good lateral continuity of the mineralisation, RSC considers the risk associated with the collar locations for the 2018 programme a low-to-moderate risk with respect to the data quality objective.

No quantitative data or check surveys are available to confirm accuracy of the 2021 collars. Taking into account the specified precision for the DGPS instrument (+/- 10 cm), RSC considers the risk associated with the 2021 collar locations low with respect to the data quality objective.

No quantitative data or check surveys to support a final verdict on the down-hole survey data. Based on to the core size (PQ), short hole length (<100 m) and encountered rock types, RSC expects any deviation would likely be minimal. Considering this along with the relatively simple geometry and good continuity of the mineralisation, RSC perceives the risk associated with the down-hole surveys to be low with respect to the data-quality objective.

6.5.2 Density Data

Quantitative QC data are not available for the density measuring process and accuracy and precision cannot be determined.

For the 2018 programme, densities were determined by the Archimedes method. For the 2021 programme, the core-tray method was used, while the Archimedes method was used for a selection of competent pieces of core. In a pairwise comparison of core-tray and Archimedes density measurements collected for the 2021 programme, density values obtained by the Archimedes method were found to be consistently higher (~5–15%, Figure 27). Similarly, in a comparison of density values by mineralisation domain, it was found that median values obtained by the Archimedes methods during 2018 are 13–14% higher than median values obtained in 2021 for the same domain using the core-tray method (Table 18).

In view of the above, the 2018 and 2021 Archimedes density values were not used in the MRE, as the Competent Person suspects that Archimedes density values are biased high. Accordingly, the density values obtained during the 2021 drilling campaign by the core-tray method were used in the determination of density values.



Scatter graph of Density_Archimedes vs Density_TRAV



Figure 27: Scatterplot comparison of pairwise density values recorded by the Archimedes and Core Tray methods during 2021.

Table 18: Summary statistics for density values within mineralised oxide and fresh domains recorded by the Core Tray	1
method in 2021 and Archimedes method during 2018.	

Method - Year	Oxidation	Count	Mean	Sd	CV	Minimum	Median	Maximum
2021 - Core Tray	Oxide	48	2.4	0.2	0.1	2.2	2.4	3.0
Method	Fresh	331	2.8	0.1	0.0	2.4	2.8	3.0
2018 - Archimedes	Oxide	198	2.7	0.2	0.1	2.4	2.7	3.4
Method	Fresh	373	3.2	0.2	0.1	2.6	3.2	3.6

6.5.3 Primary Sample

Core drilling recoveries were acceptable, with room for improvement (mean >80% for 2018 samples and mean >90% for 2021 samples). The large sample size recovered with PQ drilling generally provides lower sampling variance than those collected using smaller core diameters (HQ, NQ) and percussion sampling methods. There is no relationship between Cu grade and core recovery.

The Competent Person considers the risk associated with the primary sampling to be low with respect to the data-quality objective, and the data are accepted without exclusion for use in MRE.



6.5.4 First Split

RSC assessed the accuracy and precision of first-split duplicate pairs using the calculation of relative precision error¹ (Abzalov, 2008) and scatter plots. A total of 28 first-split duplicate pairs were submitted for Cu analysis by AVOD in 2018 and 49 in 2021. The precision of the first-split duplicates for Cu duplicate pairs collected during 2018 is 3.8% (Table 19; Figure 28) and 11.1% (Table 19) for the samples collected during 2021. These are relatively low and acceptable numbers for precision.

RSC considers the precision and accuracy of the first-split duplicates to be acceptable.



Table 19: Precision of the first-split duplicates for Cu.

Figure 28: Scatter plot of 2018 (left) and 2021 (right) first split duplicates and originals indicates overall good precision.

6.5.5 Second Split

The Argetest laboratory duplicated 14 samples in 2018 and eight samples in 2021 for the second split. The number of duplicate pairs (14 in 2018 and 8 in 2021) does not provide adequate data to provide a statistically significant assessment. However, the precision¹ of the second-split duplicates for Cu duplicate pairs collected in 2018 is 1.6% and during 2021 is 1.4% (Table 20; Figure 29); these are very low and acceptable numbers.

RSC considers the precision and accuracy of the second-split duplicates to be acceptable with respect to the DQO.



Year	N Pairs	Precision (%)
2018	14	1.6
2021	8	1.4



Figure 29: Scatter plot for the 2018 (left) and 2021 (right) second split duplicates and the respective originals.

6.5.6 Third Split

The Argetest laboratory duplicated 35 third-split samples in 2018 and ten in 2021. The precision¹ of the second-split duplicates for Cu duplicate pairs collected during 2018 is 5.0% (Table 21). The relative precision error is strongly influenced by a single outlier pair (visible in the QQ plot, Figure 30), which when excluded produces a precision of 1%. The number of 2021 duplicate pairs (10) does not provide sufficient data to provide a robust assessment; however, the precision¹ of the third-split duplicates for Cu duplicate pairs collected during 2021 is 1.8% (Table 21; Figure 30).

RSC considers the precision and accuracy of the third-split duplicates to be acceptable with respect to the DQO

Year	N Pairs	Precision (%)
2018	35	5.0
2021	10	1.8

Table 21.	Precision	of the	third-soli	t dur	licates	for	Сп
	1 100131011		umu-spi	ւսսբ	льасьз	101	ou.





Figure 30: Scatter plot for the third split duplicates and the respective originals.

6.5.7 RSC comments on First, Second and Third Split Precision

RSC notes that the relative precision error reduces through the splitting process (Table 22) except for the third-split values. The 2018 third-split precision is heavily influenced by a single outlier, which when removed reduces the precision to 1% and the 2021 third-split values contain low sample support. RSC further notes that the duplicates were not taken from the same samples throughout the splitting processes; therefore, the precision values presented here are not representative of the same sample population and there may be a residual risk relating to the validity of their values. RSC recommends that for future programmes duplicates are processed for the same samples throughout the splitting processes.

Table 22: Precision of the first, second and third split duplicates.

Year	1 st Split	2 nd Split	3 rd Split
2018	3.8%	1.6%	5.0%
2021	11.1%	1.4%	1.8%

6.5.8 Analytical Process

6.5.8.1 <u>Certified Reference Materials</u>

The precision of the analytical method was assessed using a Fisher test to determine whether the difference between the variance of the laboratory assay and the certified variance is significant at the 95% confidence limit. The accuracy of the analytical method was assessed by comparing the processed mean-grade with the certified mean, using Student t-tests at the 95% confidence limit. The magnitude of any observed bias was assessed to determine if it presents a risk with respect to the data quality objective.

The results from the single CRM (OREAS 623) used in the 2018 programme indicate that at the 95% confidence the results were precise and accurate (Table 23). For the 2021 programme, results from two CRMs (OREAS 623 and OREAS 908)



indicate that the results were precise; and had a small bias (95% confidence) of <3% (Table 23). The Competent Person has considered the magnitude and low nature of the bias and determined the accuracy of the results to be acceptable. The data are fit for the purpose of estimation and classification with respect to the data quality objective.

Year	CRM Code	N	Mean	SD	Certificate Mean	Certificate SD	Bias (95 % Confidence Limit)	Precision	Precision Judgement	Accuracy	Accuracy Judgement
2021	OREAS 623	36	1.69	0.03	1.73	0.06	-2.41%	Precise	Pass	Minor bias	Pass
2021	OREAS 908	26	1.23	0.04	1.26	0.03	-2.81%	Precise	Pass	Minor bias	Pass
2018	OREAS 623	42	1.71	0.03	1.73	0.06	-	Precise	Pass	Accurate	Pass

Table 23: CRM results for Cu by 4-acid digest at Argetest.

6.5.8.2 Independent (Umpire) Laboratory Validation of Cu Grade

As an additional check on quality of the analytical data, RSC compared the Cu distributions of the 2018 and 2021 datasets within the modelled mineralised domains and found this correlation to be poor (Figure 31). It was also noted that correlations for cobalt (Co) values were extremely poorly correlated between the two campaigns (Figure 32).

RSC requested reanalysis for a selection of pulps by an independent (umpire) laboratory (ALS). Thirty samples from the 2018 programme and 30 samples from the 2021 programme were selected for reanalysis, each consisting of 15 samples from Area A, and 15 from Area B.

The results of the umpire analysis suggest that the original 2018 and 2021 Cu results are conservative compared to the umpire results (Table 24 and Figure 33) and suggest that the 2018 Co concentrations are significantly higher than both the 2021 original and 2022 umpire results (Table 24 and Figure 32). Comparison of means (Table 24) and review of QQ plots (Figure 33) suggests that Cu results obtained in 2018 are biased low by ~4% in Area A and ~17% in Area B compared to the umpire results. The comparison suggests that Cu results obtained in 2021 are reasonably comparable to the umpire results (~2% in Area A and ~4% in Area B).

The Competent Person has some concerns about the accuracy of Cu concentrations at Area B (which is primarily modelled on the 2018 data) and the 2018 drilling at Area A, and this has been considered in the classification of the Mineral Resource. Overall, considering that biases are all low biases, the overall tonnage and grade in the estimation are therefore probably slightly conservative, and reflects a minor potential upside.



ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT



Figure 31: QQ plots of Cu % for the 2018 and 2021 datasets within estimation domains.

Area	Year	Original Mean Cu %	Umpire Mean Cu %	% Mean Difference	Original Mean Co ppm	Umpire Mean Co ppm	% Mean Difference¹
	2018	1.56	1.68	-4%	298	50	83%
Α	2021	1.55	1.62	-2%	36	35	4%
	Combined	1.55	1.66	-3%	189	39	79%
	2018	1.56	1.65	-17%	166	89	46%
В	2021	1.61	1.73	-4%	79	78	1%
	Combined	1.36	1.69	-11%	124	84	32%

Table 24: Mean-grade comparison of the Original Cu and Co assay data and re-assay values.





Figure 32: QQ plots of Co ppm for the 2018 and 2021 datasets within estimation domains.





Figure 33: QQ plot of 2018 (left) and 2021 (right) Cu assay and Cu umpire reanalysis concentrations for samples within Area A (left) and Area B (right).

6.6 Data Verification

The data verification process included site visits in 2019 and 2021. During these site visits, RSC noted that several discrepancies were identified between the 2018 collar locations provided by AVOD and survey points collected by RSC staff in 2019 using handheld GPS. RSC completed a review of the drillhole collar locations of the 2018 programme, using high resolution photogrammetry images and an updated DTM, which revealed significant issues with the supplied collar locations. RSC repositioned the 2018 collar locations based on the location of drill pads visible in the high-resolution photogrammetry collected in December 2019.

RCS completed spot checks of both the 2018 and 2021 Cu results against the original laboratory certificates and noted no transcription errors relating to the data. Sample results in the database were able to be tracked back to core trays, sample bags and metre intervals.

RSC requested reanalysis for a selection of pulps by an independent (umpire) laboratory (ALS) following a comparison of Cu and Co distributions within the modelled mineralised domains revealed poor correlation between the two datasets. The umpire reanalysis, completed by an independent laboratory, indicates that the original 2018 Co concentrations are



significantly higher than the umpire results and the 2018 and 2021 Cu results are conservative compared to the umpire reanalysis results. A comparison of Cu mean-grade and QQ plots between the original assay data and the reanalysis data reveals that the 2018 Cu concentrations are biased 4% low in Area A and ~17% low in area B. The 2021 Cu concentrations are biased marginally low, with ~2% in Area A and ~4% in Area B. The Competent Person has concerns about the accuracy of the 2018 Argetest laboratory results and this has been considered in the classification of the Mineral Resource.

6.7 Security & Chain of Custody

The SOP for sample security of the 2018 drilling programme does not detail sample tracking documentation or chain of custody and simply notes that samples should not be accessible by people not involved with the project; samples should be kept in a locked and secure location and transported by authorised people only. The Competent Person considers the absence of tracking and chain of custody documentation to be poor practice.

The Competent Person considers the SOP for sample security of the 2021 drilling programme to be in line with good industry practice. The SOP makes clear who is responsible for which type of sample at every step between collection and analysis of the diamond core (Figure 34).

Considering the various check-sampling programmes, audits and verification work, the Competent Person considers that there is low risk with respect to security and chain of custody of the samples.



Figure 34: Flow diagram for sample custody.



6.8 Summary Data Quality

A summary of the QA/QC and Quality Assessment is shown in Table 25.

Table 25: Summary of QA/QC review, for the purpose of classification in the indicated and inferred resource category. NA = not available.

Data Type	Technique	QA	QC	Accuracy	Precision	Accepted/Fit for Purpose	Comment
Location Data	Collar	Pass with issues	N/A	N/A	N/A	Yes	The 2021 collar location data are considered fit for purpose. 2018 collar locations were not DGPS surveyed as per the SOP. Data accepted based on RSC review of collar positions.
	Downhole	Pass with issues	N/A	N/A	N/A	Yes	The 2021 downhole survey data are considered fit for purpose. 2018 downhole surveys were not completed as per the SOP. The risk to the estimate has been deemed low due to the depth and angle of drillholes.
Density	Weight/volume	Pass	N/A	N/A	N/A	Yes	SOP available, no quantitative control data. Archimedes density measurements are potentially biased high and were omitted from the MRE. The processes and equipment used to obtain the 2021 core tray density measurements are fit for purpose.
	Primary sample	N/A	Pass	N/A	Accepted	Yes	Core drilling recoveries were high (mean >80% for 2018 samples and mean >90% for 2021 samples). Drilling operations were monitored by the rig geologist.
	First split	Pass	Pass	Accepted	Accepted	Yes	The description of process and equipment is fit for purpose. Accepted following quantitative review of control data
	Second Split	N/A	Pass	Accepted	Accepted	Yes	No SOPs but accepted following quantitative review of control data.
	Third Spilt	N/A	Pass	Accepted	Accepted	Yes	No SOPs but accepted following quantitative review of control data.
Grade	Analytical Process	N/A	Pass	Accepted with issues	Accepted	Yes	No SOPs. RSC review of CRM data indicates that the analytical process delivered results that were precise but with a low bias of ~<3% for the 2021 analysis and ~1% for the 2018 analysis. Overall accepted fit for purpose.
	Umpire Reanalysis	N/A	Pass	Accepted with issues	Accepted with issues	Yes	The results of the umpire analysis suggest that the original 2018 and 2021 Cu results are conservative compared to the umpire results. The Competent Person considers the 2018 Cu data suitable for the classification of Inferred Resources and the 2021 Cu data suitable for the classification of Indicated Resources.



The Competent Person has reviewed and assessed the quality of the data to be used in the resource estimation; several important quality issues have been identified and were taken into account in the classification of the resource. RSC has not used the 2017 data in the resource estimation. RSC identified the following key issues for the 2018 and 2021 sample data.

- Discrepancies identified between the 2018 collar locations provided by AVOD and verification measurements by RSC suggest that accuracy of the collar surveys was extremely poor. RSC repositioned the 2018 collar locations based on the location of drill pads visible in the high-resolution photogrammetry collected in December 2019. However, there remains a residual risk associated with the correction of the collar positions.
- The results of 60 umpire reanalyses suggest that the 2018 and 2021 Cu results may understate Cu concentrations, consistent with the results of two CRMs. Moreover, the umpire analyses suggest that results of two CRMs for the 2018 programme may understate the low bias for Cu. RSC recommends carrying out additional reanalyses for 5% of the 2018 and 2021 at an independent (umpire) laboratory for additional independent validation of Cu grade followed by an in-depth review.
- Archimedes density measurements obtained in 2018 and 2021 are potentially biased high and were omitted from the MRE.
- RSC recommends that for future programmes duplicates are processed for the same samples throughout the splitting processes.





7 Mineral Resources

7.1 Informing Data

The data informing the MRE are based on diamond drilling conducted by AVOD from 2018 to 2021. The data include results from 47 diamond holes (2,587 m, Appendix B) and are stored in an MS Access database containing all drilling data.

RSC completed verification of the data (section 6.6) to confirm that QA and QC processes delivered fit for purpose data and satisfied the DQO (section 6.2). This verification process included a visit to site to audit drilling and sampling. RSC staff reviewed whether all relevant processes were carried out in accordance with standard operating procedures, and audited collar locations, reviewed transcription errors between the database and laboratory certificates. Sample results in the database were tracked back to core trays, sample bags and metre intervals.

7.2 Interpretation and Model Definition

7.2.1 <u>Geological Domains</u>

Mineralisation within the Project occurs predominantly in units logged as basalt, breccia and basaltic breccias (basalt/breccias). An implicit model of the basalt/breccia units at Area and Area B was modelled using the available downhole logging information. The basalt/breccia geological domain (Figure 35) provides a first-pass geological constraint on grade populations.



Figure 35: Cross-section view to the south of the geological model at Area B.

Oxidation domains were built. These domains represent control of primary sulphide mineralisation, oxidised, and supergeneenriched oxide mineralisation (Figure 39). Estimation domains A0 and B0 are interpreted to represent the primary sulphide mineralisation, domain B1 represents the supergene-enriched oxide mineralisation, and estimation domain B2 is considered to represent the remainder of the oxidised part of the mineralisation, including a minor cap interpreted as partially oxidised



Cu sulphide mineralisation. This interpretation is based on elevated sulphur values identified in the geochemical clustering process represented by geochemical group 2. The extent of this cap has been modelled within estimation domain B2.

7.2.2 Estimation Domains

RSC assessed the multi-element geochemical dataset, through Principal Component Analysis (PCA) using a Gaussian Mixture Model of the elements iron (Fe), Cu and sulphur (S). Four geochemically distinct populations were identified in the sample data (Figure 36 and Figure 37). The geochemical groups are interpreted as a solid proxy for further geological domain resolution in lithological units.

The four geochemical groups are characterised as follows:

- Group 1: Intermediate-Low Cu, Intermediate Fe, High S.
- Group 2: Intermediate-High Cu, High Fe, Intermediate S.
- Group 3: High Cu, low Co, low S.
- Group 4: Low Cu, low Fe, low S.

A 3-D assessment of the geochemical groups revealed excellent continuity and correlation between drillholes (Figure 38) and displayed a strong correlation with lithology logs and mineralisation style (oxidic/sulphidic).

The estimation domain models were guided by the mineralised geochemical groups, 1, 2 and 3, and then refined using the continuity of Cu grade and downhole logging information. Geochemical group 4 was not modelled, as it is not linked to mineralised intervals and is interpreted to represent the un-mineralised basalt and radiolarite units.

At Area A, mineralisation is associated with geochemical group 1 (Figure 38). A single estimation domain (A0, Figure 39) has been modelled. All intervals within domain A0 were logged as sulphidic basalt/breccia.

At Area B, mineralisation is associated with rocks of geochemical groups 1, 2 and 3 (Figure 38). Three estimation domains were modelled (Figure 39):

- An intermediate-low-grade domain (B0), primarily comprised of geochemical group 1 (93%), and intervals logged as sulfidic basalt/breccia (100%).
- A high-grade domain (B1) comprised predominantly of geochemical group 3 (96%).
- An intermediate-high-grade, domain (B2) comprised of geochemical group 2 (73%) and 3 (26%). All intervals within Domain B1 and B2 are logged as oxidic basalt/breccia.

Estimation domain B0 is overlain by estimation domain B1, which is again overlain by B2 (Figure 39).

The extent of the Mineral Resource at Area A spans ~830 m northeast-southwest and ~200 m southeast-northwest, with a thickness up to ~20 m. The depth of the deposit below surface ranges from 0 m to ~55 m as it dips beneath the undulating topography to the west. The extent of the Mineral Resource at Area B spans ~200 m north-south and ~230 m east-west, with a thickness up to ~25 m. The depth of the deposit below surface ranges from 0 m to ~45 m as it dips beneath the undulating topography.





Figure 36: 2-D bi-plot of Cu, S and Fe against Co identifying four distinct geochemical cluster groups.



Figure 37: Box plots displaying the distribution of Cu %, Fe % and S % (left to right) within each geochemical cluster group.




Figure 38: Cross-section view to the northeast of Area A (top), and to the south at Area B (bottom), displaying the continuity of geochemical groupings.







Figure 39: Cross-section view to the northeast of Area A (top), and to the south at Area B (bottom), displaying estimation domain extents and the cap of mixed material within estimation domain B2.

7.2.3 Domain Extrapolation

Mineralisation at Area B is closed off. At Area A, mineralisation remains open to the east. The lateral extent of domain A0 was extrapolated beyond drilling up to ~50 m from drilling where mineralisation remains open and within the extent of the geophysical anomaly (Figure 40). The Competent Person considers the degree of extrapolation to be appropriate, given the observed continuity of geological units, low variability of grade data (section 7.3.1) and variogram ranges (section 7.4). The extent of extrapolation has been considered in the classification of the resource.





Figure 40: Plan view of the extent of the modelled mineralised domain at Area A (black mesh) within the extent of the geophysical low anomaly.

7.3 Summary Statistics and Data Preparation

7.3.1 Cu Grade Summary Statistics

All core was sampled in 1-m intervals, and intervals were therefore not composited for estimation. All estimation domains are characterised by monomodal distributions (Figure 41), and top-cutting of grades was not required due to the low coefficient of variation (CV) of Cu grade data within the defined domains (<=0.4, Table 26).





Figure 41: Histograms of Cu % within estimation domains.

Domain	Count	Mean (%)	SD	CV	Variance	Minimum (%)	Maximum (%)
A0	588	1.5	0.5	0.3	0.2	0.1	3.1
B0	165	1.2	0.4	0.3	0.2	0.1	2.2
B1	168	3.5	1.2	0.4	1.6	0.7	7.8
B2	82	1.6	0.6	0.3	0.3	0.4	3.2

Table 26: Summary statistics of Cu concentrations within estimation domains.

7.3.2 Density

The density values obtained during the 2021 drilling campaign by the Core Tray method were used in the determination of density values. The 2018 and 2021 Archimedes density values were not incorporated into the MRE, as the Competent Person has concerns that the Archimedes measurements are potentially biased high due to the deposit's highly fractured nature, with Archimedes measurements only completed on competent pieces of core (section 6.5.2). Density values within mineralised oxidation domains display very low CVs and variability (Table 27).



Oxidation Domain	Count	Length	Mean (g/cm3)	Median (g/cm3)	SD	сv	Variance	Minimum (g/cm3)	Maximum (g/cm3)
Sulphide	321	229.1	2.8	2.8	0.1	0	0.0	2.4	3.0
Oxide	46	33.8	2.4	2.4	0.2	0.1	0.0	2.2	3.0

Table 27: Summary statistics of the 2021 density values within mineralised oxidation domains.

7.4 Spatial Analysis and Variography

The spatial continuity of Cu grades was independently modelled within the plane of mineralisation of each estimation domain. For each estimation domain, experimental semi-variograms were modelled with a relatively low γ_0 value (0.1–0.25, estimated from downhole variogram) and two spherical structures (Table 28, Figure 42 and Figure 43). All variograms display satisfactory structure and an acceptable level of confidence with regards to the DQO (6.2).

Table 28: Cu variogram parameters.

Estimation Domain	Structure	Model Type	Sill	Range Major (m)	Range Semi Major (m)	Range Minor (m)
A0		Nugget	0.1			
	1	Spherical	0.3	60	60	4
	2	Spherical	0.6	110	110	8
B0		Nugget	0.1			
	1	Spherical	0.3	60	60	4
	2	Spherical	0.6	120	120	8
B1		Nugget	0.25			
	1	Spherical	0.12	50	40	1
	2	Spherical	0.63	125	85	4
B2		Nugget	0.1			
	1	Spherical	0.34	50	30	3
	2	Spherical	0.55	125	70	8





Figure 42: Experimental semi-variogram models for Cu grade within estimation domain A0 (left) and B0 (right).



Figure 43: Experimental semi-variogram models for Cu grade within estimation domain B1 (left) and B2 (right).



7.5 Block Model

A parent block size of 25 m x 25 m x 5 m, sub-blocked to 5 m x 5 m x 1 m (x-y-z), was selected for estimation based on the current drill spacing and supported by kriging neighbourhood analysis (KNA). Block model prototype definitions are outlined in Table 29.

Axis	Origin	Length (m)
x	640113	1200
у	4430260	1200
z	1345	240

Table 29: Block model definitions.

7.6 Search Neighbourhood Parameters

The estimation of Cu grade was completed in a single pass using search neighbourhood parameters supported by KNA (Table 30). Variable orientations were utilised to guide the search ellipse within the estimation domains. The grade of each block was estimated using a minimum of six and a maximum of 20 samples, a maximum of six samples per drillhole and discretisation of $5 \times 5 \times 5 (x-y-z)$.

abl	e 30:	Search	neigl	nbourhood	paramete	ers.

Domain	Search Range (m)
A0	300 x 200 x 25
B0	250 x 200 x 25
B1	250 x 200 x 25
B2	250 x 200 x 25

7.7 Estimation

7.7.1 <u>Cu Grade</u>

The resource estimate was completed using ordinary kriging (OK). OK is the most widely used non-biased linear estimation method for grade populations that exhibit reasonable statistical homogeneity within estimation domains. Hard domain boundaries were set for estimation after reviewing domain contact analysis plots (Figure 44).

Summary statistics for Cu block model estimates are provided in Table 31, and perspective views of the block model grades are displayed in Figure 45 and Figure 46. Validation of block model estimates has been assessed in section 7.8.





Figure 44: Contact analysis plots for estimation domains A0, B0, B1 and B2.

Domain	Mean (%)	SD	сv	Variance	Min (%)	Lower quartile	Median	Upper quartile	Max (%)
A0	1.4	0.3	0.2	0.1	0.8	1.2	1.4	1.6	2.2
B0	1.7	0.2	0.1	0.1	1.1	1.6	1.7	1.8	2.2
B1	3.5	0.4	0.1	0.2	2.5	3.3	3.5	3.8	4.7
B2	1.1	0.2	0.1	0.0	0.7	1.0	1.1	1.2	1.6

Table 31: Summary statistics of Cu concentrations within estimation domains of the block model estimate.





Figure 45: Perspective view to the northwest of the Çorum Resource Block Model at Area A.



Figure 46: Perspective view to the northeast of the Çorum Resource Block Model at Area B.



7.7.2 Density

The density values obtained during the 2021 drilling campaign by the Core Tray method were used in the determination of density values (section 6.5.2). The modelled estimation domains represent control of sulphide and oxide mineralisation. Density values were assessed within each unit, and based on the low variability of the data, nominal densities equal to the median of the density values were used to determine resource tonnages (Table 32).

Table 32: Density values of each oxidation domain.

Oxidation Domain	Density (g/cm3)
Sulphide	2.8
Oxide	2.4

7.8 Validation

Block model grades were validated by comparing the input mean grades with the block model mean grade, using swath plots, and visually, on cross-section. The effects of negative kriging weights on the estimates were also investigated.

- The comparison of input mean grade and estimated block means by estimation domain demonstrates good correlation for Cu % with differences < 5% (Table 33).
- Swath plots (x-y-z) display good correlation between input and estimated Cu grades, and appropriate levels of smoothing within each estimation domain (Figure 47 and Figure 48).
- Visual validation along cross-section, comparing input and estimated block grade, indicates that the estimates reasonably reflect the grade of the input data (Figure 49).
- Negative kriging weights were found to constitute <1% of the total sum of kriging weights. The effect of negative
 kriging weights on individual block grades was assessed by reviewing grades of affected blocks. Block grades
 incorporating negative weights were found to be representative of the surrounding composite grades (Figure 50).

Domain	Sample Mean Grade Cu (%)	Estimate Mean Grade Cu (%)	Mean grade % Difference
A0	1.45	1.39	-3.8%
B0	1.17	1.12	-4.6%
B1	3.50	3.47	-0.8%
B2	1.63	1.61	-0.8%

Table 33: Mean comparison of sample and estimated Cu grades.





Figure 47: Swath plots displaying the average sample (black) and estimated (red) Cu grade for estimation domain A0 (left) and B0 (right) along easting, northing, and elevation (top to bottom) slices.





Figure 48: Swath plots displaying the average sample (black) and estimated (red) Cu grade for estimation domain B1 (left) and B2 (right) along easting, northing, and elevation (top to bottom) slices.





Figure 49: Cross-section views to the north displaying visual comparison of Cu block grades and drillhole data at Area B (top) and Area A (bottom).





Figure 50: Perspective view to the north displaying sample kriging weights (top) and sample grades (bottom) used in the estimation of a single resource block within Area B.

7.9 Sensitivity Testing

Sensitivity testing of the variogram parameters employed in the estimate was tested by comparing block model estimate results using different variogram models. Two alternative models were tested: one with double the nugget value and half the range of the original model (v1), and a second with half the nugget value and twice the range (v2). The impact of estimating with the alternative variogram model did not significantly affect the estimates. The average grade, tonnage, kriging efficiencies and slope of regression are relatively insensitive to these parameters (Table 34Table 34).

Area	Variogram	% Difference Mt	% Difference Cu %	% Difference KE	% Difference SOR
Area A	Variogram v1	3.1%	0.2%	-0.8%	-0.2%
Area A	Variogram v2	-3.7%	0.2%	2.3%	0.8%
Area B	Variogram v1	6.0%	-2.4%	0.0%	0.2%
	Variogram v2	-1.8%	0.9%	0.3%	0.1%

T_LL_ 01.										
1 anie 34.	Lomnarison	i ot estimates	nusina	alternative	variooram	models	romnared i	in the	original	model
	Companison		uonig	allonnalive	vanogram	111000010 0	Joinparca		ungina	mouci.



7.10 Classification

7.10.1 <u>Classification</u>

The Competent Person has classified an Indicated Mineral Resource of 2.5 Mt at 1.43% Cu, and an Inferred Mineral Resource of 5 Mt at 1.7% Cu, reported at a cut-off grade of 0.3% for oxide material and 0.35 % for fresh (Table 35). The Mineral Resource is reported as a global resource.

The Competent Person has classified the Mineral Resource in the Inferred and Indicated categories in accordance with the UMREK Code (2018). The Indicated portion of the MRE has been confined to the areas drilled in Area A during the 2021 drilling campaign. The remainder of the Mineral Resource has been classified as Inferred. There is no material classified as Measured.

For the Inferred portion of the Resource (5 Mt at an average grade of 1.6% Cu), geological evidence is sufficient to imply, but not verify, geological and grade continuity. The Inferred portion of the Resource is based on exploration, sampling and testing information gathered through appropriate techniques from drillholes. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration. Confidence in the Inferred Mineral Resources is not sufficient to allow the results of the application of technical and economic parameters to be used for detailed planning in Pre-Feasibility or Feasibility Studies.

For the Indicated portion of the Resource (2.5 Mt at an average grade of 1.43% Cu), grade and densities are estimated with sufficient confidence to allow the application of Modifying Factors, in sufficient detail, to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from drillholes, and is sufficient to assume geological and grade continuity between points of observation where data and samples are gathered.



Area	Resource Category	Oxidation	Mass (Mt)	Av Cu %	Contained Cu Metal kt
	Indicated	Oxide	—	_	—
A	Indicated	Sulphide	2.5	1.43	35
Area A	Informed	Oxide	—	—	—
	Interred	Sulphide	3	1.4	40
	Indicated	Oxide	—	—	—
Area P	Indicated	Sulphide	—	—	—
Alea D	Inforrad	Oxide	1	2.9	30
	Interred	Sulphide	1	1.1	10
	Indicated	Oxide	—	—	—
Total	mulcaleu	Sulphide	2.5	1.43	35
TOLAI	Inforrad	Oxide	1	2.8	30
	Interred	Sulphide	4	1.4	50
	Indicated		2.5	1.43	35
Total	Inferred		5	1.6	80
		TOTAL	7.5	1.6	115

Table 35: Çorum Cu Project Mineral Resource Classification.

Notes:

• The MRE is reported at a cut-off grade of 0.3% Cu for oxide and 0.35% Cu for fresh.

• The Mineral Resource is contained within license 200712071.

• The effective date of the estimate is 1 July 2022.

 Estimates are rounded to reflect the level of confidence, in accordance with the UMREK code. All Indicated Resources have been rounded to the nearest half million tonnes and all Inferred Resources have been rounded to the nearest million tonnes.

The Mineral Resource is reported as a global resource.

7.10.2 Cut-off grade

The cut-off grades 0.3% for oxide material and 0.35% for fresh were determined through a pit optimisation study (Neesham & Millbank, 2022) and are based on assumed operating costs and metallurgical recoveries (Appendix C).

7.10.3 Mining and Metallurgical Methods and Parameters

As no metallurgical test work has been undertaken to date, RSC has made reasonable assumptions based on a desktop analysis of processing and recovery options to inform the open pit optimisation and determine the reasonable prospects for eventual economic extraction

A summary of the assumptions used in the pit optimisation study to determine the reasonable prospects for eventual economic extraction were determined from a desktop analysis of comparable operations and are detailed in Appendix C.



The uncertainty surrounding the absence of metallurgical testing is determined to pose a moderate risk to the MRE considering the nature of the deposit. Metallurgical testing will be required for any future work and would reduce the uncertainty around possible operational revenues.

7.10.4 <u>RPEE</u>

Portions of the deposit that do not have reasonable prospects for economic extraction are not included in the Mineral Resource. In assessing the reasonable prospects, the Competent Person has evaluated preliminary mining, metallurgical, economic, environmental and geo-technical parameters. The Mineral Resource reported here and confined to the optimised pit shell is a realistic inventory of mineralisation which, under assumed and justifiable technical, economic and developmental conditions, might, in whole or in part, become economically extractable. Conceptual mining parameters used for pit optimisation are summarised in Appendix C.

7.10.5 Comparison with Previous Resource Estimates

The updated Mineral Resource reported here includes a total of 7.5 Mt at 1.6% Cu (Table 36) and includes an Indicated Mineral Resource of 2.5 Mt at 1.4% Cu (Table 35). The updated MRE includes data from the additional 42 diamond drillholes for a total of 1,855 m drilled in 2021. The 2021 drilling infilled the 2018 drilling and stepped out approximately 50 m from the bounds of previously intercepted mineralisation.

Due to the success of the 2021 drilling programme, predominantly in Area A, the size of the Resource reported here is considerably higher than the previous studies by Duzgun (2018, 4.3 Mt @ 1.8 Cu %); Lowiki and Teigler (2018 2.7 Mt @ 2.0 Cu %) (2020) and Aldrich & Sterk (2020 4.4 Mt @ 1.9% Cu, Table 36).

The grades and tonnes reported in this report are ~12 % lower than reported by Hogg et al. (2020). RSC considers that the extrapolation strategy of extending high-grade wireframes up to 50 m from drillholes in Area B resulted in a slight overestimation of tonnes.

RSC notes that the previous studies by Duzgun (2018), Lowiki and Teigler (2018), and Hogg et al. (2020) used the uncorrected drillhole collar data (section 6.5.1).

Study	Date	Drilling Campaign Data	Mineral Resource	Contained Cu (t)
Duzgun	2018	2018	4.3 Mt @ 1.8% Cu	77,400
Lowiki and Teigle; Wagner	2018	2018	2.7 Mt @ 2.0% Cu	54,000
Hogg et al.	2020	2018	8.6 Mt @ 1.8% Cu	154,800
Aldrich & Sterk	2020	2018	4.4 Mt @ 1.9% Cu	83,600
2022 Updated MRE (this report)	2022	2018 and 2021	7.5 Mt @ 1.6% Cu	120,000

Table 36: Comparison of Previous Resource Estimates.



8 Environmental

The Competent Person is not aware of any environmental studies undertaken for the project, nor any environmental restrictions to explore within the project area. RSC notes that an ephemeral stream runs through the length of the resource at Area A.

The Competent Person notes that an approved environmental impact assessment (EIA) must be obtained before commencing mining activities and it is a prerequisite for the issuance of any other licence or permit that could be legally required.





9 Risks

An overview of the various risk factors affecting the Mineral Resource are presented in Table 37. The most pertinent risks have also been noted throughout this Report.

Item	Data/Info Availability	Risk Factor	Comments
Drilling/Sampling Techniques	Good	Low	The RSC MRE was completed using drilling data from the 2018 and 2021 drilling campaigns. Drilling was undertaken using PQ diamond core. RSC considers the standard operating procedures for work associated with the drilling and sampling to be fit for purpose.
Drilling/Sampling Recovery	Good	Low	Sample recoveries were high (>80% for 2018 samples and >90% for 2021 samples). The large sample size recovered with PQ drilling generally provides optimal core recoveries and lower sampling variance than those collected using smaller core diameters (HQ, NQ) and percussion sampling methods.
Subsampling Techniques and Sample Preparation	Good	Low	RSC considers that precision is acceptably low through the three stages of splitting, crushing and pulverising for the 2018 and 2021 samples.
Quality of Assay Data and Laboratory Tests	Good	Moderate	RSC's review of laboratory performance concluded that the CRMs show a statistically significant low bias (at 95% confidence) of ~<3% for the 2021 analysis and ~-1% for the 2018 analysis. This low bias, and any resulting uncertainty, has been taken into account in the classification of the resource. Based on the outcomes of the umpire reanalysis the Competent Person has concerns regarding the Cu concentrations at Area B (which is primarily modelled on the 2018 data) and the 2018 drilling at Area A; this has been taken into account when classifying the Mineral Resource.
Verification of Sampling and Assaying	Good	Moderate	This verification process included site visits to site to audit drilling and sampling. RSC investigated for transcription errors between the database and laboratory certificates. There were no issues with tracking sample results in the database back to core trays, sample bags and metre intervals. As an additional check on the 2018 and 2021 Cu and Co results, RSC requested reanalysis for a selection of pulps by an independent (umpire) laboratory (ALS). The results of the umpire analysis suggest that the original 2018 and 2021 Cu results are conservative compared to the umpire results
Location of Data Points	Limited	Moderate	The 2018 drillhole collars were not surveyed in accordance with AVOD's SOPs, leading to significant inaccuracies in collar locations and the requirement of repositioning of collars by RSC. The 2021 drillhole locations were surveyed by a professional surveyor by means of a Differential Global Positioning System (DGPS).
Data Spacing and Distribution	Good	Low/Moderate	The drill spacing is not evenly spaced. RSC considers the drill spacing and distribution to be sufficient to support the classification of the resource.
Orientation of Data/Drilling	Good	Low	All drilling used in the estimate is appropriately oriented.

Table 37: Overview of risk factors affecting the MRE.



Sample Security	Limited	Low	Standard operating procedures note that samples should not be accessible by people not involved with the project, samples should be kept in a locked and secure location, also transport by authorised people only. The SOP does not detail sample tracking documentation or chain of custody.
Database Integrity	Good	Low	RSC retrieved the database from AVOD. The data was appropriately structured, and checks were made between original assay sheets for transcription errors.
Geological Interpretation	Good	Low	The interpretation and model of the relatively simple, flat-lying geometry of the geological units are considered robust and well constrained.
Estimation and Modelling: Domaining	Good	Low/Moderate	Estimation domains guided by geochemistry provide good correlation between drillholes and produced populations with low internal grade variation as expressed by the CV.
Estimation and Modelling: Top Cutting	Good	Low	The domains have very low CVs and no top cutting was applied.
Estimation and Modelling: Variography	Good	Low/Moderate	Variogram structures are generally well defined and extend beyond drill spacing. Nugget values inferred from the downhole variograms are relatively low (0.1–0.25).
Estimation and Modelling: Interpolation/Extrapolation	Good	Moderate	Interpolation is controlled by kriging weights within each domain. Estimation domains within Area B are confined to the extent of drilling. The lateral extent of domain A0 was extrapolated beyond drilling extents by ~50 m from drilling in directions where mineralisation remains open and within the extent of the geophysical anomaly. The competent person considers the degree of extrapolation to be appropriate given the observed continuity of geological units, low variability of grade data and variogram ranges.
Estimation and Modelling: Block Size	Good	Low	The block size was selected based on drill spacing and supported by KNA.
Estimation and Modelling: Checks & Validation	Good	Low	The model was validated through visual validation, mean comparison checks, and review of swath plots. RSC considers the block model to be robustly estimated with block grades representative of the input data.
Estimation and Modelling: Cut-Off	Good	Low	The cut-off values were determined during the pit optimisation studies and are based on assumed operating costs and metallurgical recoveries.
Estimation and Modelling: Density	Good	Moderate	Bulk density was acquired using highly fractured core. The 2018 and 2021 Archimedes density values were not incorporated into the MRE, as the Competent Person has concerns that the Archimedes measurements are biased high due to the deposit's highly fractured nature and Archimedes measurements only taken on competent pieces of core (selection bias). Nominal density values are equal to the median of recordings for the oxide and sulphide portions of the block model. The bulk density assignment is considered reasonable; however, their accuracy and precision cannot be determined.
Classification	Good	Low	The model is classified as Indicated and Inferred based on sample spacing, sample quality, geological understanding, and kriging efficiencies. The Indicated portion of the MRE has been confined to the areas drilled in Area A during the 2021 drilling campaign. Confidence in the Inferred Mineral Resources is not sufficient to allow the results



	of the application of technical and economic parameters to be used for detailed planning in Pre-Feasibility or Feasibility Studies. For the Indicated portion of the Resource (2.5 Mt at an average grade of 1.4% Cu), grade and densities are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the
	economic viability of the deposit.



SSC MINING & MINERAL EXPLORATION



10 Exploration Potential

10.1 Area A

The geological interpretation is limited by the extent of drilling in Area A, and mineralisation remains open to the east and in isolated areas to the west of the deposit. The lateral extent of the mineralised domain in area A has been extrapolated beyond drilling extents by up to ~50 m where mineralisation remains open, and within the extent of the geophysical anomaly (Figure 51). RSC recommends a programme of step-out drilling to the east and west in the areas highlighted in Figure 51.



Figure 51: Plan view of the extent of the modelled mineralised domain at Area A (yellow) displaying the areas where mineralisation remains open (dashed red line) within the extent of the geophysical anomaly.



10.2 Licence-Wide Exploration

RSC notes that a low amount of exploration data is available for the wider licence area and no exploration targets can be defined at this stage. The type of mineralisation present within the licence area is VMS, which is a style of mineralisation well known for occurring in clusters. During the 2019 site visit, RSC noted that much of the licence and surrounding area consists of the basaltic lavas similar to those seen at areas A and B. These basaltic lithologies should be considered as target areas warranting further exploration, including surface mapping and geochemical sampling (stream sediment and soil sampling). RSC also notes that buried and blind VMS deposits are common, and geophysical exploration techniques should be employed over all areas where basaltic lavas occur.

Typically, VMS deposits occur as small discrete bodies, and companies wishing to exploit these need to ensure they have a pipeline of resources to maintain continuous mining and processing. RSC recommends AVOD undertakes detailed geological mapping and further exploration of the wider project, as well as investigate other potential opportunities within trucking distance from the Çorum Copper Project.





11 Interpretation and Conclusions

RSC has completed an MRE for the Çorum Copper Project. RSC has reviewed the available data, SOPs, quality control and quality testing undertaken. The informing data have been collected from PQ drill core, which RSC considers a method appropriate for representative sampling in mineral exploration. The Mineral Resource is prepared by a Competent Person and reported in accordance with the UMREK Code (2018).

The data informing the MRE are based on the 2018 and 2021 diamond drilling campaigns within Area A and Area B.

RSC completed verification of the sampling and analytical process, and data, to confirm that adequate controls are in place to ensure the data quality is fit for purpose. This evaluation included a visit to site to witness drilling and sampling being carried out in accordance with standard operating procedures, an audit of collar locations, a review of CRM performance at the laboratory, exploring for transcription errors between the database and laboratory certificates, reviewing the precision through the stages of splitting, crushing and pulverising, and ensuring that sample results in the database could be tracked back to core trays, sample bags and metre intervals.

The results of the umpire reanalysis, completed by an independent laboratory, indicates that the original 2018 and 2021 Cu results are conservative compared to the umpire reanalysis results. A mean-grade comparison and review of QQ plots between the original assay data and the reanalysis data reveals that the 2018 Cu concentrations are biased 4% low in Area A and ~17% low in area B compared to the umpire results. The comparison suggests that Cu results obtained in 2021 are reasonably comparable to the umpire results (~2% low in Area A and ~4% low in Area B). The Competent Person has some concerns about the accuracy of Cu concentrations at Area B (which is primarily modelled on the 2018 data) and the 2018 drilling at Area A, and this has been considered in the classification of the Mineral Resource. Overall, considering that biases are all low biases, the overall tonnage and grade in the estimation are therefore probably slightly conservative, and reflects a minor potential upside.

Estimation domains were modelled based on an assessment of the multi-element geochemical dataset, through Principal Component Analysis (PCA) using a Gaussian Mixture Model of the elements iron (Fe), Cu and sulphur (S). Four geochemically distinct populations were identified in the sample data. The geochemical groups are interpreted as a solid proxy for further geological domain resolution in lithological units and displayed a strong correlation with lithology logs and mineralisation style (oxidic/sulphidic).

Grade was estimated using OK and validation of the domains indicates a good correlation between the drill samples and block grades. RSC has classified the MRE in the Indicated and Inferred categories based on sample spacing, sample quality, geological understanding, KE and SOR.

The Competent Person has classified an Indicated Mineral Resource of 2.5 Mt at 1.43% Cu, and an Inferred Mineral Resource of 5 Mt at 1.7% Cu, reported at a cut-off grade of 0.3% for oxide material and 0.35 % for fresh (Table 1). The Mineral Resource is reported as a global resource and has been classified in accordance with the UMREK Code (2018). There is no material classified as Measured.



The mineralised domain at Area A has not been closed off by drilling, which means the spatial extents of the deposits are not yet known. RSC recommends a programme of step-out drilling to further define the resource.

A Scoping Study based on the updated MRE is currently being prepared by RSC and will be reported in accordance with the UMREK code (2018).





12 Recommendations

The recommendations focus on the management of the risks identified in section 9 and elsewhere in the Report. RSC makes the following recommendations.

- Complete additional independent validation of samples by sending 5% of the 2018 and 2021 samples to an independent (umpire) laboratory for additional independent validation of the Cu grade followed by an in-depth review.
- Carry out step-out drilling in Area A, to test for extensions of mineralisation.
- Complete a programme of metallurgical sampling to help define the metallurgical properties of each domain.
- Investigate further VMS opportunities within trucking distances of the Project.
- Undertake wider geological and structural mapping of the Project; and undertake a surface geochemical sampling programme.





13 References

Abzalov, M.Z., 2008. Quality Control of Assay Data: A Review of Procedures for Measuring and Monitoring Precision and Accuracy. Exploration and Mining Geology, Vol. 17, Nos. 3–4, pp. 131–144.

Arevalo Jr, R. and McDonough, W.F., 2010. Chemical variations and regional diversity observed in MORB. *Chemical Geology*, 271(1-2), pp.70---85.

Bailey, E. and McCallien, W.J., 1950. The Ankara mélange and the Anatolian Thrust. *Nature*. 166(4231), pp.938-940.

Bosellini, A. and Winterer, E.L., 1975. Pelagic limestone and radiolarite of the Tethyan Mesozoic: a genetic model. *Geology*, 3(5), pp.279–282.

Çağatay, A., 2013. Petrological report for sample 5556. Mining Marbel Industry Ltd., pp.1-2

Cox, D.P. 1986. Descriptive model of Besshi massive sulfide. In: Cox, D.P. and Singer, D.A., ed. *Mineral deposit models*: U.S. Geological Survey Bulletin 1963, pp.136.

DMT, 2018, Data Acquisition Manual - Standard Operating Procedures On The Copper Project For License 200712071 In The Çorum Province, Turkey. pp.1—55

Duzgun, A., 2018. Copper mineral reserve determination, analysis and facility design reports regarding reserve assessment report. Dünya Grup unpublished report, Ankara. pp. 1--71.

Galley, A.G., Hannington, M., and Jonasson, I., 2007. Volcanogenic massive sulphide deposits. In: Goodfellow, W.D., ed., *Mineral deposits of Canada – A synthesis of major deposit-types, district metallogeny, the evolution of geological provinces, and exploration methods*: Geological Association of Canada, Mineral Deposits Division, Special Publication 5, pp.141–161.

Hogg, J., Siddle, R., Harvey, L., Tanyıldız, T., and Atalar, E. UMREK Technical Report and Resource Estimation for The AVOD Çorum Copper Project, Çorum Province, Turkey.

John, D.A. and Taylor, R.D., 2016. By-products of porphyry copper and molybdenum deposits: Chapter 7. In: Verplanck, P.L. and Hitzman, M.W. *Rare Earth and Critical Elements in Ore Deposits*. Society of Economic Geologists, pp.28.

JORC, 2012. Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (The JORC Code) [online]. Available from: http://www.jorc.org (The Joint Ore Reserves Committee of The Australasian Institute of Mining and Metallurgy, Australian Institute of Geoscientists and Minerals Council of Australia).

Koski, R. and Mosier, D., 2012. Deposit type and associated commodities in volcanogenic massive sulphide occurrence model: U.S. Geological Survey Scientific Investigations Report 2010–5070–C, Ch. 2, pp. 8.

Lowicki, F. and Teigler E-B., 2018. Technical Report: Mineral resource estimate – Çorum Copper Project Licence 200712071, Çorum Province, Turkey. DMT GmbH & Co. KG unpublished report. pp. 1–75.

National Instrument 43-101, 2011. Standards of Disclosure for Mineral Projects (NI43-101 Code) [online]. Available from: < https://mrmr.cim.org> (Canadian Institute of Mining, Metallurgy and Petroleum).



Neesham, L. and Millbank, J, 2022. Technical Report on the Scoping Study for the Çorum Copper Project, Turkey. UMREK Technical Report.

Okay, A., 2008. Geology of Turkey: A Synopsis. Anschitt. 21. 19-42.

Okay, A. and Tüysüz, O. 1999. Tethyan sutures of northern Turkey. Geol. Soc. London, Spec.Publ., 156, 475-515

Parlak, O. and Robertson, A., 2004. The ophiolite-related Mersin Melange, southern Turkey: its role in the tectonic– sedimentary setting of Tethys in the Eastern Mediterranean region. Geological Magazine, 141(3), pp.257–286.

Sarifakioglu, E., Dilek, Y. and Sevin, M., 2014. Jurassic-Paleogene intraoceanic magmatic evolution of the Ankara Mélange, north-central Anatolia, Turkey. Solid Earth, 5(1), pp.77–108.

Sarıfakıoğlu, E., Dilek, Y. and Sevin, M., 2017. New synthesis of the Izmir-Ankara-Erzincan suture zone and the Ankara mélange in northern Anatolia based on new geochemical and geochronological constraints. *Tectonic Evolution, Collision, and Seismicity of Southwest Asia: In Honor of Manuel Berberian's Forty-Five Years of Research Contributions. Geological Society of America Special Paper,* 525, pp.1–63.

Shanks, W., and Koski, R., 2012. Introduction in volcanogenic massive sulfide occurrence model: U.S. Geological Survey Scientific Investigations Report 2010–5070–C, Ch. 1, pp. 4.

Singer, D.A., 1986. Descriptive model of Kuroko massive sulfide, In: Cox, D.P. and Singer, D.A., ed. *Mineral deposit models*: U.S. Geological Survey Bulletin 1963, pp.189–190.

Stanley, C.R., and Lawie, D., 2007, Average relative error in geochemical determinations: Clarification, calculation, and a plea for consistency: Exploration and Mining Geology, v. 16, pp. 265–274.

Sterk, R., and Aldrich, S., 2020. Mineral Resource Estimate for the Çorum Copper Project, Turkey.

Taylor, C.D., Zierenberg, R.A., Goldfarb, R.j., Kilbum, J.E., Seal II, R.R., and Kleinkopf, M.D., 1995. Volcanic-associated massive sulfide deposits (Models 24a-b, 28a; Singer, 1986a, b; Cox, 1986). In: *Preliminary Compilation of Descriptive Geoenvironmental Mineral Deposit Models*. U.S. Geological Survey Open-File report 95-831, U.S. Government Printing Office, Washington, D.B., pp. 137–144.

UMREK, 2018. National Resources And Reserves Reporting Committee Of Turkey (The UMREK Code) [online]. Available from: https://www.crirsco.com/ (Committee for Mineral Reserves International Reporting Standards).

Wagner, D.H., 2018. Preliminary Economical Assessment of Çorum Copper Project, License 200712071. Dirk H. Wagner Mining Consulting unpublished report. pp. 1–21.



Appendix A

New drilling results including mineralised intercepts since 1 April 2020 MRE.

Table 38: Drill collar details of exploration holes with returned laboratory results at Çorum (UTM ED50 Zone 36N) since the previous MRE (1 April 2020).

Hole ID	Year	Easting	Northing	RL	Depth (m)	Azimuth	Dip	Status
A-01	2021	640,184	4,430,520	1,226	20	275	-76	Unmineralised
A-02	2021	640,312	4,430,565	1,252	50	275	-76	Unmineralised
A-03	2021	640,256	4,430,597	1,222	65	276	-75	Mineralised
A-04	2021	640,207	4,430,591	1,225	45	277	-76	Mineralised
A-05	2021	640,246	4,430,650	1,221	25	274	-76	Mineralised
A-06	2021	640,283	4,430,682	1,229	25	273	-75	Mineralised
A-07	2021	640,216	4,430,677	1,230	50	276	-76	Mineralised
A-08	2021	640,315	4,430,732	1,233	20	277	-75	Mineralised
A-09	2021	640,325	4,430,792	1,230	40	275	-75	Mineralised
A-10	2021	640,264	4,430,767	1,238	55	276	-75	Mineralised
A-11	2021	640,369	4,430,843	1,235	30	275	-76	Unmineralised
A-12	2021	640,320	4,430,858	1,251	35	277	-76	Mineralised
A-13	2021	640,412	4,430,900	1,244	35	282	-75	Mineralised
A-14	2021	640,433	4,430,932	1,250	35	273	-75	Unmineralised
A-15	2021	640,379	4,430,949	1,249	35	276	-76	Mineralised
A-16	2021	640,472	4,431,017	1,270	45	272	-75	Mineralised
A-17	2021	640,333	4,430,990	1,269	35	269	-76	Unmineralised
A-18	2021	640,435	4,431,078	1,255	55	279	-76	Mineralised
A-19	2021	640,464	4,431,141	1,260	35	278	-76	Mineralised
A-20	2021	640,542	4,431,179	1,291	65	280	-75	Mineralised
A-21	2021	640,492	4,431,288	1,274	40	280	-77	Mineralised
A-22	2021	640,945	4,430,430	1,298	40	277	-76	Unmineralised
A-23	2021	641,032	4,430,431	1,266	45	276	-75	Mineralised
A-24	2021	640,992	4,430,449	1,279	40	281	-75	Mineralised
A-25	2021	641,008	4,430,514	1,295	70	275	-76	Mineralised
A-26	2021	640,908	4,430,369	1,293	40	278	-76	Unmineralised
A-27	2021	640,898	4,430,428	1,299	45	279	-76	Mineralised
B-01	2021	641,038	4,430,571	1,278	50	274	-77	Mineralised
B-02	2021	640,487	4,431,199	1,286	50	0	-90	Mineralised
B-03	2021	640,417	4,431,010	1,265	50	278	-76	Mineralised
B-04	2021	640,343	4,430,901	1,255	55	279	-77	Mineralised
B-05	2021	641,046	4,430,519	1,278	60	279	-75	Unmineralised

ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT



B-06	2021	640,915	4,430,434	1,297	50	276	-76	Unmineralised
B-07	2021	641,073	4,430,396	1,256	50	274	-75	Unmineralised
B-08	2021	640,463	4,431,203	1,283	50	279	-76	Mineralised
B-09	2021	640,394	4,431,002	1,264	45	278	-76	Unmineralised
B-10	2021	640,370	4,430,910	1,256	30	277	-75	Mineralised
B-12	2021	640,288	4,430,811	1,248	50	277	-76	Unmineralised
B-15	2021	640,320	4,430,804	1,248	50	275	-75	Unmineralised
B-16	2021	640,259	4,430,734	1,241	50	276	-76	Mineralised

Table 39: Exploration drilling intersections from the Çorum project, using a 0.3% Cu cut-off, with a minimum width of 1 metre and including up to 1 metre of internal waste since previous MRE (1 April 2020, UTM ED50 Zone 36N).

Hole Id	Easting	Northing	RL	From	То	Width (m)	Cu %
A-02	640312	4430565	1252	15	16	1	0.4
A-03	640256	4430597	1222	47	59	12	1.1
A-04	640207	4430591	1225	7	24	17	1.1
A-05	640246	4430650	1221	3	21	18	1.2
A-05	640246	4430650	1221	24	25	1	0.4
A-06	640283	4430682	1229	3	15	12	1.3
A-07	640216	4430677	1230	6	28	22	1.2
A-08	640315	4430732	1233	6	13	7	1.0
A-09	640325	4430792	1230	6	28	22	1.2
A-10	640264	4430767	1238	9	26	17	1.3
A-12	640320	4430858	1251	3	19	16	1.2
A-13	640412	4430900	1244	4	27	23	1.5
A-15	640379	4430949	1249	6	26	20	1.2
A-16	640472	4431017	1270	7	25	18	1.5
A-18	640435	4431078	1255	6	28	22	1.4
A-19	640464	4431141	1260	3	26	23	1.4
A-20	640542	4431179	1291	10	38	28	1.3
A-21	640492	4431288	1274	6	16	10	0.8
A-23	641032	4430431	1266	2	31	29	1.4
A-24	640992	4430449	1279	7	37	30	1.4
A-25	641008	4430514	1295	14	45	31	1.3
A-27	640898	4430428	1299	20	30	10	1.1



ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

B-01	641038	4430571	1278	1	20	19	2.9
B-02	640487	4431199	1286	0	24	24	2.1
B-03	640417	4431010	1265	2	13	11	3.2
B-03	640417	4431010	1265	19	23	4	1.0
B-04	640343	4430901	1255	0	27	27	1.7
B-08	640463	4431203	1283	2	9	7	1.2
B-10	640370	4430910	1256	0	15	15	2.2
B-10	640370	4430910	1256	25	30	5	1.3



MINING & MINERAL EXPLORATION



ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

4,430,792

4,430,767

4,430,843

4,430,858

4,430,900

4,430,932

4,430,949

4,431,017

4,430,990

4,431,078

4,431,141

4,431,179

4,431,288

4,430,430

4,430,431

4,430,449

4,430,514

4,430,369

4,430,428

4,430,571

1,230

1,238

1,235

1,251

1,244

1,250

1,249

1,270

1,269

1,255

1,260

1,291

1,274

1,298

1,266

1,279

1,295

1,293

1,299

1,278

Appendix B

Collar information of drillholes used in estimation of the Çorum MRE

Table 40: Collar information of drillholes used in estimation of the Çorum MRE (UTM ED50 Zone 36N).

Hole id	Easting	Northing	RL (m)	Depth (m)	A-10	2021	640,325
GERD-08	2018	640,487	4,431,199	1,286	A-12	2021	640,264
GERD-17	2018	640,417	4,431,010	1,265	A-13	2021	640,369
GERD-24	2018	640,343	4,430,901	1,255	A-15	2021	640,320
GERD-47	2018	641,046	4,430,519	1,278	A-16	2021	640,412
GERD-54	2018	640,915	4,430,434	1,297	A-18	2021	640,433
GERD-61	2018	641,073	4,430,396	1,256	A-19	2021	640,379
GERD-10	2018	640,463	4,431,203	1,283	A-20	2021	640,472
GERD-22	2018	640,394	4,431,002	1,264	A-21	2021	640,333
GERD-26	2018	640,370	4,430,910	1,256	A-23	2021	640,435
GERD-28	2018	640,288	4,430,811	1,248	A-24	2021	640,464
GERD-30	2018	640,320	4,430,804	1,248	A-25	2021	640,542
GERD-32	2018	640,259	4,430,734	1,241	A-27	2021	640,492
GERD-33	2018	640,269	4,430,707	1,242	B-01	2021	640,945
GERD-35	2018	604,235	4,430,561	1,229	B-02	2021	641,032
ERD-49	2018	640,952	4,430,475	1,297	B-03	2021	640,992
GERD-51	2018	640,999	4,430,380	1,284	B-04	2021	641,008
GERD-57	2018	641,033	4,430,478	1,277	B-08	2021	640,908
GERD-58	2018	641,097	4,430,470	1,258	B-10	2021	640,898
GERD-60	2018	641,076	4,430,441	1,259	B-16	2021	641,038
GERD-63	2018	641,022	4,430,396	1,273			
A-03	2021	640,312	4,430,565	1,252			
A-04	2021	640,256	4,430,597	1,222			
A-05	2021	640,207	4,430,591	1,225			
A-06	2021	640,246	4,430,650	1,221	×		
A-07	2021	640,283	4,430,682	1,229			
A-08	2021	640,216	4,430,677	1,230	-		
A-09	2021	640,315	4,430,732	1,233			



Appendix C

Conceptual Parameters Used in the Pit Optimisation

Conceptual Mining Parameter	Input
Slope	30–40°
Cu Cut-off grade - Oxide	0.30%
Cu Cut-off grade - Mixed	0.45%
Cu Cut-off grade - Fresh	0.35%
Processing Cost (USD) - Oxide	\$17/t
Processing Cost (USD) - Mixed	\$20/t
Processing Cost (USD) - Fresh	\$20/t
Cu Price (USD)	\$4.50/lb
Royalty / State Right (%NSR)	3%
Recovery Cu - Oxide	70%
Recovery Cu - Mixed	60%
Recovery Cu - Fresh	80%
Mining Cost (USD/t) - Waste	\$1.75/t
Mining Cost (USD/t) - Oxide Ore	\$1.75/t
Mining Cost (USD/t) - Mixed and Fresh Ore	\$2.00/t
Production Rate	775 kt/pa

Table 41: Conceptual mining parameters used in the pit optimisation.

Notes:

- The Competent Person considers that the deposit may be mined via a conventional open pit method.
- Recovery is anticipated via heap vat leach Solvent-Extraction / Electrowinning (SX-EW) for oxide, combine flotation then heap vat leach for mixed material, and flotation for fresh material.

Appendix D

UMREK Code, 2018 Edition, Checklist of Assessment and Reporting Criteria

Section 1 General

Criteria	UMREK Code explanation	Commentary
Purpose of Report	 Report should include a cover page and a Table of Contents, including a list of figures and tables. Indicate for whom the report is prepared, specify whether the purpose is a partial or full assessment or other purpose, what scopes of work were carried out, effective date of the report and what is left to do. The Competent Person must specify whether the document conforms to the UMREK Code. If a reporting standard or code other than the UMREK Code is being used, the Competent Person shall add an explanation of differences 	 RSC has completed an independent Mineral Resource estimate (MRE) on the Çorum Copper Project and prepared a technical report for AVOD Altın Madencilik Enerji İnş.San.ve Tic A.Ş. (AVOD) in accordance with the UMREK Code (2018). The report includes a cover page and a Table of Contents with a list of figures and tables.
General Info on Project	Brief explanation of key technical factors that have been considered	• The MRE has been completed for the project using the available 2018 and 2021 drilling data. Modelling of geological and estimation domains was completed in Leapfrog Geo and estimation was performed using ordinary kriging in Leapfrog Edge.
History	 Discuss the known or existing historical Mineral Resource estimates, reconciliation for the actual production updates to reported resources/reserves for past and current operations, and include their reliability and how they are related to the UMREK Code. Transparent description of former achievements and failures and explain why the project should now be considered potentially economic. 	 AVOD commissioned DMT GmbH & Co. KG (DMT) in 2018 to carry out resource estimates using the drilling completed by AVOD at that time (20 diamond drill holes). The resource report also included a report by Dirk H. Wagner Mining Consulting on the Preliminary Economic Assessment (PEA) of the Çorum Copper Project. The reporting and classification of the resources was undertaken in accordance with the JORC Code (2012). The associated PEA; however, is not reported in accordance with any internationally accepted reporting code. The DMT resource estimation is based on geological logging and assays from 20 drill holes. Due to limited geological knowledge the wireframes were not extrapolated past the drill holes. DMT's resource estimate states a mineral resource of 2.7 Mt at an average grade of 2.0% Cu at a 1% Cu cut-off. Estimation domains were constrained to the extent of the available drilling. DMT categorised the entire resource as inferred. No block modelling was undertaken, and the resource is based on averaged Cu grades and density. The PEA was prepared by Dirk H. Wagner Mining Consulting (Wagner 2018), based on the findings



ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

in the mineral resource report by DMT (2018) and assumed mining factors and costs based on other hard rock projects in Turkey and information received from AVOD. The economic assessment proposes open pit mining of a 'mineable' resource of around 2.5 Mt @ 1.87% Cu.

- A 'reserve determination' was undertaken by Duzgun in 2018 (Duzgan, 2018) based on the results of the 2018 diamond drilling campaign (20 diamond drill holes). The report and classification of the resources and reserves was not reported in any internationally accepted reporting code, such as the VALMIN Code (2015), JORC Code (2012) or NI 43-101. Estimation of Cu grades was completed in two areas: West Zone and East Zone. The West zone wireframe was extrapolated to the extent of the geophysical anomaly (15-30 m from drilling) resulting in much higher tonnages than the DMT MRE. A mineral resource of 4.3 Mt @ 1.8% Cu a 1% Cu cut-off was estimated using a nearest neighbour estimation method.
- AVOD commissioned Bordokum Mining and Addison Mining Services to complete a MRE for the Çorum copper project in 2020 (Hogg, et al. 2020). The estimation was based on the results of the 2018 drilling campaign (20 diamond drill holes). The MRE technical report was prepared in accordance with the UMREK Code (2018). The model is extrapolated with a consistent thickness (~35 m) up to 50 m from the bounds of existing drilling. The total estimated resource contained approximately 8.6 Mt @ 1.8% Cu. The entire resource was classified in the Inferred category.
- AVOD commissioned RSC to carry out a MRE (Aldrich & Sterk, 2020) for the Çorum Copper Project and prepare a technical report in compliance with the JORC Code (2012). The estimation was based on the results of the 2018 drilling campaign (20 diamond drill holes). Wireframes were closed off at ~25 m from the drill holes (i.e. half the drill hole spacing). RSC estimated an Inferred Mineral Resource at Çorum of 4.4 Mt @ 1.9% Cu.
- There is reasonable consistency between the various legacy studies carried out on the Project. Duzgun (2018) estimated 4.3 Mt @ 1.8 Cu %; Lowiki and Teigler (2018) estimated 2.7 Mt @ 2.0 Cu %, Hogg et al. (2020) estimated 8.6 Mt @ 1.8% Cu, and Aldrich & Sterk (2020) estimated 4.4 Mt @ 1.9% Cu. Wagner (2018) also reported a potential minable resource of 2.5 Mt @ 1.9 Cu % and Duzgan reported a potential minable resource of 2.7 Mt @ 2.0 Cu %.

Lowiki and Teigler (2018) restricted the domaining to the drillhole traces, significantly restricting the volume of the deposit to 2.7 Mt. In comparison, Hogg et al. (2020) extrapolated wireframes up to 50 m from drillholes, leading to an overestimation of tonnes compared to other MREs based on the 2018 drilling data (Duzgun, 2018; Lowiki and Teigler, 2018; and Aldrich & Sterk, 2020). RSC considers the Hogg et al. (2020) estimate to be overstated, as the 2021 step-out drilling of approximately 50 m partially closed-off mineralisation in Area A and completely closed-off mineralisation in Area B. The total resource ('visible' and 'possible') estimated by Duzgun (2018) and MRE by Aldrich & Sterk (2020) resulted in comparable tonnages (4.3 Mt and 4.4 Mt, respectively) having undertaken a similar approach to extrapolation of grades within the models. RSC notes that the previous studies by Duzgun (2018), Lowiki and Teigler (2018), and Hogg et al. (2020) used the uncorrected drillhole collar data.

• There has been no recorded production and hence no reconciliation. The abovementioned technical studies indicate support for a mineral resource for the project and that the project has potential to be developed in the future.

ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

Critical Plans, Maps, Diagrams	 Include and quote reference to all important, more detailed maps and all related cadastral and other infrastructure properties, described in a site location map or map index and article. If the adjacent areas or urban areas have a significant effect on the report, their location and their sections containing joint mineral tenure must also be indicated on the maps. All information taken from other sources must be referenced. All maps, plans and sections indicated in this check list must be legible and should include explanations, coordinates, coordinate system, scale bar and north arrow. Diagrams and illustrations must be readable, with notes and explanations where necessary. 	 Critical plans, maps and diagrams are included in the body of the report text with sufficient explanatory text.
Project Location and Explanation	 Explanation of Project location (country, province and closest town, coordinate systems and distances etc.). For each property, diagrams, maps and plans must be provided such that they indicate the locations of mineral exploration/mining rights, any previous or current work, any exploration and all main geological characteristics. 	 The Çorum Copper Project is situated at the border of the Çorum and Yozgat provinces in Turkey and lies about 200 km east of Turkey's capital city, Ankara. The closest large settlement is Boğazkale which lies about 1 km west of the project. The project covers 13.75 km2 and is held as exploration licence 200712071. The historic site of Hattusas, the capital of the Hittite Empire during the Bronze age, is situated in the northwest portion of the licence. The prospects lie over 1.5 km southeast of this site but are not visible from Hattusas. AVOD is currently exploring two prospects (Area A and Area B) that are 600 m apart. Maps and plans indicating the project licence, geology and exploration are included in the report text.
Topography and Climate	• A topographic-cadastral map with sufficient details to assist evaluation of eventual technical and economic viability. Known related climate risks must be indicated.	 Altitudes in the licence area range from 1,100–1,400 m above sea level and the terrain is hilly with moderate to occasionally-steep slopes. Flat agricultural fields are located in the northwest of the licence area. The Büyükkale river drains through the southern portion of the licence area towards the northeast. The climate is classified as Csb Köppen climate classification (http://koeppen-geiger.vu-wien.ac.at/present.htm) hence a continental/Mediterranean climate with warm dry summers and cool, wet winters. The area has been examined by RSC using Google Earth satellite imagery, and multiple figures of satellite and aerial imagery are included in the report. The Competent Person does not regard it as necessary to include a detailed topographic-cadastral map showing weather, ground conditions, dense vegetation and/or high-altitude areas.
Legal Aspects and Tenure	 Included in the explanations below, the Competent Person should confirm legal tenure. Type of the licensing body (e.g. exploration and/or mining) and the right of use for the properties related to these rights; 	 AVOD controls 100% of the Çorum Project through its ownership of exploration licence 200712071, which covers 1,375 ha and expires 6 March 2024. The licence applies to mineral Group 4 (c) and includes the following: sub-section (a): industrial minerals, including boron, sodium, lithium and calcium; sub-section (b): energy source minerals including lignite and anthracite resources;

SSL
	 Main terms and condition of all existing agreements/protocols and the details of prospective ones (for instance, and not to be limited to these, privileges, partnerships, joint ventures, access rights, rents, historic and cultural areas, nature or national parks and environmental conditions, royalties, consents, permits, approvals or authorizations, other private or public investment areas; Security of the tenure held at the time of reporting or reasonably expected to be granted, any obstacle to obtain the right of operation on site, and Notification of any legal case that could affect mineral exploration rights, or a suitable negative statement. 	 sub-section (c): precious metals, including gold (Au), silver (Ag), Cu and iron (Fe); and sub-section (ç): radioactive minerals and other radioactive substances containing elements such as uranium, thorium and radium. RSC understands that the land where the project is situated is privately owned, in the form of approximately 12 smallholding farms.
Personal introduction in projects and verification of data	 Visiting dates of the designated prospect, mine site, laboratories or relevant infrastructure. Meetings with people responsible for the reported project, their areas of responsibility and project related experiences. Visit to the project site, preparing a report that lists observations. What sections of the project are accessible for individual confirmation? Lists of data used or referenced when preparing public reporting. 	 RSC geological consultants first visited the project in July 2019. Mr Aldrich inspected the geology and 2019 drill sites. He also visited the analysing laboratory (Ankara) and the core storage facility. RSC geological consultants Mr Grimshaw and Mr Goodship visited the project in April 2021 to review the implementation of standard operating procedures (SOPs) during drilling.

SL

Section 2 Sampling Techniques and Data

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

Criteria	UMREK Code explanation	Commentary
Sampling types	• Sampling type, location and time, leading to the results to be reported, must be indicated. Sampling types include stream sediment, soil and heavy mineral concentrate samples, trench and pilot pit results, rock breaking and channel sample, drilling and boring, handheld XRF devices etc. Ground samples include previous works, mine dumps etc. Where possible, distance between samples must be indicated, and locations must be shown on coordinate maps, plans and sections with proper scales.	 The MRE was completed using data collected by AVOD during the 2018 and 2021 drilling campaigns. In 2018, AVOD drilled 20 PQ diamond drill holes for a total of 1,380.5 m. In 2021, AVOD drilled 42 PQ diamond drillholes for a total of 1,855 m. Plan maps and cross-sections of drillholes are provided in the report.
Drilling techniques	• Drilling techniques may include core drilling, reverse circulation, percussion, rotary auger, down-the-hole hammer etc. These should be indicated in the report, and their details (e.g. core diameter) should be given. Measures taken to keep sampling at a maximum level of recovery and quality assurance of the samples must be indicated.	 Diamond drilling was completed using triple tube, PQ core. The large sample size recovered with PQ drilling generally provides lower sampling variance than those collected using smaller core diameters (HQ, NQ) and percussion sampling methods. The drill core was not orientated
Driling sampling	• A detailed explanation must be given to indicate sampling is being properly recorded and results are being assessed. The report should particularly indicate if there is a relationship between grade and quality, acquired through sample collection, and sample bias (for instance, preferential gain/loss of fine/coarse material).	 Recovered run lengths were measured against the expected run lengths. RSC considers the core recoveries to be acceptable, with an average of >80% for 2018 samples and >90% for 2021 samples. Drill core in the mineralised zone was very incompetent, PQ core was used to ensure recoveries remained high. There is no relationship between sample recovery and grade.
Logging	 It must be confirmed whether the samples have been recorded with sufficient details to assist suitable Mineral Resource estimation, mining tests and metallurgy tests, and it must also be indicated whether record keeping is qualitative or 	 The core has been logged for lithology, mineralisation and alteration. 100% of the retrieved core has been logged. The logging is qualitive in nature. Core photography has been completed. RSC reviewed the logging in 3D and considered it to be consistent. Downhole lithological logging was



	quantitative. Core (or channel, trench etc.) photographs must be attached.	used to define the geological model.The level of detail is sufficient to support the classification of the Mineral Resource.
Sub-sampling techniques and sample preparation	 For sampling of drill core, it must be indicated whether sampling was taken from cut or sawn or quarter, half or whole core. If sampling was done without a core, production pipes, sample or rotary split etc. and wet or dry split procedures must be indicated. For all sample types, the nature, quality and appropriateness of sample preparation techniques must be defined, and quality- control procedures adopted at all sub-sampling stages to maintain the representative capability of samples at a maximum level must be indicated. The measures taken to ensure representative capability of the material at the place of sampling must be indicated. For all sample types, the nature, quality and appropriateness of the sample sizes to the particle sizes of the material must be defined. A statement is advised with regards to the security measures taken to ensure sample consistency. 	 The Competent Person considers the large sample size derived from PQ drilling appropriate for obtaining a representative sample within the incompetent rock of the deposit. Initial sample preparation was undertaken by AVOD at the company's core shed in Manisa. Entire 1 m intervals of core were removed from the core tray, crushed to <5 mm with a jaw crusher, and split using a riffle splitter (50/50). Half the core mass was collected as a sample, the other half was placed as a crushed sample back into the core box. After the preparation and splitting of each sample, the gear was cleaned with compressed air and brushes to avoid cross contamination between samples. Samples were weighed and placed into labelled plastic bags. After every 20 samples during the 2018 campaign and every 10 samples during the 2021 campaign, a second sample was taken from the riffle splitter to monitor the quality of the sample preparation and to assess inherent sample variability. RSC considers the precision and accuracy of the first-split duplicates to be acceptable. Samples were sent to the laboratory, Argetest, for the remainder of sample preparation and analysis. Upon arrival at the laboratory, samples were labelled and tracked using an inhouse barcode tracking system. Samples were processed according to Argetest methods DRY 02, PREP-02. Samples were dried at 80°C, then crushed to 70% passing 2 mm using a Hira Laboratory jaw crusher. The sample was split (second split) to approximately 0.5 kg using a bench top riffle splitter. The sample was then pulverised to 85% passing 75 µm in a Hira Laboratory disc mill. The second and third splits were undertaken at Argetest, Ankara. Quality control of the second and third split was undertaken through the collection of sample weights and collection of duplicate samples (1:50 second split). There are no issues with the tracking of sample results to core trays, sample bags to metre intervals and all data in the database accurat
Analysis data and laboratory research	 The type, quality and appropriateness of the assay and laboratory procedures and whether the technique has been accepted in full or partially must be indicated. Attention must be paid to how the presented assay results relate to the estimated extractable metal or mineral content of the reserve. Sample preparation and analysis can be carried out by internal or independent laboratories. The laboratories actually used for this must be defined in all reports. In any case, the accreditation of the laboratory (e.g., ISO standards, ISO 9000:2001 and ISO 17025, TÜRKAK etc.) and actual procedures used, including use of random 	 All samples were analysed at an independent laboratory, Argetest, Ankara. Argetest applies a quality management system that complies with international standards; TS EN ISO/IEC 17025 - Accreditation of Testing and Calibration Laboratories, ISO 9001:2015 - Quality Management Systems, ISO 14001:2015 - Environmental Management Systems, and OHSAS 18001:2007 Occupational Health and Safety System The 2018 samples were analysed by Multi Acid Digestion(total)/ICP-MS (GAR05) and the 2021 samples analysed by Multi Acid Digestion (total)/ICP-OES (GAR03). The reason for the change in method is not known to RSC. Before the samples were sent to the lab, AVOD inserted QC samples. After every 20 samples for the 2018 drilling and every ~10 mineralised samples for the 2021 drilling, a certified reference material (CRM) and a blank were inserted. These were used to monitor the quality of the laboratory's sample preparation and analysis. The results from the single CRM (OREAS 623) used in the 2018 programme indicate that at the 95%

		distribution, internal and external standard samples and monitoring procedures for blank analysis and systematic deviation must be taken into consideration. In particular, a short note must be added to indicate whether sample analyses, used to support resource estimation, have been repeated by other laboratories.	 confidence the results were precise and accurate. For the 2021 programme, results from two CRMs (OREAS 623 and OREAS 908) indicate that the results were precise; and had a small bias (95% confidence) of <3%. The Competent Person has considered the magnitude and low nature of the bias and determined the accuracy of the results to be acceptable. The data are fit for the purpose of estimation and classification with respect to the data quality objective. RSC considers the precision and accuracy of the laboratory split duplicates to be acceptable with respect to the data quality objective. The results of the umpire reanalysis, completed by an independent laboratory, indicates that the original 2018 and 2021 Cu results are conservative compared to the umpire reanalysis results. A mean-grade comparison and review of QQ plots between the original assay data and the reanalysis data reveals that the 2018 Cu concentrations are biased 4% low in Area A and ~17% low in area B compared to the umpire results. The comparison suggests that Cu results obtained in 2021 are reasonably comparable to the umpire results (~2% low in Area A and ~4% low in Area B). The Competent Person has some concerns about the accuracy of Cu concentrations at Area B (which is primarily modelled on the 2018 data) and the 2018 drilling at Area A, and this has been considered in the classification of the Mineral Resource. Overall, considering that biases are all low biases, the overall tonnage and grade in the estimation are therefore probably slightly conservative, and reflects a minor potential upside. 	INVESTIGATION CONTROL
Verification of results	•	It is recommended that independent or alternative personnel confirm the selected intersection points and twinned holes, deflections or duplicate samples are used.	 All sample intersections were selected by AVOD's Geologist. For the 2021 programme, a further check was conducted by RSC who reviewed the core photographs and geological logs in 3D software to approve sample intervals. No twinned holes have been used. 	
Data location	•	A statement is required with regards to the quality and reliability of certainty of surveys used to locate drill holes, trenches, mining works and other locations. Quality and adequacy of topographic control should be explained, and site plans should be given. The quality and adequacy of down-hole surveys should be explained. Quality and adequacy of topographic control.	 All drill collar locations were recorded by handheld GPS of unknown type; hand-held GPS have a typical accuracy of ±5 m. The grid system used is (UTM ED50 Zone 36 North). Upon the completion of drilling the 2021 drill collar locations were recorded by a professional surveyor by means of a Differential Global Positioning System (DGPS). The 2021 drill hole, angles and azimuth were set and recorded by field staff in accordance with AVOD SOP's and drilling operations supervised by the rig geologist. Down-hole surveys were collected by the drill crew using Reflex EZ-Trac survey tool. The 2018 Drill hole angles and azimuth were set by field staff using unknown tools. No downhole surveying was undertaken. A digital terrain model (DTM) was collected during December 2019 by Ünal Harita Engineering. The DTM covered both Areas A and B and resulted in significant improvements to topographical surface control for the project. The DTM has an approximate accuracy of ±10 mm vertical and ±5 mm horizontal at the control points. High-definition photography was also collected and captured the position of drill pads of 2018 drill collars. A review in January 2020 of the drillhole collars of the 2018 programme, using high resolution images and an updated DTM, revealed significant issues with collar locations. Following this review, RSC repositioned the 2018 collar locations based on the location of drill pads visible in the high-resolution photogrammetry 	ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

		 collected in December 2019. The DTM and photogrammetry has an approximate accuracy of ±10 mm vertical and ±5 mm horizontal at the control points. The accuracy reduces away from these points. Considering the relatively simple, flat-lying geometry of the mineralisation, limited structural complexity, and generally good lateral continuity of the mineralisation, RSC considers the risk associated with the collar locations for the 2018 programme a low-to-moderate risk with respect to the data quality objective. No quantitative data or check surveys are available to confirm accuracy of the 2021 collars. Taking into account the specified precision for the DGPS instrument (+/- 10 cm), RSC considers the risk associated with the 2021 collar locations low with respect to the data quality objective.
Data density and distribution	 A statement must be given to indicate whether data density and distribution is sufficient enough t ensure geological and grade or quality continuity for Mineral Resource and/or Reserve estimation procedure and the applied categorizations, and if sample compositing has been made. With regards to the deposit type, it must be explained if sampling is sufficient to define the mineralization. 	 The drill spacing is not evenly spaced. The Competent Person considers the drill spacing and distribution to be sufficient to support the classification of the resource. No sample composting has occurred. All samples were taken over 1 m intervals.
Reporting Archives	• Primary data documentation, data input procedures, data confirmation, data storage (physical and electronic) must be provided to support report preparation.	 RSC retrieved the database from AVOD in 2018. The data was appropriately structured, and checks were made between original assay sheets for transcription errors. RSC updated the database in 2021 and 2022 with the 2021 drilling data. There are no issues with the tracking of sample results to core trays, sample bags to metre intervals and all data in the database accurately reflects the interval it was drilled from. A comprehensive review of Avod's quality assurance procedures is detailed in Section 6 of this report.
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	 The data verification process included site visits in 2019 and 2021. During these site visits, RSC noted that several discrepancies were identified between the 2018 collar locations provided by AVOD and survey points collected by RSC staff in 2019 using handheld GPS. RSC completed a review of the drillhole collar locations of the 2018 programme, using high resolution photogrammetry images and an updated DTM, which revealed significant issues with the supplied collar locations. RSC repositioned the 2018 collar locations based on the location of drill pads visible in the high-resolution photogrammetry collected in December 2019. RCS completed spot checks of both the 2018 and 2021 Cu results against the original laboratory certificates and noted no transcription errors relating to the data. Sample results in the database were able to be tracked back to core trays, sample bags and metre intervals. RSC requested reanalysis for a selection of pulps by an independent (umpire) laboratory (ALS) following a comparison of Cu and Co distributions within the modelled mineralised domains revealed poor correlation between the two datasets. The umpire reanalysis, completed by an independent laboratory, indicates that the original 2018 Co concentrations are significantly higher than the umpire results and the 2018 and 2021 Cu results are conservative compared to the umpire reanalysis results. A comparison of Cu mean-grade



and QQ plots between the original assay data and the reanalysis data reveals that the 2018 Cu concentrations are biased 4% low in Area A and ~17% low in area B. The 2021 Cu concentrations are biased marginally low, with ~2% in Area A and ~4% in Area B. The Competent Person has concerns about the accuracy of the 2018 Argetest laboratory results and this has been considered in the classification of the Mineral Resource.

Section 3 Reporting of Exploration Results

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

Criteria	UMREK Code explanation	Commentary
Mining rights and land ownership	 Type, reference name/no., location and ownership, joint ventures, partnerships and similar agreements with third parties or material issues, historical areas, wildlife or national park and environmental conditions, conditions of other investment areas. Security of the right of use at the time of reporting or reasonably expected to be given, known obstacles preventing the right of operating on site. Layout plans of mining rights and ownership. Definition of a mine ownership in a technical report is not expected to be a legal opinion; it should rather be a brief and clear explanation of ownership, as perceived by the author. 	 AVOD controls 100% of the Çorum Project through its ownership of exploration licence 200712071, which covers 1,375 ha and expires 6 March 2024. The project can be accessed via the Boğazkale-Yozgat Road which transects the south of the project area. Areas A and B, discussed in this report, are situated in the hills east of this road and are 2.5 km to 4 km from Boğazkale. Much of the wider project area is accessible via several unsealed roads and farm tracks. The licence applies to mineral Group 4 (c) and includes the following: sub-section (a): industrial minerals, including boron, sodium, lithium and calcium; sub-section (b): energy source minerals including lignite and anthracite resources; sub-section (c): precious metals, including gold (Au), silver (Ag), Cu and iron (Fe); and sub-section (c): radioactive minerals and other radioactive substances containing elements such as uranium, thorium and radium. RSC understands that the land where the project is situated is privately owned, and AVOD expects that purchasing the land required to undertake mining operations will not present any significant issues.
Exploration done by other parties	• Acknowledgment and appraisal of exploration by other parties.	 Some mining occurred in the 1950s; however, no information is available about the location, extent, or historical production. RSC inspected a mine site in the Project area during a 2019 site visit and noted only very minor excavations and no evidence of mine infrastructure. No exploration was carried out in the area between the 1950s and when AVOD acquired the licence



		(200712071) in 2013.	
Geology	• Explanation of the nature, details and reliability of geological information (related to rock types, structure, alteration, mineralization, and areas known to be containing mineralization etc.). Explanation of geophysical and geochemical data. Reliable geological maps and sections should be available to support comments.	 The project is located within the IAESZ, which is a regionally extensive zone of ophiolite rocks and seafloor sediments. IAESZ extends from west to east through Turkey and represents a major structural deformation zone and includes complex subduction-accretion zones like the Ankara mélange, west of the project. These regional suture zones host significant mineral deposits, including VMS deposits throughout Turkey. The main lithologies within the project area are basalt lava flows and seafloor sediments (radiolarites). These lithologies are typical of those found near surface in semi-active spreading ridges and probably within water less than 4,000 m in depth and likely related to the regional tectonic shortening and shallowing of the Tethys. 	THE REAL PROPERTY OF THE REAL
Mineralogy /Mineralization	• Definition, frequency, size and other characteristics of the minerals inside the ore. Effect of the secondary and economically nonvaluable minerals on the steps of beneficiating the main mineral and the variability of each significant mineral within the deposit should be indicated.	 The project is considered to be a volcanogenic massive sulphide (VMS) deposit. VMS deposits form when seawater is heated by submarine volcanism and flows through the volcanic rocks using a network of conduits including cooling cracks and joints and interconnected pore spaces in permeable rocks such as in volcanic breccias. The hydrothermal fluids mobilise metals including Cu, Zn, Pb, Au and Ag. Changes in temperature can cause the metal-laden hydrothermal fluids to precipitate the dissolved metals as sulphide minerals forming deposits. The shape of VMS deposits varies and could be pod or sheet-like. Cu Mineralisation at Çorum is associated with lava flows, which may suggest that it formed below the seafloor, either in the lower part of a vent (i.e. in the alteration halo) or along conduits some distance away from any main vent. 	
Data compositing (accumulation) methods.	 In exploration result reporting, weighted average techniques, maximum and/or minimum grade cut (e.g. cutting of high grades), cut-off grades are generally important and must be stated. In places where composited intersections yield high-grade results over short lengths and low-grade results over longer lengths, the procedure used for such compositing must be specified, and some typical examples of such intersections should be given in detail. The Modifying Factors used for any type of reporting on metal equivalents should be clearly indicated. 	 Exploration drilling intersections from the Corum project are reported in the Appendix section of the report. No metal equivalents are used. 	ÇORUM COPPER PROJI AVOD ALTIN MADENCILIK ENERJI INS

ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known'). 	Drilling was well-orientated perpendicular to the sub-horizontal mineralisation. Drilling intervals are reported as down hole widths.
Diagrams	 Where possible, if the maps, plans and sections (scaled) and charts of intersections significantly clarify the report, then they should be included for any material survey being reported. 	Cross-sections illustrating intersections of mineralisation and estimated block model grades are included in the body of the report text.
Balanced reporting	 If it is not practical to report in depth all Exploration Results, one should try to report both low and high grades and/or widths, so that Exploration Results will be representative. 	All analytical results have been reported in a balanced manner.
Other substantive exploration data	 If other exploration data are meaningful and tangible, they should be reported as follows (not limited to them): geological observations, geophysical exploration results, geochemical exploration results, bulk samples - size and method of development, metallurgical test results, bulk density, underground water, geotechnical and rock characteristics, moisture content, potentially deleterious or contaminating conditions and characteristics. 	AVOD commissioned Aktif Yerbilimleri A.S. (AY) to carry out an aerial magnetics survey over what is now Area A. Drilling to date in Area A has been confined to the region of the magnetic (low) anomaly. AVOD contracted the governmental institution, General Directorate of Mineral Research and Exploration (MTA), to undertake a ground geophysics survey using induced polarisation (IP), which produced maps and sections of chargeability and resistivity. The raw data and the processed maps in .kmz file format were provided to RSC. The IP studies carried out by MTA were undertaken over seven profiles on the field over Area A with electrodes spaced at 50 m. A progressive dipole-dipole electrode array was used. The total survey length was 8,000 m and eight levels of measurements were taken. The results from the IP survey identified a continuous zone of high resistivity and high chargeability anomalies which extended northeast 600–700 m, with an average east-west width of 100 m. MTA (2013) estimated the IP anomaly could extend to a depth of 150 m.
Additional works	 Nature and dimension of the planned future development (e.g. additional exploration). Descriptions of estimated environmental 	The Competent Person notes that an approved environmental impact assessment (EIA) must be obtained before commencing mining activities and it is a prerequisite for the issuance of any other licence or permit that could be legally required

TSC NAME OF TAXABLE

5 T 5		liabilities.	• RS(0 0 0 0 0	C recommends the following work be completed: Complete additional independent validation of samples by sending 5% of the 2018 and 2021 samples to an independent (umpire) laboratory for additional independent validation of the Cu grade followed by an in-depth review. Complete a programme of metallurgical sampling to assess the metallurgical properties of each domain. Carry out step-out drilling in Area A, to test for extensions of mineralisation. Investigate further VMS opportunities within trucking distances of the project. Undertake wider geological and structural mapping of the Project, and undertake a surface geochemical programme.
-------	--	--------------	--------------------------------	---

Section 4 Mineral Resource and Mineral Reserve Estimations and Reporting

(Criteria listed in section 1, and where relevant in section 2, also apply to this section.)

Criteria	UMREK Code explanation	Commentary
Database integrity	• Measures taken to ensure data are not corrupted between first collection of data and being used to estimate Mineral Resource, e.g., recording and database errors. Data verification and/or validation procedures used.	 RSC retrieved the database from AVOD in 2018. The data was appropriately structured. RSC updated the database in 2021 and 2022 with the 2021 drillhole logging and assay data. Data verification processes included site audits, spot checks between original assay sheets for transcription errors, verification of location and laboratory data (see section 6.6 on data verification). Sample results in the database were able to be tracked back to core trays, sample bags and metre intervals.
Geological interpretation	• Definition of geological model and the inferences made from this model. Estimation procedure used to ensure continuity of mineralization, and discussion of the sufficiency of the given database. Discussing alternative interpretations and their potential impact on the estimation.	 Mineralisation within the Project occurs predominantly within sub-horizontal units logged as basalt, breccia and basaltic breccias (basalt/breccias). The geological interpretation and model are considered robust and well constrained by downhole geological logging and supported by geochemistry. The Competent Person considers that due to the nature of the deposit, alternative interpretations of the geology are not likely to deviate much from the current model and will have little impact on the MRE.
Dimensions	• The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	 The extent of the Mineral Resource at Area A spans ~830 m northeast-southwest and ~200 m southeast-northwest, with a thickness up to ~20 m. The depth of the deposit below surface ranges from 0 m to ~55 m as it dips beneath the undulating topography. The extent of the Mineral Resource at Area B spans ~200 m north-south and ~230 m east-west, with a thickness up to ~25 m. The depth of the deposit below surface ranges from 0 m to ~45 m as it dips

ÇORUM COPPER PROJECT AVOD ALTIN MADENCILIK ENERJI INSAAT

		beneath the undulating topography.
Estimation and modelling techniques	 Nature and appropriateness of the applied estimation techniques and key assumptions, including treatment of extreme grade values, compositing (included with length and/or density), interpolation parameters, maximum projection distance from data points and the final area of the estimation. Interpolation refers to estimation supported by sample data. Extrapolation refers to estimation stretching beyond areal borders of sample data. Validation refers to the existence of previous estimations and/or mining production losses and whether Mineral Resource estimation. Assumptions made with regards to the recovery of by-products and other minerals which could possibly affect beneficiation of the ore. If block model interpolation is done, block size with relation to average sampling spacing and applied exploration. All assumptions used to establish selective mining units (e.g., nonlinear kriging) modelling. Validation process, the checking process used, comparing model data with drill hole data, and use of reconciliation data, if any. Detailed explanation of tonnage and grade estimation (section, polygon, inverse distance, geo-statistical or other methods) and the methods used. Explaining how geological interpretation was used to control resource estimation. Discussing the basis of using or not using grade cutting or capping. If a computer method has been selected, explanation of the program and parameters 	 Estimation domains guided by geochemistry provide good correlation between drill holes and produced populations with low internal grade variation as expressed by the CV. The estimation domains have very low CVs (<0.5) and no top cutting was required. The Cu resource estimate was completed using ordinary kriging (OK) in Leapfrog Edge. OK is the most widely used non-biased linear estimation method for grade populations that exhibit reasonable statistical homogeneity within estimation domains. Hard domain boundaries were set for estimation after reviewing domain contact analysis plots. Variogram structures are generally well defined and extend beyond drill spacing. Nugget values inferred from the downhole variograms are relatively low (0.1–0.3). Estimation domains within Area B are confined to the extent of drilling. The lateral extent of domain A0 was extrapolated beyond drilling extents by ~50 m from drilling in directions where mineralisation remains open and within the extent of the geophysical anomaly. The competent person considers the degree of extrapolation to be appropriate given the observed continuity of geological units, low variability of grade data and variogram ranges. A parent block size of 25 m x 25 m x 5 m x 5 m x 5 m x 1 m (x-y-z), was selected for estimation act or grade was completed in a single pass using search neighbourhood parameters supported by KNA. Variable orientations were utilised to guide the search ellipse within the estimation domains. The grade of each block was estimated using a minimum of six and a maximum of 20 samples, a maximum of 5 as mples per drillhole and discretisation of 5 x 5 x 5 (x-y-z). The model was validated through visual validation, mean comparison checks, and review of swath plots. The Competent Person considers the block model to be robustly estimated with block grades representative (within 5%) of the input data.

	 used. Geo-statistical methods have multiple variations; therefore, these need to be explained in detail. The selected method has to be justified. Geo-statistical parameters (including variogram) and conformity to geological interpretation need to be discussed. Experience from geo-statistical methods applied to similar deposits must be taken into account. Variation of length (along the layer/seam direction or the other way), plan width and upper and lower limits of mineral resource as a sub-surface depth to the Mineral Resource. All metals (or other components) to be treated (including those deemed to be dump material) must be indicated. A statement must be added to indicate that there are no other deleterious minerals that need to be separated or if otherwise describe a mitigation plan. 	
Metal equivalents or other combined representation of other multiple components	 In any report containing reference to metal equivalents (or other content equivalents), the following minimum data must conform to these principles: Individual assays for all metals included in the metal equivalent calculation; Assumed commodity prices for all metals. (Companies should declare the actual assumed sales prices.) Discussion of the spot price is not sufficient when declaring the price used for calculating metal equivalent.) For all metals, metallurgical test results and basis from which assumed recoveries have been derived (metallurgical test study, detailed mineralogy, similar deposits etc.); 	Not applicable as no metal equivalents reported.



	 company's opinion that all the elements involved in metal equivalent calculation have a reasonable potential of recovery and sale; and o Calculation formula. In many cases, the metal selected for equivalent based reporting, should be the one that has contributed most to the metal equivalent calculation. If this is not the case, a clear explanation for choosing another metal must be included in the report. Estimations of metallurgical recoveries for each metal are particularly important. In many projects, metallurgical test data may not be available during the Exploration Results stage or may not be estimated with reasonable confidence. In general, overall metal recoveries are calculated on the basis of a flowsheet showing the mass balance. This should be indicated by the testwork, and it should be shown that results are related to the ore body in question and is not just the sample treated. 	
Cut-off grades and parameters	 The basis of the applied cut-off grades or quality parameters must be included (if possible, including the basis of the equivalent metal formula). The cut-off grade parameter can also be expressed as economic value per block, instead of grade. 	 The cut-off grades 0.3% for oxide material and 0.35 % for fresh were determined through a pit optimisation study and are based on assumed operating costs and metallurgical recoveries.
Tonnage Factor/In Situ Bulk Density	 Must indicate whether assumed or determined. If assumed, the basis of assumptions. If determined, the method used, frequency of measurements, nature, size and representation reliability of samples. 	 Recovered core was found to be highly fractured. The density of 2018 core was determined by the 'Archimedes' method and the 2021 core by the "Core Tray" method, and the 'Archimedes' method was used for a selection of competent pieces of core. In a pairwise comparison of core-tray and Archimedes density measurements collected for the 2021 programme, density values obtained by the Archimedes method were found to be consistently higher (~5–15%). Similarly, in a comparison of density values by mineralisation domain, it was found that median values obtained by the Archimedes methods during

o A clear statement indicating it is the



		2018 are 13–14% higher than median values obtained in 2021 for the same domain using the core-tray method. In view of the above, the 2018 and 2021 Archimedes density values were not used in the MRE, as the Competent Person suspects that Archimedes density values are biased high. Accordingly, the density values obtained during the 2021 drilling campaign by the core-tray method were used in the determination of density values.	
Mining factors or assumptions	Appropriateness of the recommended mining method and mineralization type, minimum mining dimensions and internal (or external, if applicable) mining dilution to be indicated. It is not always possible to make detailed assumptions related to mining factors, when estimating Mineral Resources. Basic assumptions are required to determine reasonable prospects for eventual economic extraction. These would include access issues (boreholes, inclined shafts etc.), geotechnical and hydrogeological parameters (pit slopes, stope dimensions etc.), infrastructure requirements and estimated mining costs. All assumptions must be clearly indicated	 RSC completed a pit optimisation study on the MRE. The pit optimisation was completed using GEOVIA Whittle®, and applied assumptions derived from desktop analysis. The applied assumptions are outlined in the Appendix of the report. The Competent Person considers that the deposit may be mined via a conventional open pit method. 	inse -
Metallurgical factors or assumptions	The proposed metallurgical process and its appropriateness to the style of mineralization. It is not always possible to make detailed assumptions related to metallurgical factors, when estimating Mineral Resources. Basic assumptions are required to determine reasonable prospects for eventual economic extraction. Availability of metallurgical tests, recovery factors, allowances for byproduct credits or deleterious minerals or elements, infrastructure requirements and estimated processing costs can be given as examples. All assumptions should be clearly indicated. The exact definition of minerals, or the required assays to ensure appropriateness of	 As no metallurgical test work has been undertaken to date, RSC has made reasonable assumptions based on a desktop analysis of processing and recovery options to inform the open pit optimisation and determine the reasonable prospects for eventual economic extraction The uncertainty surrounding the absence of metallurgical testing is determined to pose a moderate risk to the MRE considering the nature of the deposit. Metallurgical testing will be required for any future work and would reduce the uncertainty around possible operational revenues. RSC has made reasonable metallurgical assumptions based on its desktop analysis of processing and recovery options used in comparable operations to inform the open pit optimization and determine the reasonable prospects for eventual economic extraction. Recovery is proposed to include a 125 ktpa vat leach SX/EW circuit for oxide - producing up to 2,500 tpa of copper in cathode. A sulphide concentrate will be produced by sulphide flotation of mixed fresh material. Mixed material may also be further vat leached, following flotation. The assumed throughput capacity of the concentrator is 650 ktpa, resulting in a processing plant capacity of 750-800 ktpa for a 5–10 year mine life, expected to be extended by exploration success. 	çorum copper project avod altın madencilik enerji insaat

	the process, and all unwanted or possible by- products should be revealed, and appropriate process steps should be included in the flowchart	
Cost and revenue factors	 State basis for assumptions. Currency, exchange rates and dates of estimates 	• Cost and revenue factor assumptions used in the pit optimization study to determine the reasonable prospects for eventual economic extraction are detailed in the Appendix of the report.
Other	• All obstacles such as land access, environmental or legal permits, potentially affecting mining. Location plans of mineral rights and titles.	 The Competent Person is not aware of any environmental studies undertaken for the project, nor any environmental restrictions to explore within the project area. The Competent Person notes that an approved environmental impact assessment (EIA) must be obtained before commencing mining activities and it is a prerequisite for the issuance of any other licence or permit that could be legally required. RSC notes that an ephemeral stream that may need diverting runs through the length of the resource at Area A. Key environmental legislation concerning mining activities include the Environmental Law No. 2872 (dated 11 August 1983) and the Environmental Impact Assessment Regulation (published in the Official Gazette No. 29186, dated 25 November 2014) (EIA Regulation). An approved environmental impact assessment (EIA) must be obtained before commencing mining activities and it is a prerequisite for the issuance of any other licence or permit that could be legally required. Other legislation, regulating for example industrial activities, environmental effects, and health and safety of the workplace, also apply to mining activities. The project can be accessed via the Boğazkale-Yozgat Road which transects the south of the project area. RSC understands that the land where the project is situated is privately owned.
Classification	• Basis of classification of the Mineral Resources into varying confidence categories. Whether all relevant factors have been properly included in the calculation, e.g., relative confidence in tonnage/grade calculations, continuity of geology and distribution of metal values, quality, quantity and data. Does the resultant categorization properly reflect the Competent Person's opinion of the deposit?	 The Mineral Resource is classified entirely as Indicated and Inferred. For the Inferred portion of the Resource (5 Mt at an average grade of 1.6% Cu), geological evidence is sufficient to imply, but not verify, geological and grade continuity. The Inferred portion of the Resource is based on exploration, sampling and testing information gathered through appropriate techniques from drillholes. For the Indicated portion of the Resource (2.5 Mt at an average grade of 1.43% Cu), grade and densities are estimated with sufficient confidence to allow the application of Modifying Factors, in sufficient detail, to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from drillholes, and is sufficient to assume geological and grade continuity between points of observation where data and samples are gathered. In the Competent Person's view, appropriate account has been taken of all relevant factors that affect resource classification. Portions of the deposit that do not have reasonable prospects for eventual economic extraction are not included in the Mineral Resource. In assessing the reasonable prospects, the Competent Person has

SSI

		evaluated preliminary mining, metallurgical, economic and geo-technical parameters.
Audits or reviews	• Audit or review results of Mineral Resource estimations.	The Mineral Resource has been internally reviewed.
Discussion of relative accuracy/ confidence	Where applicable, a statement for relative accuracy and/or confidence for the Mineral Resource and Mineral Reserve estimation, by using an approach or procedure deemed to be appropriate the Competent Person. As an example, application of statistical or geostatistical procedures to quantify the relative accuracy of the reserve within the stated limits of a confidence category or, if such an approach is not possible, qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimation. Is the statement related to global or local estimations, and if local, indicate the tonnages and volumes which need to be related to technical and economic assessment? Documentation should include the assumptions made and the procedures used. Where the statements of relative accuracy and confidence of the estimation are accessible, estimation should be compared to production data. Discussing the tests of the production sequence by conditional simulation on the uncertainty of the tonnages and grades of production increments.	 The confidence reflected in the Indicated and Inferred classification of the deposit is based on exploration, sampling and assaying information gathered through appropriate techniques from appropriately spaced drillholes, geological understanding, kriging efficiency and slope of regression values. The MRE statement is related to a global estimate of in-situ tonnes and grade. There is potential for uncertainty in local estimations of block grades due to potential subtle variations in the deposit that are not captured in the density of available data. The Competent Person determines the block model to be robustly estimated based on validation of input and estimated grades through visual assessment, domain grade mean comparisons, and a review of swath plots. No production data are available for comparison.