Report No. 20200316_BDK

UMREK Technical Report and Resource Estimation for The AVOD Çorum Copper Project, Çorum Province, Turkey

Prepared for

Avod Altin Madencilik Enerji Insaat San. Ve Tic. A.S

By

Bordokum

Addison Mining Services

01 June 2020

Document Title	UMREK Technical Report and Resource Estimation for The AVOD Çorum Copper Project, Çorum Province, Turkey
Project Number	20200316_BDK
Prepared by	James Hogg MSc MAIG, Director and Principal Consultant Geologist Richard Siddle MSc MAIG, Director and Senior Consultant Geologist Lewis Harvey MSc MAIG, Director and Senior Consultant Geologist Toygar Tanyıldız, Managing Director and Senior Consultant Geologist Erdem Atalar MSc, Director and Senior Consultant Geologist
Contact	jnh@addisonmininggroup.com erdem.atalar@bordokum.com
Registered Address	Mustafa Kemal Mah. Dumlupınar Bul. No:266 Tepe Prime C/36 Çankaya/ANKARA
Effective Date	27th May 2020
Signature Date	01 June 2020
Competent Person	Özgür Çörekci
Competent Person Signature	Ö. Çörekci
Client Name	Avod Altin Madencilik Enerji Insaat San. Ve Tic. A.S
Client Address	AVOD Altın Mad. Enerji İnş. San. ve Tic. A.Ş. Yıldırım Mah. 35 Sokak No: 62 Menemen/İZMİR
Version Control	Final

Competent Person's Consent and Statement

This updated resource estimate and technical report in accordance with the UMREK 2018, has been prepared in accordance with Turkey 2018 version of the "National Resource and Reserve Reporting Committee" (UMREK) Code. UMREK Code is the reporting standard adopted by the Turkish Capital Markets Board (TCMB).

The information contained within this document has been verified where possible and practical in the field and laboratory by YERMAM Professional Member Özgür Çörekci, compiled objectively, or prepared under his supervision.

Özgür Çörekci is a competent person as defined in the UMREK Code (UMREK Certificate no: 44) and has sufficient experience about the form of mineralization, the type of mineral deposits subject to assessment and the activity undertaken.

Mr. Çörekci has not a direct or indirect financial interest in, or association with AVOD, the properties and tenements reviewed in this report, apart from standard contractual arrangements for the preparation of this report and other previous independent consulting work. The present arrangements for services rendered to AVOD do not in any way compromise the independence of him with respect to this review.

UMREK, 2018.

Consent Form of Competent Person

Report Name

UMREK TECHNICAL REPORT AND RESOURCE ESTIMATION FOR THE AVOD ÇORUM COPPER PROJECT, ÇORUM PROVINCE, TURKEY

AVOD ALTIN MADENCILIK ENERJI INSAAT SAN. VE TIC. A.S

ÇORUM COPPER PROJECT

---

01 June 2020

STATEMENT

I,

Özgür Çörekci

---

confirm that I am the Competent Person with regards to report and:

- I have read and understood the requirements of the UMREK Code for Reporting Exploration Results, Mineral Resources and Reserves.
- I accept that I am the Competent Person defined by the UMREK Code 2018, having 7 years of experience that is relevant to the style of mineralization and type of deposit specified in the Report and to the activity for which I am accepting responsibility.
- I am a member of a 'professional organization', recognised by UMREK.
- I have reviewed the Report to which this Consent Statement applies.

To prepare the documents related to **Çorum Copper Project**, basis of the report for the period ending on 30 May 2020,
I am a consultant working for the below given company:

Bordokum Mining & Addison Mining Services

Including any issues that can be perceived as a conflict of interest by the investors, I have informed the Company that will submit the report about the exact nature of the relationship between myself and the Company.
I verify that the Report is fairly and accurately reflecting in the form and context in which it appears, the information in my supporting documentation relating to the Mineral Resources.

CONSENT

I consent to the release of the Report and this Consent Statement by the directors of:

AVOD ALTIN MADENCILIK ENERJI INSAAT SAN. VE TIC. A.S

Ö. Çörekci

Competent Person Signature:

01 June 2020

Date:

YERMAM

Professional Membership (insert name of organization):

UMREK # 44

Membership No:

Witness signature:

Toygar TANYILDIZ
BORDOKUM Managing Director &
Senior Consultant Geologist.
Mustafa Kemal Mah. Dumlupınar Bul.
No:266 Tepe Prime C/36
Çankaya/ANKARA

Name and address of witness:

Table of Contents

1 Executive Summary 14
1.1 Introduction 14
1.2 Project Description and Location 14
1.3 Accessibility, Local Resource & Infrastructure 15
1.4 History 15
1.5 Geological Setting 16
1.6 Exploration and Drilling 17
1.7 Mineral Resource Estimation 19
1.8 Estimates of Process Recoveries and Operating Costs 23
1.9 Economic Cut-Off 24
1.10 Interpretations and Conclusions 25
1.11 Recommendations 27
1.12 Mineral Resource Estimations 28
1.13 General Exploration Recommendations 28
1.14 Development Strategy Recommendations 29
2 Introduction 30
2.1 Terms of Reference 31
2.2 Units 31
2.3 Independence 31
2.4 Limitations 32
2.5 Sources of Information and Data 32
2.6 Material Change Statement 33
3 Reliance on Other Experts 33
4 Property Description and Location 34
5 Accessibility, Climate, Local Resources, Infrastructure and Physiography 37
5.1 Accessibility 37
5.2 Climate 38
5.3 Local Resources and Infrastructure 39
5.4 Physiography and Vegetation 39
5.5 Archaeological Site 40
6 History 41
6.1 Historical Mineral Estimations 42
7 Geological Setting and Mineralisation 44
7.1 Regional VMS Occurrences 44
7.2 District Geology 45
7.3 Local Geology 47
8 Deposit Types 50
9 Exploration 53
10 Drilling 59

10.1 Overview 59
10.2 CPs Comments 66
11 Sample Preparation, Analysis and Security 67
11.1 Sample Preparation 67
11.1 Sample Analysis 69
11.2 Data Management 71
11.3 CP Comments 72
12 Data Verification 73
12.1 Competent Persons Site Visit 73
12.2 Quality Control 82
12.3 Comments 84
13 Mineral Processing and Metallurgical Testing 85
14 Mineral Resource Estimates 85
14.1 Software Used 85
14.2 Input Data Summary 85
14.3 Data Validation and Preparation 85
14.4 Geological Interpretation and Modelling 86
14.5 Geochemical Analysis 88
14.6 Statistical Analysis 90
14.7 Compositing and top cutting 91
14.8 Variography 92
14.9 Block Model Estimation 93
14.10 Block Model Validation 94
14.11 Grade Tonnage Curves and Tabulations 98
14.12 Estimates of Process Recoveries and Operating Costs 100
14.13 Economic Cut-Off 101
14.14 Risk Assessment and Resource Classification 102
14.15 Resource Statement 104
15 Mineral Reserve Estimates 106
16 Mining Methods 106
17 Recovery Methods 106
18 Project Infrastructure 106
19 Market Studies and Contracts 106
20 Environmental Studies, Permitting and Social or Community Impact 106
21 Capital and Operating Costs 106
22 Economic Analysis 106
23 Adjacent Properties 107
24 Other Relevant Data and Information 108
25 Interpretations and Conclusions 109
26 Recommendations 109

26.1 Mineral Resource Estimations 109
26.2 General Exploration Recommendations 110
26.3 Development Strategy Recommendations 110
27 References 112
28 Illustrations 113
29 UMREK Table 114

List of Figures

Figure 1.1: Çorum licence area 200712071 (red polygon) is located approximately 200 km east of Ankara (Source Google Earth, DMT 2018). 15

Figure 1.2 Tectonic map of western Tethys showing main tectonic units and mineral deposits. Simplified and modified from Stampfli et al. (1998), Stampfli (2001), Jolivet et al. (1994), and Kaymakçi and Kus¸cu (2007). Abbreviations: IAESZ = Izmir- Ankara-Erzincan suture zone, SEAOB = Southeastern Anatolian orogenic belt, SSZ = Suprasubduction zone location of licence area (red point) (Source: Ilkay Kuscu et al., 2013). 17

Figure 1.3: Licence Showing Mapped Areas (source DMT 2018). 18

Figure 1.4: Drill Holes of Areas A and B (source DMT 2018). 19

Figure 1.5: Grade tonnage curves for all material types 21

Figure 4.1 Çorum licence area 200712071 (red polygon) is located approximately 200 km east of Ankara. 34

Figure 4.2: Licence 200712071. 35

Figure 4.3: Licence Certificate 200712071. 36

Figure 5.1: Access from Ankara to Bogazkale. 37

Figure 5.2: Unsealed Project Tracks. 38

Figure 5.3 Annual Weather Averages for Çorum (Source https://mgm.gov.tr/eng/forecast-cities.aspx?m=CORUM) 38

Figure 5.4 General View of Licence (Source DMT 2018). 39

Figure 5.5 Incised Streams within Licence (Source DMT 2018). 40

Figure 5.6 The Archaelogical Site (Source: Turkey's World Heritage Areas – UNESCO). 41

Figure 6.1: Historic Mining activity marked between GERD-30 & GERD-28. 42

Figure 6.2: DMT Resource wireframes (source DMT 2018). 43

Figure 7.1 Distribution of the VMS deposits and prospects of Turkey with emphasis on host-rock lithology location of licence area (red point) (Source Ozcan Yigit, 2009). 44

Figure 7.2 Tectonic map of western Tethys showing main tectonic units and mineral deposits. Simplified and modified from Stampfli et al. (1998), Stampfli (2001), Jolivet et al. (1994), and Kaymakçi and Kuscu (2007). Abbreviations: IAESZ = Izmir- Ankara-Erzincan suture zone, SEAOB = Southeastern Anatolian orogenic belt, SSZ = Suprasubduction zone location of licence area (red point) (Source: Ilkay Kuscu et al., 2013). 45

Figure 7.3: Distribution of the sedimentary-rock hosted copper prospects of Turkey with emphasis on host-rock lithology; location of licence area (red point) (Source: Ozcan Yigit, 2009). 46

Figure 7.4 Lithologies observed. Top left: pillow basalt with calcite stockwork. Top right: gossanous layer. Bottom left: interbedded chert and carbonate. Bottom right. Basaltic breccia (Source DMT 2018). 48

Figure 7.5 Sulfide Copper mineralization as Pyrite & Chalcopyrite from the Zone A, looking W. 49

Figure 8.1: A composite schematic comparing a section through an idealized ophiolite sequence with a more realistic section through an ophiolite formed above a subducting plate margin. Lower lavas (I) consist of either N-MORB or arc tholeiite. In a fore-arc environment the upper lavas (II) would contain boninitic units, whereas in back-arc environments, picrites and fractionated tholeiite suites would be included in the upper part of the extrusive sequence (source Galley, 1997). 51

Figure 8.2: Typical cross-sections through volcanic massive sulphide deposits. Note: Vertical and lateral zonation (Cu, Zn, Pb, Fe, Mn, Ba), demagnetization and alteration. Laterally the ore-equivalent layer may develop into cherts (source: DMT, 2018). 51

Figure 8.3: Schematic view of a sulphide vein. You can see the oxidation zone, consisting of the gossan, the leached zone and the oxidised zone. The reducing zone consists of the enrichment zone and the area of primary mineralisation. Significantly modified after Evans (1992) and Ottaway (1994) (Source: http://en.archaeometallurgie.de/gossan-iron-cap)........ 52

Figure 9.1: Prospects A and B (Source Google Earth, DMT 2018). 53

Figure 9.2: Stacks of Chargeability (Left) and Resistivity (right) Images (source DMT 2018) 54

Figure 9.3: Outcrop of 1:25 000 scaled governmental geological map H33-D3 (source DMT 2018). 55

Figure 9.4: IP survey point locations corresponding on the licence. 56

Figure 9.5: AVOD DMT Geological Map (source DMT 2018). 57

Figure 9.6: Licence Showing Mapped and Drilled Areas (source DMT 2018). 58

Figure 10.1: Drill Rig 59

Figure 10.2: Drill Holes of Areas A and B. 60

Figure 10.3: Core Photo from GERD-35 drillhole. 61

Figure 11.1: Steps of sample preparation: Equipment in core shed (Top Left), Crushing (Top Right), Splitting (Bottom Left), Cleaning (Bottom Right) (source DMT 2018). 68

Figure 11.2: Extract from ARGETEST Catalogue 2017-2018; sample preparation methods (source DMT 2018). 69

Figure 11.3: Extract from ARGETEST Catalogue 2017-2018; multi acid digestion plus ICP finish (source DMT 2018). 70

Figure 11.4: Extract from ARGETEST Catalogue 2017-2018; fire assay plus AAS finish (source DMT 2018). 71

Figure 12.1: Oxide Copper mineralization at Zone B as Malachite & Azurite from the trench, looking East. 74

Figure 12.2: GPS Pick Up Location; AVOD's Licence Area Site Visit by Competent Person (CP); All Drill Locations visited with Garmin GPSMAP64s handheld GPS. 76

Figure 12.3: CP Collar Location Checks. 77

Figure 12.4: Core and Pulp Assay Comparison Graph ARGETEST vs ALS Chemex for Cu (%) 80

Figure 12.5: Core Sample Assay Comparison ARGETEST vs ALS for Cu (%). 80

Figure 12.6: Resampling Period. 82

Figure 12.7: Shewhart Plot OREAS 623 – Cu% 83

Figure 12.8: Field duplicate analysis. 84

Figure 14.1: Example cross section Zone A (West) 87

Figure 14.2: Example Cross Section Zone B (East) 87

Figure 14.3: Ternary Plot for Cu Fe S. 88

Figure 14.4: Fe S budget analysis for formation of Chalcopyrite 89

Figure 14.5: Histograms and Box-Whisker plot for assays in mineralized wireframe domains. 91

Figure 14.6: Directional Semi Variograms for East Hypogene 1 domain, sample pairs shown as pars and numbers. 93

Figure 14.7: Composites vs Block Model Histograms 95

Figure 14.8: Composites vs Block Model Histograms cont. 96
Figure 14.9: Example Block model cross section zone A (West) 97
Figure 14.10: Example Block model cross section zone B (East) 97
Figure 14.11: Grade tonnage curves for all material types 98
Figure 14.12: Resource Block Models in plan view. 105

List of Tables

Table 1.1: Resource Estimate for the Avod Çorum Cu deposit, Turkey. All resources are Inferred resources. Numbers are rounded to reflect the relative accuracy of the estimate and as such discrepancies between individual values and totals may be present. 20

Table 1.2: Estimate of rounded grade tonnage estimates. 22

Table 1.3: Assumed process recoveries 23

Table 1.4: Estimated operating costs 24

Table 1.5: Cut-off grade determination 24

Table 1.6: Risk Assessment. 26

Table 4.1: Licence Coordinates 35

Table 6.1: DMT Inferred Resource at a 1 % Cu cut-off grade. Effective 5th November 2018. 43

Table 10.1: Drill Hole Details 61

Table 10.2: Significant intercepts generated from mineralized models described in section 14. 65

Table 12.1: Bordokum AMS CP Collar Location Checks 78

Table 12.2: Drill Hole Log Verification. 79

Table 12.3: CP Check Samples both core samples and pulps versus AVOD Samples. 79

Table 14.1: Cu and S descriptive statistics for assays in wireframe. 90

Table 14.2: Cu % Statistics for Assays and Composites. 92

Table 14.3: Experimental semi variogram parameters. 92

Table 14.4: Comparison of 2 m Composite and Block Model Cu% statistics. 94

Table 14.5: Estimate of rounded grade tonnage estimates. 99

Table 14.6: Assumed process recoveries 100

Table 14.7: Estimated operating costs 101

Table 14.8: Cut-off grade determination 101

Table 14.9: Risk Assessment. 102

Table 14.10: Resource Estimate for the Avod Çorum Cu deposit, Turkey. All resources are Inferred resources. Numbers are rounded to reflect the relative accuracy of the estimate and as such discrepancies between individual values and totals may be present. 104

1 Executive Summary

1.1 Introduction

Bordokum Mining Ltd (Bordokum Madencilik Ticaret Anonim Şirketi) ("Bordokum", "the consultant") were requested by MEHMET ÇETİNER of Avod Altin Madencilik Enerji Insaat San. Ve Tic. A.S ("Avod", "the client") to prepare a resource estimate and technical report for the Çorum copper project, Turkey in accordance with The National Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves Code of Turkey (The UMREK Code) 2018 ("The UMREK Code", "UMREK", UMREK 2018").

This Technical Report has been compiled by Mr Özgür Çörekci who is Competent Person (CP) as defined by UMREK code 2018 for the study. A site visit by the CP was conducted between the 29th and 31st of March 2020.

Mr Richard Siddle MSc MGeol (Hons) FGS MCSM is responsible for the preparation of the Resource Estimate and section 14 of this report in collaboration with the Competent Person. Mr Siddle is a CP as defined by the JORC code 2012 and a Qualified Person as defined by NI43-101 for undertaking Mineral Resource Estimates for a variety of metalliferous deposits including sulphide Cu deposits, however he has not completed a site visit and is not acting a CP for this study.

Additional contribution to this technical report has been made by Mr James Hogg MSc MAIG of AMS, Mr Toygar Tanyildiz of Bordokum, and Mr Lewis Harvey MSc MAIG of AMS.

1.2 Project Description and Location

The Çorum licence 200712071 area is located some 200 km to the east of Ankara, the capital city of Turkey and located in the Çorum province between the villages of Bogazkale in the west, Yuksekyayla in the east, Emirler in the north and Derbent in the south. Licence number 200712071 covers an area of 1375 ha (13.75 km^2). The location of the project location area is shown in Figure 1.1.

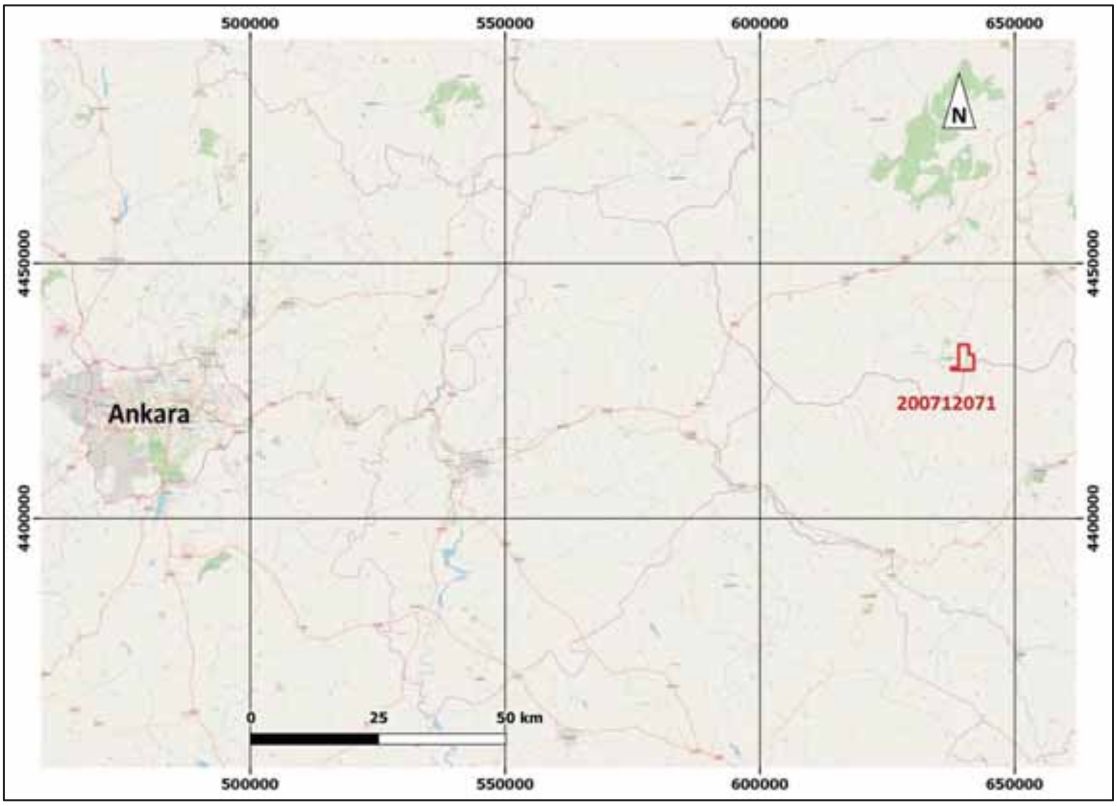


Figure 1.1: Çorum licence area 200712071 (red polygon) is located approximately 200 km east of Ankara (Source Google Earth, DMT 2018).

1.3 Accessibility, Local Resource & 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 international airport is in Ankara.

The licence area is located in the Çorum province and accessible from Ankara within 2.5 hours by car; 1.5 hours via D200 motorway to Delice and another hour via the D190 motorway to Bogazkale. From Bogazkale, it is 6 km on the road to Yozgat. The province capital of Çorum is accessible via motorways D190 and D785 within 1 hour by road. The project area is cut by a number of unsealed tracks made for agriculture and forestry purposes.

1.4 History

According to Bordokum, there was a period of limited small scale development/mining activity in the mid-20th Century. However, no historic exploration or production information is available.

Based upon review of limited historic reports and discussions with AVOD technical staff, it is understood that the reported historic mining activity is likely a small number of abandoned gallery entrances at Zone A.

During the Bordokum field visit, the area for historic exploration or production is visited and no any evidence for production as dump or any remnants for production noticed. Detailled comments are available at Section 6.

1.4.1 Historical Mineral Estimations

DMT completed a Mineral Resource estimate with an effective date of 5th November 2018. The estimate used the 2018 diamond drilling results described in section 10 of this report. DMT considered potential economic viability using a 1 % Cu cut-off grade (based on analogous mining activities and grades in Turkey), which yields an inferred resource of 2.7 Mt at a grade of 2.0 % Cu.

The estimation methodology used a wireframe to estimate a volume to which a bulk density was applied. The grade and proportion of potentially economic material was estimated by averaging the proportion of data above the cut-off grade within the assay database. While this methodology is often used for early stage projects with sparse data, no change of support correction was applied to account for the volume variance effect. The wireframe models were not extrapolated any distance from the drillhole traces and as such the estimated volume is considered by the authors to be overly conservative.

1.5 Geological Setting

There is excellent potential for both Cyprus-type and Kuroko-type VMS deposits in Turkey, especially in the productive northeastern Black Sea coast area (the Pontide Belt). These are the bimodal-felsic and mafic-dominated types of Franklin et al. (2005).

Kuroko-type deposits in Turkey are restricted to the Late Cretaceous bimodal volcanic rocks of northeastern Turkey, while Cyprus-type deposits are associated with ophiolitic rocks of the Kure district in northern Turkey and Ergani district in southeastern Turkey.

The licence area is located in the Vardar Ophiolitic Belt along the Izmir- Ankara-Erzincan suture zone (Figure 1.2).

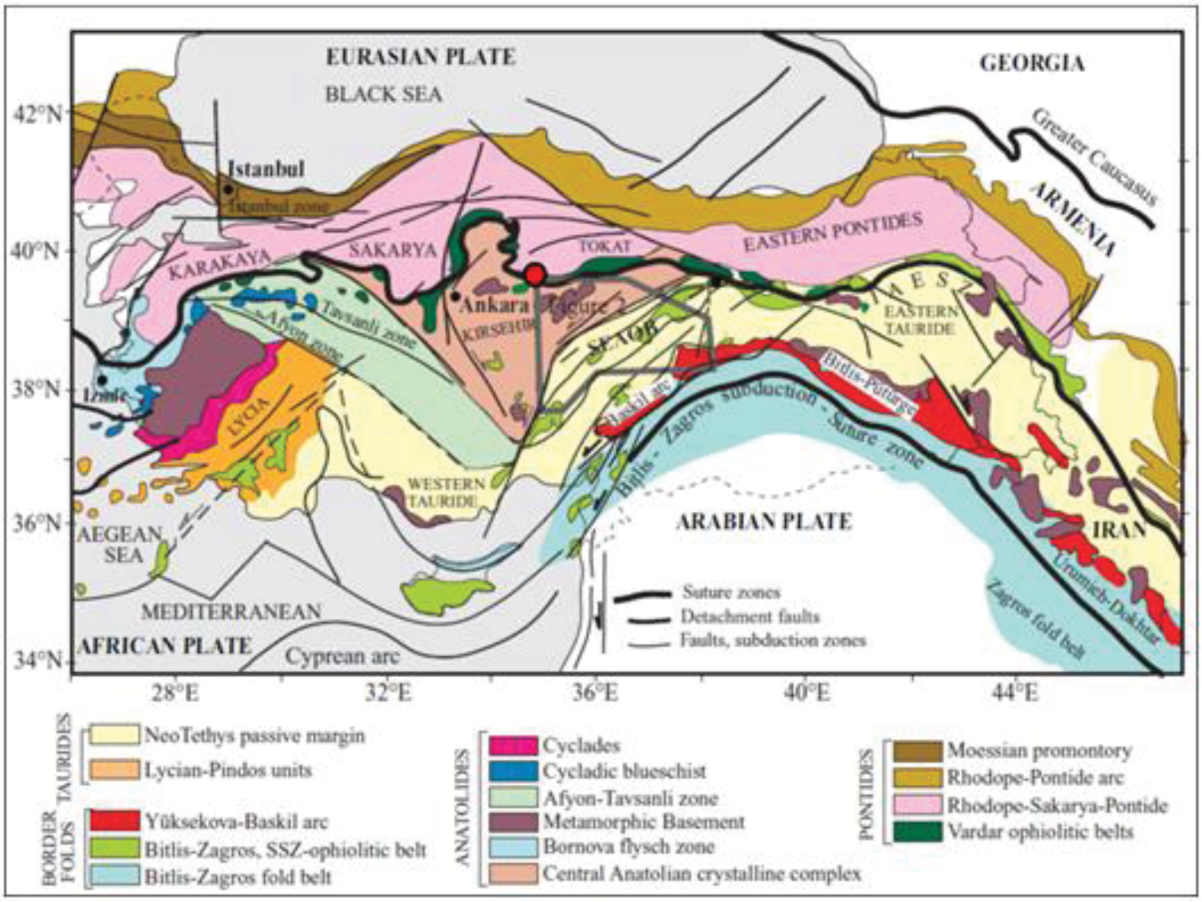


Figure 1.2 Tectonic map of western Tethys showing main tectonic units and mineral deposits. Simplified and modified from Stampfli et al. (1998), Stampfli (2001), Jolivet et al. (1994), and Kaymakçi and Kuşçu (2007). Abbreviations: IAESZ = Izmir- Ankara-Erzincan suture zone, SEAOB = Southeastern Anatolian orogenic belt, SSZ = Suprasubduction zone location of licence area (red point) (Source: Ilkay Kuscu et al., 2013).

Locally, the overall metallogenic setting is ophiolitic. This metallogenic province is well known and described in the literature. Ophiolites are tectonically emplaced at their current position and are generally very strongly deformed.

The project area appears to be largely covered by mafic lithologies. Ultramafic lithologies have been observed in the eastern part of the licence, where a small part mining licence for Mn exists. Sedimentary units are also present in form of carbonates and cherts, possibly radiolarites.

1.6 Exploration and Drilling

The company Aktif Yerbilimleri A.S. (AY) was contracted to complete a ground magnetics survey in 2013 (Area A). The governmental institution 'General Directorate of Mineral Research and Exploration (MTA)' completed a ground IP survey, in 2013, discovering anomalies along a valley indicating disseminated sulphides, also in Area A.

Based on these geophysical results, a mapping programme was implemented by DMT in 2016. The mapping identified another mineralised gossan-like body in Area B, around 700 metres west of the valley (Figure 1.3).

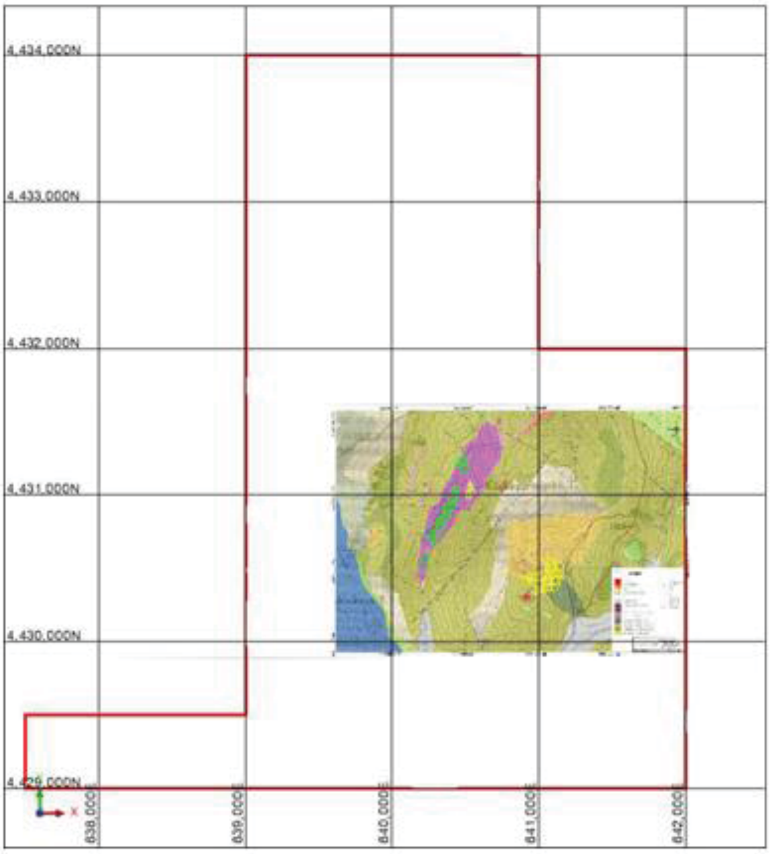


Figure 1.3: Licence Showing Mapped Areas (source DMT 2018).

Based on results of the 2013 geophysical surveys and 2016 geological mapping, 20 diamond drill holes for 1,380 metres were drilled to target the potential copper mineralisation in Area A and Area B, as illustrated in

Figure 1.4.

Of these 20 holes, 13 holes were drilled completely with PQ diameter and the 7 deeper holes were reduced to HQ. In total, 1,062 m were drilled in PQ and 318 m were drilled in HQ.

In Area A, line spacing of around 100 m was used with hole centres varying between 30 to 40 m. The lines crosscut the valley. The drilling of Area B is evenly distributed over the area with drillhole centres varying from 40 m to 60 m (Figure 1.4).

Figure 1.4: Drill Holes of Areas A and B (source DMT 2018).

1.7 Mineral Resource Estimation

The total estimated Resources reported in accordance with the UMREK Code 2018 for the Avod Çorum Cu deposit have an effective date of 27th May 2020 and are reported as **approximately 8.6 million tonnes at 1.8 % Cu for 150,000 tonnes of Cu metal**. **All Resources are of the Inferred category.** A breakdown of the resources is shown in Table 14.10.

An Inferred Resource is defined by the UMREK code 2018 as follows.

"An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling.

Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration."

Table 1.1: Resource Estimate for the Avod Çorum Cu deposit, Turkey. All resources are Inferred resources. Numbers are rounded to reflect the relative accuracy of the estimate and as such discrepancies between individual values and totals may be present.

Zone	Oxidation	Cut-off Grade	Volume	Tonnes	Density	Cu grade %	Cu Tonnes
Zone A - West	Sulphide	0.8	1,400,000	4,600,000	3.2	1.5	69,000
Zone B - East	Oxide	1	620,000	1,600,000	2.7	3.3	55,000
Zone B - East	Mixed	1.2	240,000	660,000	2.7	1.8	12,000
Zone B - East	Sulphide	0.8	560,000	1,700,000	3	1.1	19,000
TOTAL			2,800,000	8,600,000	3	1.8	150,000

The Mineral Resource Estimates are based on all available exploration drilling data to the end of October 2018, metal pricing of USD$5500 per tonne of Cu is based on London Metal Exchange December 2022 contract price as of 27th May 2020. The cut off grades were estimated based on assumed and estimated operating costs and metallurgical recoveries described in section 14.12 of this report. The Mineral Resource Estimate was completed using wireframe restricted block models and ordinary kriging. The resource estimation methodology is described in detail in this section, 14, of this technical report.

In Zone A mineralization ranges from surface to approximately 45 m below surface and ranges approximately 260 mN x 245 mE. The model is extrapolated approximately 25 m outside the limits of the drilling with a maximum spacing between drill fences (North-South) of approximately 210 m. Mineralization ranges in thickness from approximately 8 to 35 m. The Resource is not extrapolated beyond the nominal sample spacing. The Resource is open to the north, south, east and west, limited exploration has been completed at depth beyond the current resource.

In Zone B mineralization ranges from surface to approximately 55 m below surface and ranges approximately 260 mN x 245 mE. The model is extrapolated approximately 50 m outside the limits of the drilling. Mineralized thickness includes coherent zones of approximately 35 m with some internal waste which is 2-5 m thick. Some smaller zones of mineralization down to a minimum of 1 m have been modelled where mineralization is interpreted to pinch. The Resource is not extrapolated beyond the nominal sample spacing. The Resource is open to the north, south, east and west, limited exploration has been completed at depth beyond the current resource.

The estimated grade tonnage curve for all blocks in the block model are presented in Figure 14.11 with tabulations presented for each material type in Table 14.5.

The grade tonnage curve for the current model is fairly insensitive below 1% Cu, should the resource be updated with tighter drill spacing and a smaller block size, the sensitivity may increase.

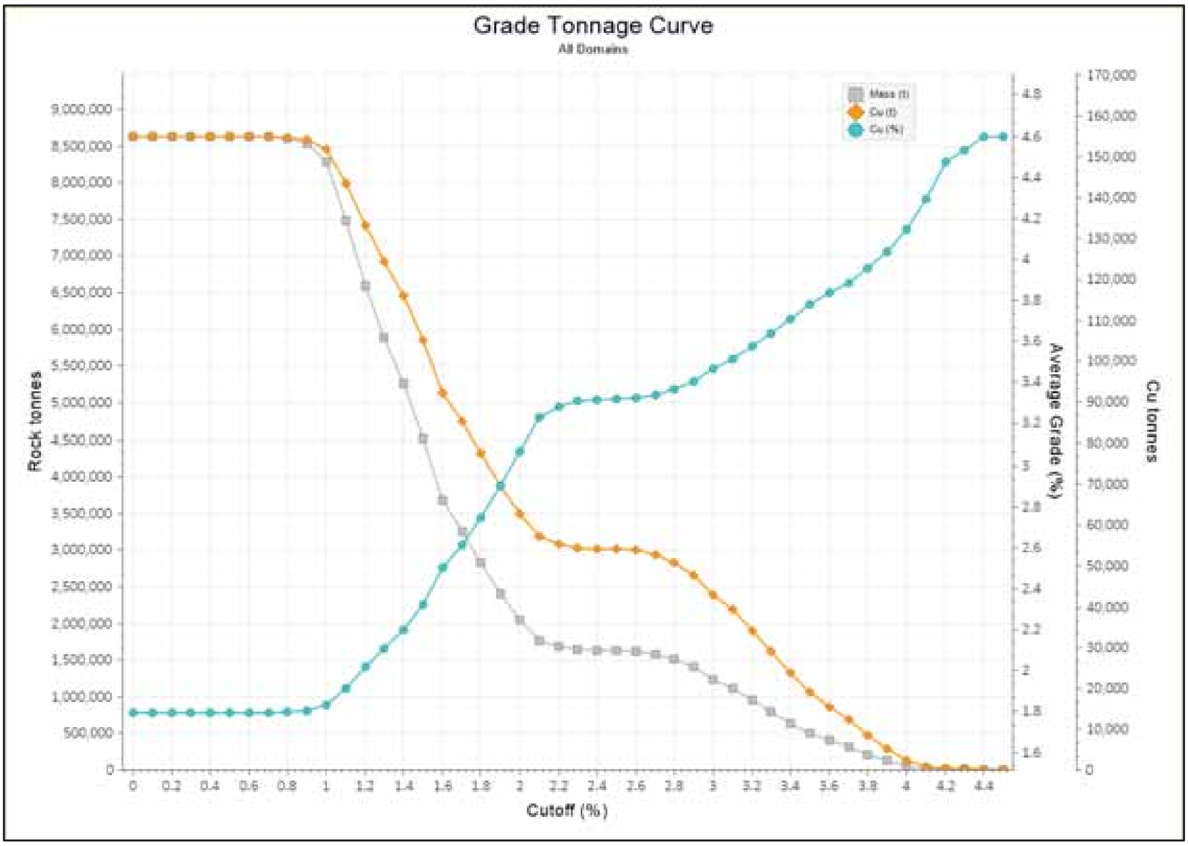


Figure 1.5: Grade tonnage curves for all material types

Table 1.2: Estimate of rounded grade tonnage estimates. Material below cut-off grade is not a resource.

Cut-Off	Zone	Oxidation	Volume	Tonnes	Density	Cu[%]	Cu[t]
2	Zone A - West	Sulphide	100,000	320,000	3.2	2.1	6,700
1.8	Zone A - West	Sulphide	270,000	860,000	3.2	2	17,000
1.6	Zone A - West	Sulphide	460,000	1,500,000	3.2	1.9	27,000
1.4	Zone A - West	Sulphide	930,000	3,000,000	3.2	1.7	50,000
1.2	Zone A - West	Sulphide	1,200,000	3,900,000	3.2	1.6	62,000
1	Zone A - West	Sulphide	1,400,000	4,500,000	3.2	1.5	69,000
0.8	Zone A - West	Sulphide	1,400,000	4,600,000	3.2	1.5	69,000
0	Zone A - West	Sulphide	1,400,000	4,600,000	3.2	1.5	70,000
4	Zone B - East	Oxide	22,000	57,000	2.7	4.1	2,400
3	Zone B - East	Oxide	460,000	1,200,000	2.7	3.5	43,000
2	Zone B - East	Oxide	620,000	1,600,000	2.7	3.3	55,000
1	Zone B - East	Oxide	620,000	1,600,000	2.7	3.3	55,000
0	Zone B - East	Oxide	620,000	1,600,000	2.7	3.3	55,000
2	Zone B - East	Oxide/Sulphide	29,000	79,000	2.7	2.1	1,700
1.8	Zone B - East	Oxide/Sulphide	120,000	330,000	2.7	1.9	6,300
1.6	Zone B - East	Oxide/Sulphide	200,000	550,000	2.7	1.8	10,000
1.4	Zone B - East	Oxide/Sulphide	230,000	630,000	2.7	1.8	11,000
1.2	Zone B - East	Oxide/Sulphide	240,000	660,000	2.7	1.8	12,000
0	Zone B - East	Oxide/Sulphide	240,000	660,000	2.7	1.8	12,000
1.4	Zone B - East	Sulphide	1,200	3,800	3	1.4	54
1.2	Zone B - East	Sulphide	130,000	380,000	3	1.3	4,800
1	Zone B - East	Sulphide	480,000	1,500,000	3	1.1	17,000
0.8	Zone B - East	Sulphide	560,000	1,700,000	3	1.1	19,000
0.5	Zone B - East	Sulphide	560,000	1,700,000	3	1.1	19,000
0	Zone B - East	Sulphide	560,000	1,700,000	3	1.1	19,000
4	TOTAL		22,000	57,000	2.7	4.1	2,400
3	TOTAL		460,000	1,200,000	2.7	3.5	43,000
2.5	TOTAL		610,000	1,600,000	2.7	3.3	54,000
2	TOTAL		750,000	2,000,000	2.7	3.1	63,000
1.8	TOTAL		1,000,000	2,800,000	2.8	2.7	78,000
1.6	TOTAL		1,300,000	3,700,000	2.9	2.5	92,000
1.4	TOTAL		1,800,000	5,300,000	3	2.2	120,000
1.2	TOTAL		2,200,000	6,600,000	3	2	130,000
1	TOTAL		2,700,000	8,300,000	3	1.8	150,000
0.8	TOTAL		2,800,000	8,600,000	3	1.8	150,000
0	TOTAL		2,900,000	8,600,000	3	1.8	160,000

1.8 Estimates of Process Recoveries and Operating Costs

The estimates have been made based on a private database of operations and feasibility studies and also on public domain material. Data from a number of sites have been selected and then modified as considered appropriate for the material at the Çorum copper project.

Estimates have been made for the three material types which have been defined- sulphide, oxide and mixed.

Research based assumed inputs to process recoveries and operating costs are considered reasonable for the purpose of establishing indicative marginal cut-off grades for the reporting Inferred resources which demonstrate potential for future economic extraction.

1.8.1 Process recoveries

As no metallurgical testwork has been completed and no data is available for any operations in the vicinity high level and conservative estimates have been made for process recoveries.

Note that for sulphide, the process recovery and concentrate grade are inter-related and depend on economic factors and trade-offs. Concentrate grade also depends on the proportions of the different copper minerals present. A degree of oxidation is expected in the majority of the sulphide mineralization and such a conservative value has been applied. Also note that for oxide, there is no knowledge of the acid soluble Cu (Cu_{AS}) content only of the total copper content (Cu_{TOT}). Cu_{TOT} is not a reliable predictor of Cu_{AS} which is used to predict the acid leachable copper content. The mixed material is anticipated to have lower recoveries than fresh sulphide material. Estimated process recoveries are shown in Table 14.6.

Table 1.3: Assumed process recoveries

Unit	Process recovery (%)
Sulphide	80
Oxide	50
Mixed (overall)	50
Mixed (sulphide)	60
Mixed (oxide)	40

1.8.2 Operating costs

The process routes are assumed to be industry standard. Due to the lack of site specific information, very high level and conservative estimates of operating costs have been made.

For sulphide material this process route is crushing, milling, flotation to produce a saleable concentrate and conventional tailings disposal. Concentrate will be transported to a third party operation for toll smelting and refining to cathode, the cost of which is included in the estimate.

For oxide material the process is crushing, milling, tank leach, solvent extraction, electrowinning to produce saleable cathode, neutralisation and conventional tailings disposal. The grades and quantities suggest that tank leach is preferred to heap leach. The sulphide and oxide components of the mixed material will be processed by a combination of the methods outlined for the main material types. Allowances have been made for general and administrative costs and rehabilitation. Operating costs are estimated as shown in Table 14.7.

Due to the shallow nature of the deposits open pit mining is assumed.

Table 1.4: Estimated operating costs

Material Type	Mining USD$/t	Processing cost (USD$/t feed to plant)	Rehabilitation USD$/t	G&A USD$/t (Assumed $1.5M PA and 750 Ktpa)	Total USD$/t
Sulphide	2	27	1	2	32
Oxide	2	22	1	2	27
Mixed (overall)	3	25	1	2	31

1.9 Economic Cut-Off

Based on the estimates presented in section 14.13, a breakeven economic cut-off grade was determined using a Cu price of USD$5500/t based on the London Metal Exchange December 2022 contract price as of 27th May 2020. The breakeven cut-off grade calculations are presented in Table 14.8. Numbers have been rounded for final selection of cut-off grade. The cut-off grade is calculated using the following formula.

$$\frac{(Total\ Operating\ Cost\ USD\$/t)}{(Cu\frac{USD\$}{100}) * (Total\ Recovery\ Factor) * (Selling\ Cost\ Factor)}$$

Table 1.5: Cut-off grade determination

Material	Cu USD $/t	Mining Recovery Factor	Process Recovery Factor	Total Recovery Factor	Selling Cost Factor (2.5%)	Total Operating Cost USD$/t	Cut-off Grade Cu%	Cut-off Grade (Rounded) Cu%
Sulphide	5500	0.95	0.8	0.76	0.975	32	0.79	0.8
Oxide	5500	0.95	0.5	0.475	0.975	27	1.06	1
Mixed	5500	0.95	0.5	0.475	0.975	31	1.22	1.2

1.10 Interpretations and Conclusions

The Çorum Copper deposit is considered an ophiolite hosted Volcanogenic Massive Sulphide (VMS) type deposit.

Limited exploration work to date within the project has identified two main mineralised areas.

At Zone A current drilling and confirmed mineralization is restricted to a topographic low, the mineralization within this low is interpreted to be the slightly weathered hypogene sulphide zone. Moving up slope from the valley (to the east or west) some iron oxidation is visible which may be consistent with the leach cap of a partially eroded supergene zone. There is also potential for a supergene oxide and secondary supergene sulphide zone to be present.

In the field at Zone B transitions between supergene and hypogene zones are not well observed, however this profile is well defined by drilling and is described in detail in section 14.

Secondary copper mineralization is seen on the surface as malachite & azurite & bornite & chrysocolla stains. Avod geologists reported with DMT geologists the occurrence of native copper at the leached-oxide zone boundaries.

Results of the block model estimations for the mineralised zones using the available data collected thus far for the areas are positive and offer potential for development of additional resources and reserves within the immediate Zone A and Zone B deposit areas. Upside exploration potential also exists within the wider licence area.

The current models and estimations for the Çorum deposit are by no means exhaustive. Strike, lateral and dip directions remain open and offer potential for the development of additional resources.

An assessment of risk and the decision-making process leading to mineral resource classification is given in Table 14.9 along with the recommended mitigation to be completed in future work programs.

Table 1.6: Risk Assessment.

Subject	Comments	Risk Rating 1:Low-5:High	Recommended Mitigation
Database Integrity	Database was found to be without significant validation errors, although data was transcribed from paper to Excel where transcription errors may occur. The Excel workbook required some manipulation to import (e.g. different naming conventions for collars).	2	Future drillholes should be logged directly to tabulated software. All existing logs should be re checked for correctness. A relational database should be constructed and maintained with built in validation checks.
Survey	Non differential GPS survey of drill collars. Collar location accuracy may be >10 m. Downhole surveys were completed every 30 m and generally showed little deviation; however azimuths and dips were not correctly recorded. Drillhole azimuths make no reference to true, magnetic or grid north.	4	Complete Differential GPS survey of all drill collars. Continue DGPS survey of all collars moving forward. Improve downhole survey by recording azimuth between 0 and 360 and dip between -90 and 0 Record azimuth type and declination and date in drillhole database
DTM	DTM is of high accuracy (<1m)	1	Continue to use current DTM. Where earthworks have been completed for drill pad preparation, use DGPS elevations for collars. Update DTM if significant earthworks are completed which may be material to the resource estimate or further studies.
Sampling	Steps have been taken to achieve representative samples through crushing and splitting. Sampling has not been conducted to geological or domain boundaries, although this may be difficult to see.	2	Review sampling boundaries during further sampling to ensure samples do not span domain boundaries e.g. Supergene /Hypogene mineralization.
Quality Control	Ratio of insertion of QC samples is good. No issues identified with QC results. However only one certified reference material was used which was sourced from sulphide material. Assessment of accuracy of Cu Oxide material is therefore not possible.	3	Increase the number of certified reference materials in use to include a Cu oxide CRM at or around oxide resource grade.

Subject	Comments	Risk Rating 1:Low-5:High	Recommended Mitigation
Geological Interpretation and Continuity	The geological interpretation is reasonably apparent from the current data spacing. Alternative interpretations may include steep angle feeder zones which may impact on tonnage. The current geological continuity is largely implied but not confirmed.	3	Complete infill drilling to confirm geological continuity. See below for further comments.
Grade continuity and data spacing	Data spacing is wide, grade continuity is implied but not confirmed. A significant portion of the resource is extrapolated.	4	Complete infill drilling to confirm grade continuity. Initially 50 mE x 50 mN spacing is recommended with a small area of closer spaced (~25 m) drilling, approximately 4-5 drillholes. This may be achieved with inclined drillholes which would also support geological interpretation.
Metallurgy	No metallurgical test work has been completed and metallurgical recovery is assumed. The metallurgical recovery can seriously impact on cut-off grade and resource tonnages. No Acid soluble Cu assay tests (only total Cu) were completed.	5	Complete initial bench scale metallurgical study of all material types. Re analyse all coarse rejects for acid soluble Cu
Overall Perceived Risk	**The input data is of a reasonably high quality, geological and grade continuity are implied to be high, but this is not confirmed. The current data spacing and use of non-differential GPS for collar surveys both prevent classification above Inferred. An Inferred classification is warranted and is consistent with the perceived risk and stage of the project.**	**3-4**	**All resources are classified as Inferred for this study.** **Further infill drilling and improved survey are key for increasing confidence in resources and classification, along with initial metallurgical testing and other recommendations identified above.**

1.11 Recommendations

Mineral resource estimation, general exploration and development strategy recommendations are listed below:

1.12 Mineral Resource Estimations

Future upgrade of mineral resources to a higher classification and the identification of additional resources at Çorum is not guaranteed. However, it is reasonable to expect such increases as a result of the following work:

- Infill and extension drilling in areas of approximately +0.5% Cu mineralisation along strike, laterally and down-dip to increase the quantity of resources and improve confidence in the model.
- Accompanying controlled surface trench sampling and logging on drill traverses.
- Improved Quality Assurance and Quality Control.
- Understanding the controls and orientation of mineralisation and using this data to create 3D models
- Clarification of location and extent of historic underground mining activities and production.
- Collection of further density measurement across all lithologies, material types and grade ranges within the mineralised areas and in the surrounding waste rocks.
- Analysis and re-analysis of samples for acid soluble copper to understand oxide copper content.
- Improved drillhole survey (downhole and DGPS of collars)
- Further risk mitigation steps are given in section 14.14.

1.13 General Exploration Recommendations

General exploration recommendations are listed below:

- 3D software (i.e. Micromine) for the exploration team to assist in drill planning and exploration targeting.
- Increased geological mapping and prospecting over the whole licence area.
- Extension of geophysical ground surveying with focus on IP and/or electromagnetics (EM).
- Detailed survey of morphology and production of a digital terrain model covering the area of resource and potential mining activities.

- Mapping, trenching, soil or stream channel sediment sampling to identify anomalous zones at surface.

1.14 Development Strategy Recommendations

Recommended development strategy:

- Step out and infill drilling to increase resource tonnages to +10Mt to support initial conceptual Scoping Studies and Preliminary Economic Analysis reportable in accordance with UMREK and JORC 2012.
- Preliminary metallurgical test work program on the currently identified three material types (Oxide, Mixed, Sulphide).
- University based mineralogical and petrographical studies (possible student project).
- Masters student study to improve understanding on deposit characteristics and controls.
- Update mineral resource estimates.
- Scoping Study PEA and updated UMREK/JORC 2012 Competent Persons Technical Report to determine order of magnitude technical and economic viability for the project (Conceptual pit designs, mining inventory, conceptual mining plan, site layouts, market studies, preliminary environmental review, conceptual DCF, NPV, IRR).

2 Introduction

Bordokum Mining Ltd (Bordokum Madencilik Ticaret Anonim Şirketi) ("Bordokum", "the consultant") were requested by MEHMET ÇETİNER of Avod Altin Madencilik Enerji Insaat San. Ve Tic. A.S ("Avod", "the client") to prepare a resource estimate and technical report for the Çorum copper project, Turkey in accordance with The National Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves Code of Turkey (The UMREK Code) 2018 ("The UMREK Code", "UMREK", UMREK 2018").

The study follows on from a report for the project prepared by DMT GmbH & Co. in November 2018. The study is led by Bordokum with contribution and in collaboration with Addison Mining Services Ltd ("AMS") who are responsible for data processing and the provision of updated geological and resource models, review of Quality Assurance and Quality Control (QA/QC) data and reports, and input to Mineral Resource Estimate report sections.

The Mineral Resource Estimates are based on all available exploration drilling data to the end of October 2018, metal pricing of USD$5500 per tonne of Cu is based on London Metal Exchange December 2022 contract price as of 27th May 2020.

This Technical Report has been compiled by Mr Özgür Çörekci who is Competent Person (CP) as defined by UMREK code 2018 for the study. A site visit by the CP was conducted between the 29th and 31st of March 2020. The purpose of the visit was to inspect the property, deposit geology, drill core, survey location and logging procedures, sampling, QAQC and data handling protocols and to confirm the presence and style of mineralisation.

Mr Richard Siddle MSc MGeol (Hons) FGS MCSM is responsible for the preparation of the Resource Estimate and section 14 of this report in collaboration with the Competent Person. Mr Siddle is a CP as defined by the JORC code 2012 and a Qualified Person as defined by NI43-101 for undertaking Mineral Resource Estimates for a variety of metalliferous deposits including sulphide Cu deposits, however he has not completed a site visit and is not acting a CP for this study.

Additional contribution to this technical report has been made by Mr James Hogg MSc MAIG of AMS, Mr Toygar Tanyildiz of Bordokum, and Mr Lewis Harvey MSc MAIG of AMS.

The Mineral Resources estimated and classified as part of this study are reported in accordance with The National Public Reporting of Exploration Results, Mineral Resources and Mineral Reserves Code of Turkey (The UMREK Code) 2018.

2.1 Terms of Reference

This report provides a summary of the geology, style of mineralisation and the exploration work conducted at the Çorum Copper Project and presents the results and findings of geological modelling and Mineral Resource estimation for the deposit undertaken by Bordokum and AMS.

The scope of work for the UMREK 2018 Technical Report on the Avod Çorum Copper Project has included:

- Project data review and validation
- Competent Persons site visit
- Data verification and QC assessment
- Analysis and interpretation of exploration drilling data
- 3D geological modelling, geostatistics and mineral resource estimation
- Preparation of technical report in English using UMREK 2018 reporting standards.

2.2 Units

All units of measurement used in this report are metric unless otherwise stated. Tonnages are reported as metric tonnes (‘t’). Base metal values including copper (‘Cu’) are reported in percent (‘%’). Other references to geochemical analysis are in parts per million (‘ppm’) or percent (‘%’) as reported by the originating laboratories.

Data was captured and located using a Universal Transverse Mercator (UTM). The geographic coordinate reference system used by the client was UTM ED50 Zone 36 Northern Hemisphere (‘ED50 / UTM36N’). Elevations are reported in metres above sea level.

2.3 Independence

AMS and Bordokum are independent geology and mining consultancies. The CP and contributing authors of this report neither has nor holds:

- any rights to subscribe for shares in Avod Altin Madencilik Enerji Insaat San. Ve Tic. A.S (“Avod”)either now or in the future,
- any vested interests in any concessions held by Avod
- any rights to subscribe to any interests in any of the concessions held by Avod, either now or in the future,
- any vested interests in either any concessions held by Avod or any adjacent concessions,

- any right to subscribe to any interests or concessions adjacent to those held by Avod, either now or in the future.

Bordokum and AMS' only financial interest is the right to charge professional fees at normal commercial rates, plus normal overhead costs, for work carried out in connection with the investigations reported here. Payment of professional fees is not dependent either on project success or project financing.

2.4 Limitations

In the preparation of this technical report Bordokum and AMS has utilised information provided by Avod. Bordokum and AMS has made every reasonable attempt to verify the accuracy and reliability of the data and information provided to them and to identify areas of possible error or uncertainty, to the best of its knowledge these details are in accordance with the facts and contains no omission likely to affect the success of the project. The authors accept no liability for the omission of information or data which has not been brought to their attention or for errors in data and information which have not been reasonably possible to identify.

The business of mining and mineral exploration, development and production by their nature contain significant risks. The success of a project is dependent on many factors, including, but not limited to: resource size and grade, mining, metallurgical, geotechnical, operational, legal, environmental, marketing, metal pricing and transportation. Given the nature of the mining business many factors may be subject to change over relatively short periods of time and as such actual results may be significantly more or less favourable. Except as specifically required by law, the authors accept no liability for any losses arising from reliance upon the information presented in this technical report.

2.5 Sources of Information and Data

This technical report is based on findings of the CP's site visit, desk top study, exploration drilling, data review and validation, deposit modelling, block model grade interpolation and resource estimation. The information and data used in this resource estimation has been provided by Avod.

The CP received the full co-operation and assistance from the Company's personnel during the site visit and in the preparation of this report. The main sources of information are listed below:

- Lowicki, F. 2018. Technical Report and Mineral Resource Estimate for the Çorum Copper Project Licence 200712071, Çorum Province, Turkey.
- Avod, Çorum Exploration Database.

The CP has reviewed information relating to the Avod Çorum Copper Project, including relevant published and unpublished third-party information, and public domain data, a list of which is provided in Sections 3 “Reliance on Other Experts” and 27 "References" sections of this report.

2.6 Material Change Statement

As of the publication date of this document, CP and the company are not aware of any likely or pending adverse effect as to business, operations, properties, assets or condition, financial or any other material change, which may arise within the six months following the publication of this report and its inclusion in the admission document.

3 Reliance on Other Experts

The CP has not independently verified title to the company’s assets, nor has it verified the status of legal agreements with local landowners and relevant parties but has relied on information supplied by Avod in this regard. The CP is relying on public documents and information provided by Avod for the descriptions of title and status of the Property agreements. The CP has no reason to doubt that the title situation is other than that which was reported to it by the Avod.

The CP takes responsibility for the content of this Technical Report and believes it to be accurate and complete in all material aspects. However, the authors are not responsible for, nor qualified to undertake any due diligence regarding non-geological technical aspects relating to legal, financial, corporate agreements and environmental due diligence. In this regard the CP has relied upon the Avod in good faith to provide any information considered relevant and material to the content of this Technical Report. The Competent Person has no reason to doubt that Avod has been forthcoming with all such relevant information.

A list of references used in this study is provided in section 27 "References" part of this report.

4 Property Description and Location

The Çorum licence area is located approximately 200 km to the east of Ankara, the capital city of Turkey and located in the Çorum province between the villages of Bogazkale in the west, Yuksekyayla in the east, Emirler in the north and Derbent in the south. Licence number 200712071 covers an area of 1375 ha (13.75 km^2). The location of the project location area is shown in Figure 4.1 and Figure 4.2 below. AVOD holds licence 200712071, with renewal date of 06 03 2019 and expiry date of 06 03 2024. Licence coordinates given in Table 4.1 and the certificate is shown in Figure 4.3. All exploration and drilling programmes are covered by this licence.

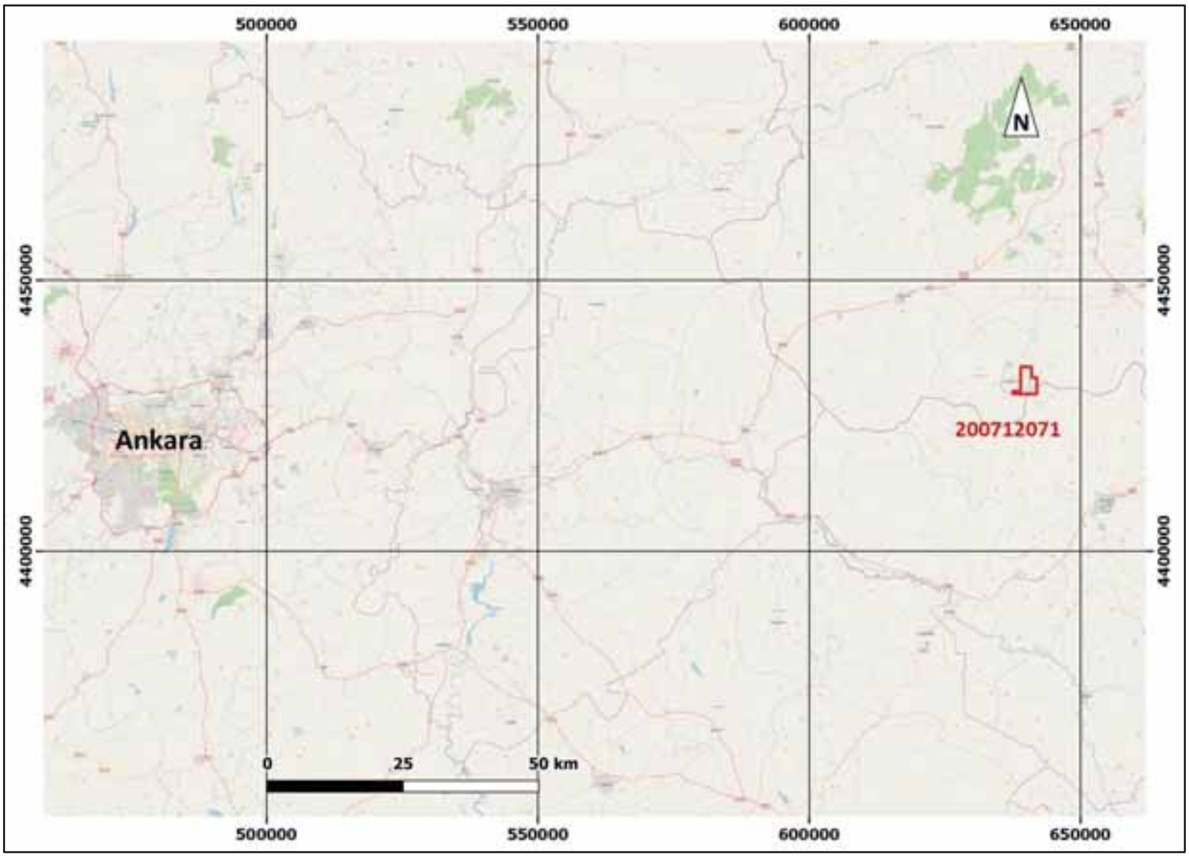


Figure 4.1 Çorum licence area 200712071 (red polygon) is located approximately 200 km east of Ankara.

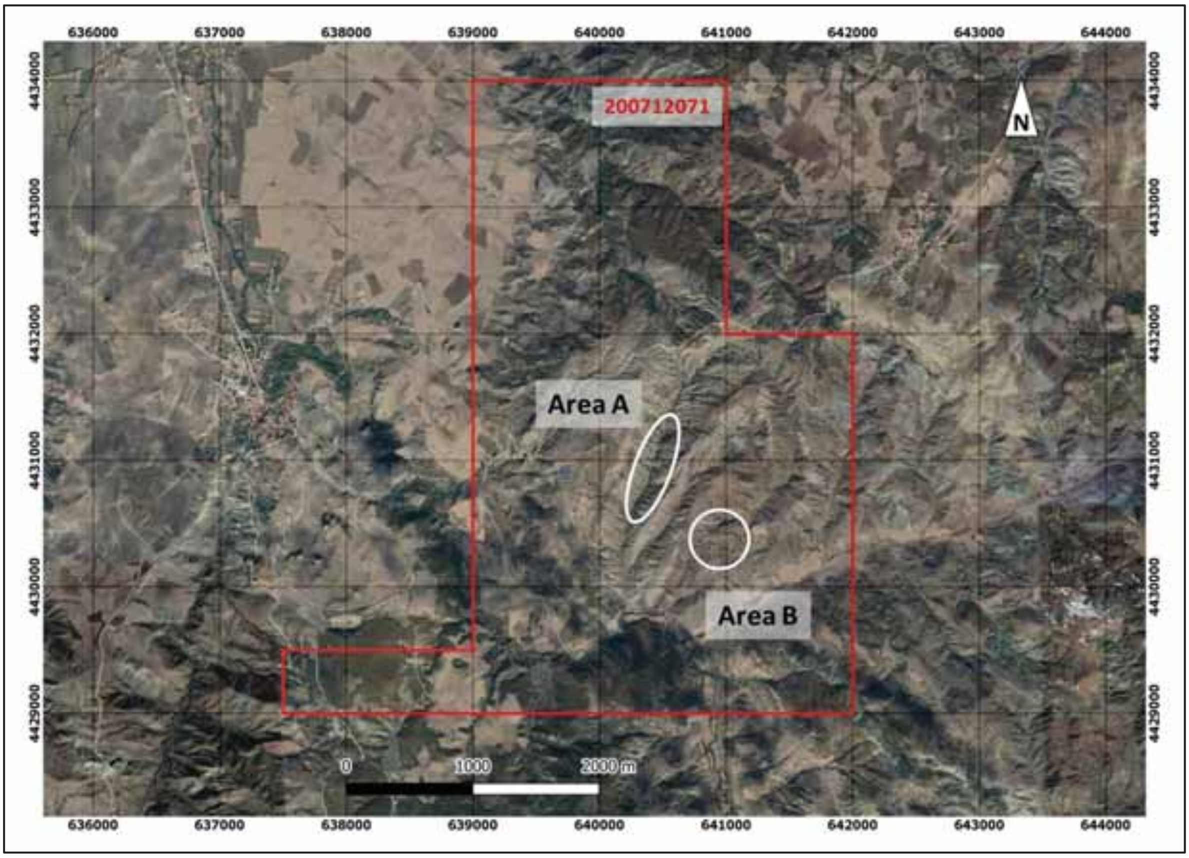
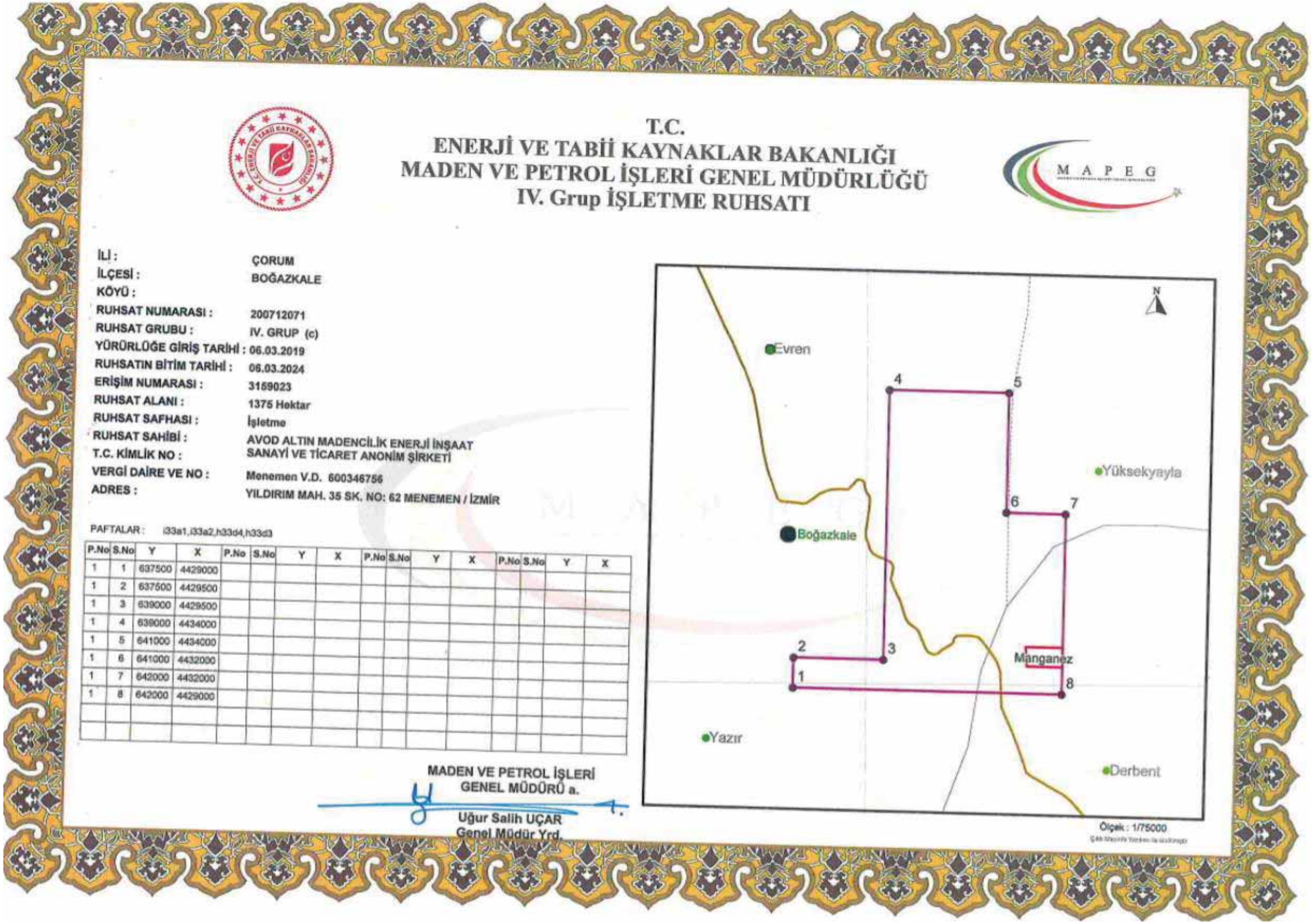


Figure 4.2: Licence 200712071.

Table 4.1: Licence Coordinates

Point	Easting ED50 / UTM36N	Northing ED50 / UTM36N
1	637 500	4 429 000
2	637 500	4 429 500
3	639 000	4 429 500
4	639 000	4 434 000
5	641 000	4 434 000
6	641 000	4 432 000
7	642 000	4 432 000
8	642 000	4 429 000



T.C.
ENERJİ VE TABİİ KAYNAKLAR BAKANLIĞI
MADEN VE PETROL İŞLERİ GENEL MÜDÜRLÜĞÜ
IV. Grup İŞLETME RUHSATI

İLİ : ÇORUM
İLÇESİ : BOĞAZKALE
KÖYÜ :
RUHSAT NUMARASI : 200712071
RUHSAT GRUBU : IV. GRUP (c)
YÜRÜRLÜĞE GİRİŞ TARİHİ : 06.03.2019
RUHSATIN BİTİM TARİHİ : 06.03.2024
ERİŞİM NUMARASI : 3159023
RUHSAT ALANI : 1375 Hektar
RUHSAT SAFHASI : İşletme
RUHSAT SAHİBİ : AVOD ALTIN MADENCİLİK ENERJİ İNŞAAT SANAYİ VE TİCARET ANONİM ŞİRKETİ
T.C. KİMLİK NO :
VERGİ DAİRE VE NO : Menemen V.D. 600346756
ADRES : YILDIRIM MAH. 35 SK. NO: 62 MENEMEN / İZMİR

PAFTALAR : i33a1,i33a2,h33d4,h33d3

P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X	P.No	S.No	Y	X
1	1	637500	4429000												
1	2	637500	4429500												
1	3	639000	4429500												
1	4	639000	4434000												
1	5	641000	4434000												
1	6	641000	4432000												
1	7	642000	4432000												
1	8	642000	4429000												

MADEN VE PETROL İŞLERİ
GENEL MÜDÜRÜ a.
Uğur Salih UÇAR
Genel Müdür Yrd.

Figure 4.3: Licence Certificate 200712071.

5 Accessibility, Climate, Local Resources, Infrastructure and Physiography

5.1 Accessibility

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 international airport is in Ankara.

The licence area is located in the Çorum province and accessible from Ankara within 2.5 hours by car; 1.5 hours via D200 motorway to Delice and another hour via the D190 motorway to Bogazkale. From Bogazkale, it is 6 km on the road to Yozgat. The province capital of Çorum is accessible via motorways D190 and D785 within 1 hour by road. The project area is cut by a number of unsealed tracks made for agriculture and forestry purposes as shown in Figure 5.1 and Figure 5.2 below.

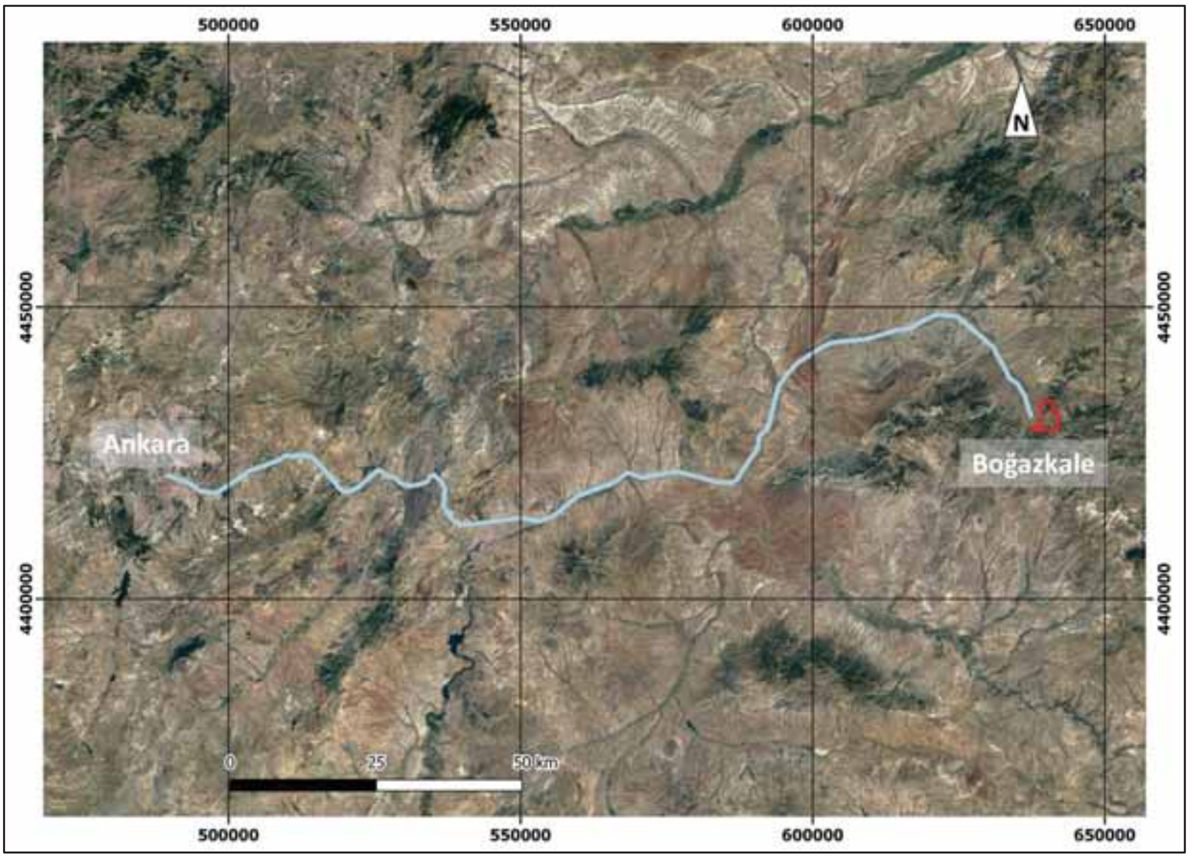


Figure 5.1: Access from Ankara to Bogazkale.

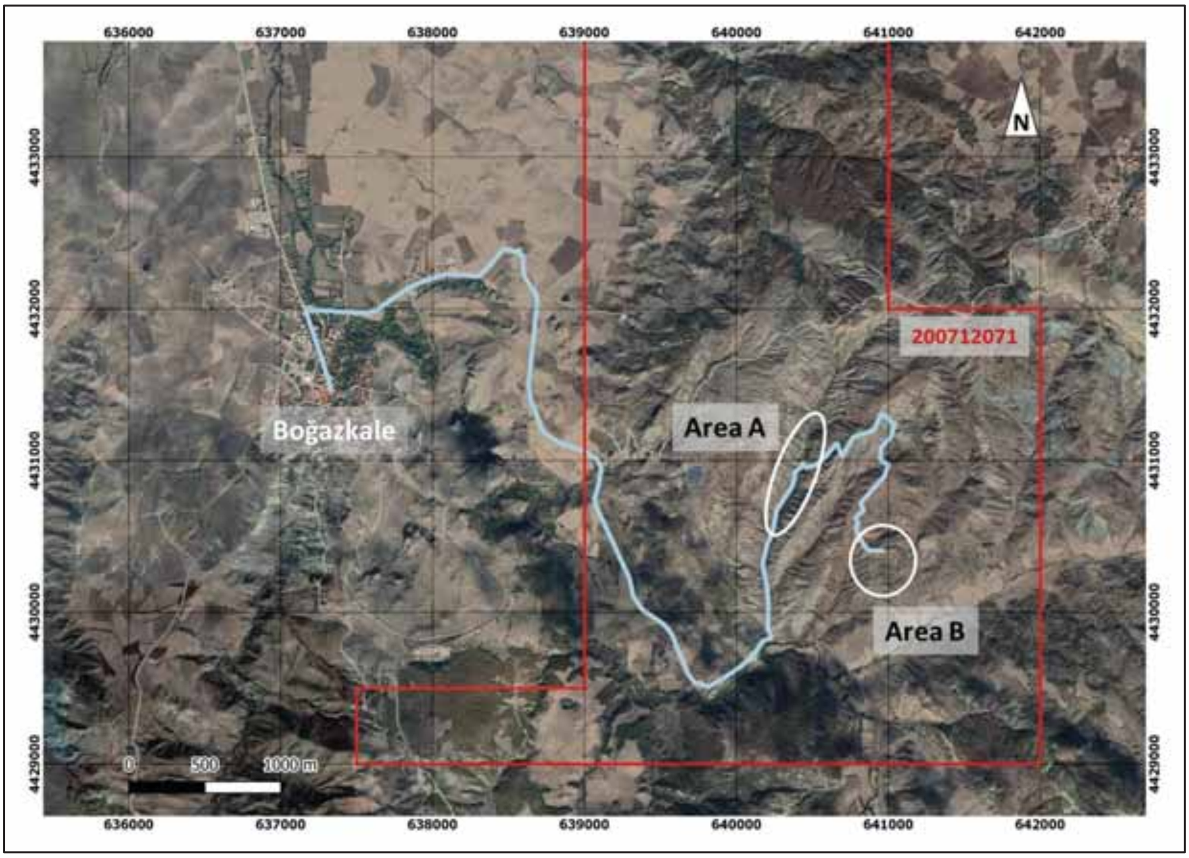


Figure 5.2: Unsealed Project Tracks.

5.2 Climate

Çorum, under the Köppen Climate Classification, has "dry-summer subtropical" climates and are often referred to as "Mediterranean". Çorum has a warm dry-summer continental climate with dry summers and cold, snowy winters, and mild to cool wet springs and autumns with light rain. The climate may not be a challenge for open cast mining during the winter months. Average annual climate is shown in Figure 5.3.

Extreme Maximum, Minimum and Average Temperatures Measured in Long Period (°C)												
CORUM	January	February	March	April	May	June	July	August	September	October	November	December
Maximum Temp.	17.5	20.4	28.6	30.4	35.1	37.5	42.6	40.2	38.7	33.6	25.6	19.2
Minimum Temp.	-25.6	-27.2	-23.3	-9.4	-4.3	0.2	3.4	3.0	-3.0	-6.3	-15.7	-21.6
Average Temp.(1981-2010)	-0.2	0.8	5.0	10.5	14.8	18.6	21.3	21.4	17.3	11.8	5.4	1.7
Average Max. Temp. (1981-2010)	4.6	6.6	11.8	17.7	22.2	26.1	29.3	29.9	26.2	19.9	12.3	6.4
Average Min. Temp. (1981-2010)	-4.4	-4.0	-1.0	3.6	6.9	10.1	12.2	12.2	8.9	5.0	0.2	-2.2

Measured in Long Period								
Max. Precipitation	25.06.1929	**65.4** kg/m2	Max. Wind	19.03.1981	**117.0** km/hour	Max. Snow Height	27.02.1948	**80.0** cm

Figure 5.3 Annual Weather Averages for Çorum (Source https://mgm.gov.tr/eng/forecast-cities.aspx?m=CORUM)

5.3 Local Resources and Infrastructure

Required personnel for mining activities is locally available since the Çorum province and Yozgat province and surrounding provinces are known for copper, lead, zinc, manganese mining, and also industrial minerals, coal production, brick factories. For infrastructure; it is 5 km paved road from drill locations to Bogazkale city and after 30 km the city has a junction with Ankara - Samsun Highway Road. On the other hand, the licence area is 40 km from the Yozgat province which has a railway line under construction. Sungurlu city is just 35 km northwest of licence area, which belongs to Çorum province, has organised industrial infrastructure, and has enough manpower, powerlines, and experience for mining and working culture.

5.4 Physiography and Vegetation

The altitude of the drilled areas inside the licence range between 1230 m and 1300 m. The licence area is hilly and steeply incised by minor streams, as illustrated Figure 5.4 and Figure 5.5.

Figure 5.4 General View of Licence (Source DMT 2018).

Figure 5.5 Incised Streams within Licence (Source DMT 2018).

5.5 Archaeological Site

Near the city of Bogazkale is the archaeological site of Hattusha, the former capital of the Hittite Empire, which is a UNESCO World Heritage site. However, this archaeological site is located nearly 2 km away of the nearest drill hole and potential mining area. The archaeological site has been highlighted by UNESCO as Wold Heritage Area, as in Figure 5.6.

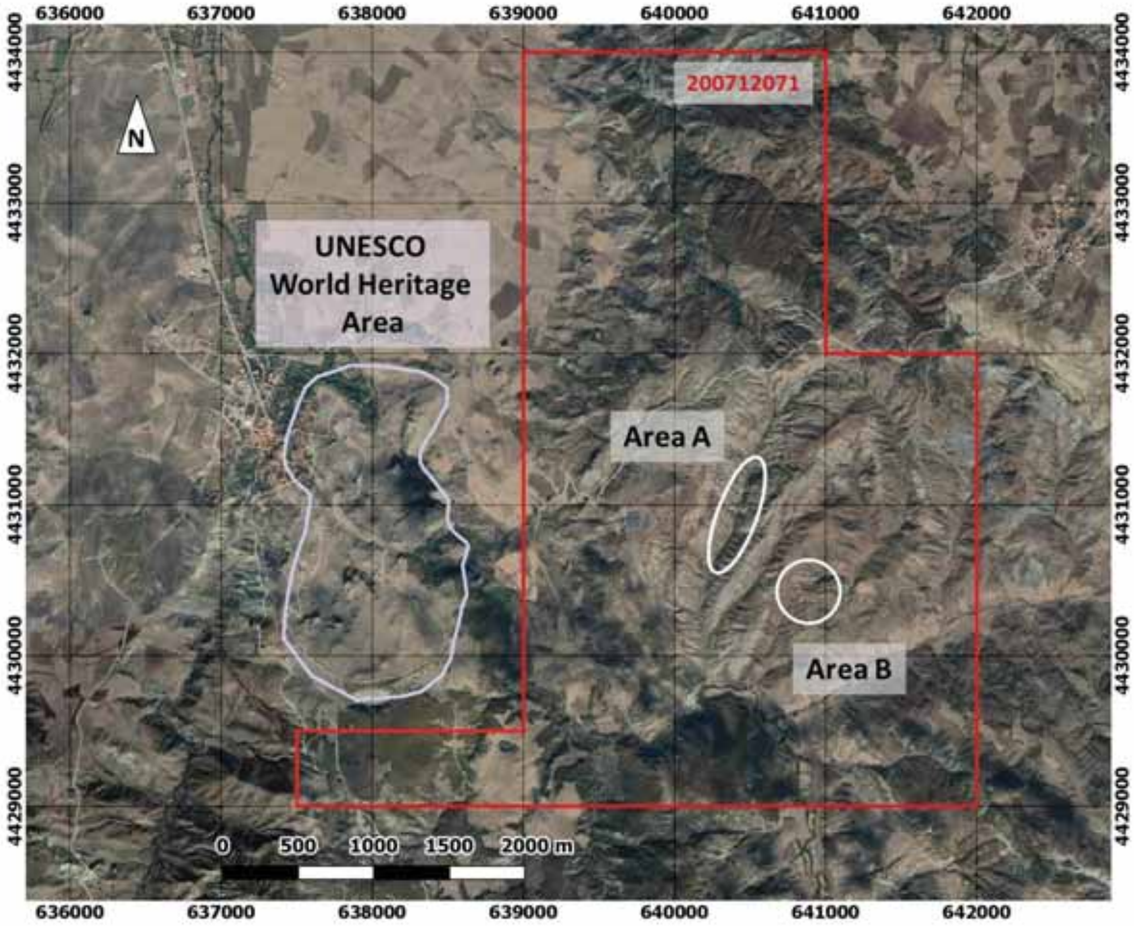


Figure 5.6 The Archaelogical Site (Source: Turkey's World Heritage Areas – UNESCO).

6 History

The licence has been owned since 2013 by AVOD. According to discussions with Avod personnel and research by Bordokum, there was a period of limited small-scale development/mining activity in the mid-20th Century. However, no historic exploration or production information is available.

Based upon review of limited historic reports and discussions with AVOD technical staff, it is understood that the reported historic mining activity is likely a small number of abandoned gallery entrances at Zone A. Depending on the field observation of Mr. Çörekci, The area has 40-50° N striking faults, as it is obvious at the main creek at zone A. The drill campaign line at this creek also sulfide mineralisation outcropped and road trenched zones. Moreover, with secondary perpendicular structures to them as 125°N oriented, says almost a hint with the abandoned galleries driven in an apparent parallel orientation. Historic production (Figure 6.1) followed that structure path with true thickness of the ore, presumably these junctions just because of the enrichments with crushed, fractured, easy way to dig out of the mineralisation zone, most probably. During the Competent Persons field visit, the area for likely historic exploration or production is visited at Zone A, and no evidence for production as dump or any remnants were noticed. The historic development and possible extraction of material is considered insignificant to the current study.

Figure 6.1: Historic Mining activity marked between GERD-30 & GERD-28.

6.1 Historical Mineral Estimations

DMT completed a Mineral Resource estimate with an effective date of 5th November 2018. The estimate used the 2018 diamond drilling results described in section 10 of this report. DMT considered potential economic viability using a 1 % Cu cut-off grade (based on analogous mining activities and grades in Turkey), which yields an inferred resource of 2.7 Mt at a grade of 2.0 % Cu. The Inferred Resource is shown in Table 6.1.

The estimation methodology used a wireframe to estimate a volume to which a bulk density was applied. The grade and proportion of potentially economic material was estimated by averaging the proportion of data above the cut-off grade within the assay database. While this methodology is often used for early stage projects with sparse data, no change of support correction was applied to account for the volume variance effect. The wireframe models were not extrapolated any distance from the drillhole traces and as such the estimated volume is considered by the authors to be overly conservative (Figure 6.2).

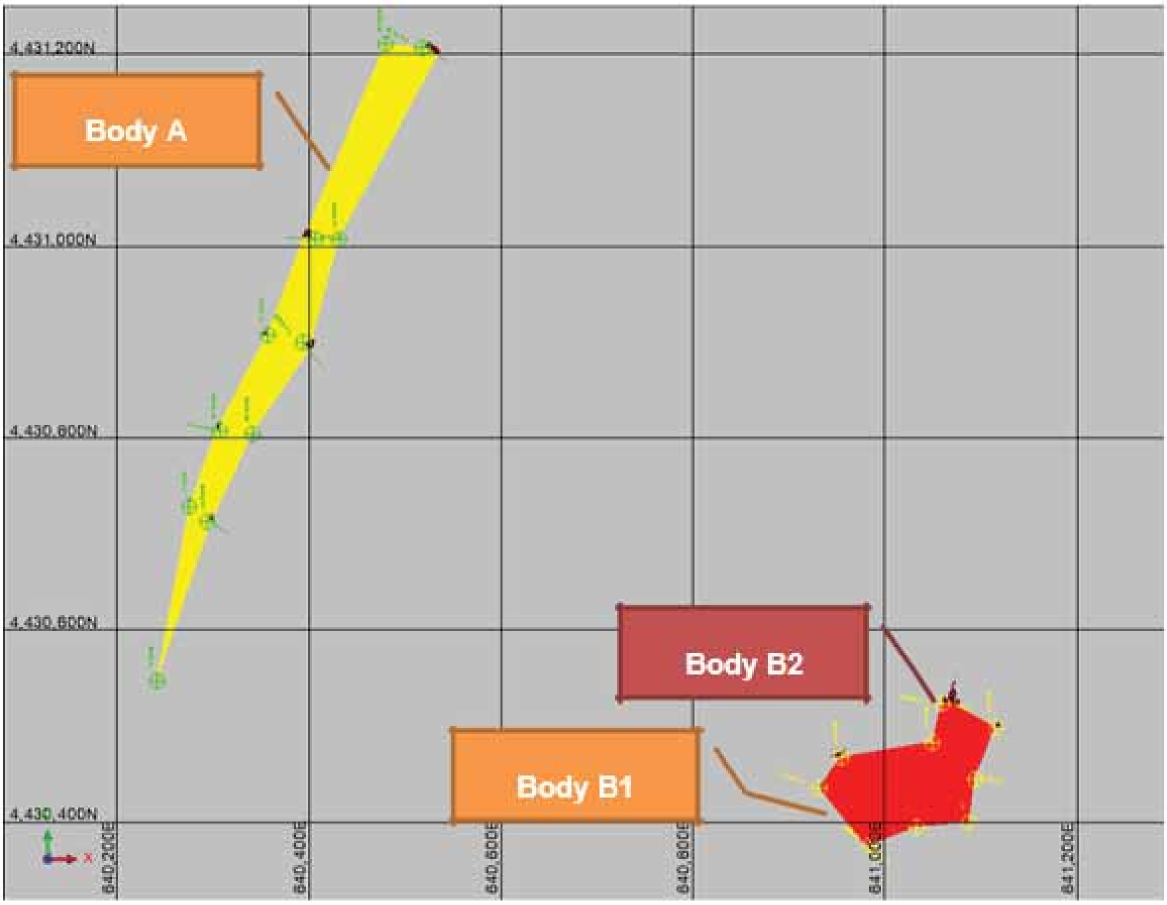


Figure 6.2: DMT Resource wireframes (source DMT 2018).

Table 6.1: DMT Inferred Resource at a 1 % Cu cut-off grade. Effective 5th November 2018.

Category	Body	Mineralisation	% Cu	Tonnes (Mt)
Inferred	A	Sulphide Body	1.7	1.6
Inferred	B1	Sulphide Body	1.4	0.3
Inferred	B2	Oxide Body	2.9	0.8
Total Inferred	**A+B**	**Sulphide and Oxide Bodies**	**2.0**	**2.7**

7 Geological Setting and Mineralisation

This section is sub-divided into three sub-sections describing the general situation of copper mining in Turkey as well as the local geology and mineralisation.

7.1 Regional VMS Occurrences

There is excellent potential for both Cyprus-type and Kuroko-type VMS deposits in Turkey, especially in the productive northeastern Black Sea coast area (the Pontide Belt). These are the bimodal-felsic and mafic-dominated types of Franklin et al. (2005).

Kuroko-type deposits in Turkey are restricted to the Late Cretaceous bimodal volcanic rocks of northeastern Turkey, while Cyprus-type deposits are associated with ophiolitic rocks of the Kure district in northern Turkey and Ergani district in southeastern Turkey (Figure 7.1).

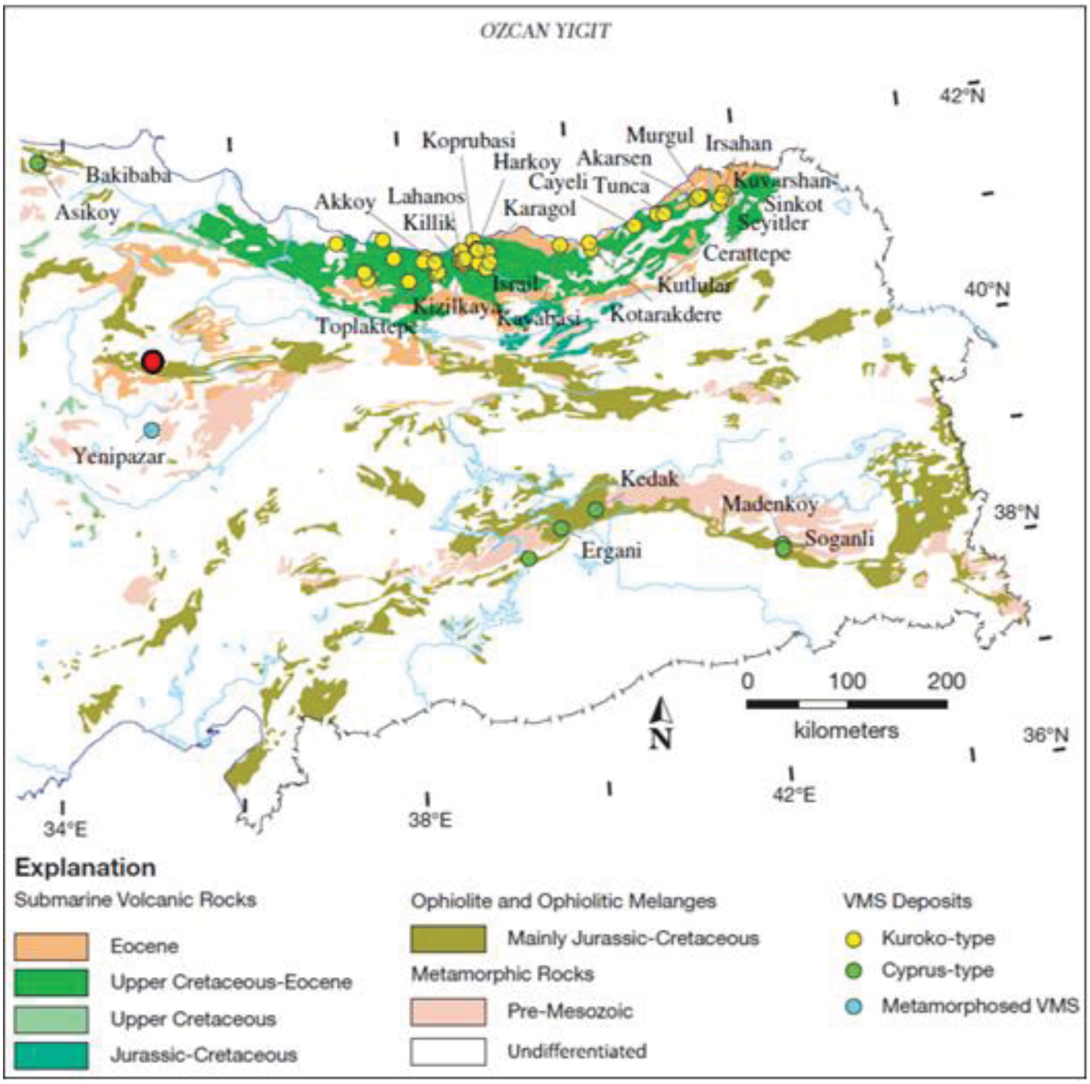


Figure 7.1 Distribution of the VMS deposits and prospects of Turkey with emphasis on host-rock lithology location of licence area (red point) (Source Ozcan Yigit, 2009).

7.2 District Geology

The licence area is located in the Vardar Ophiolitic Belt along the Izmir- Ankara-Erzincan Suture Zone (Figure 7.2).

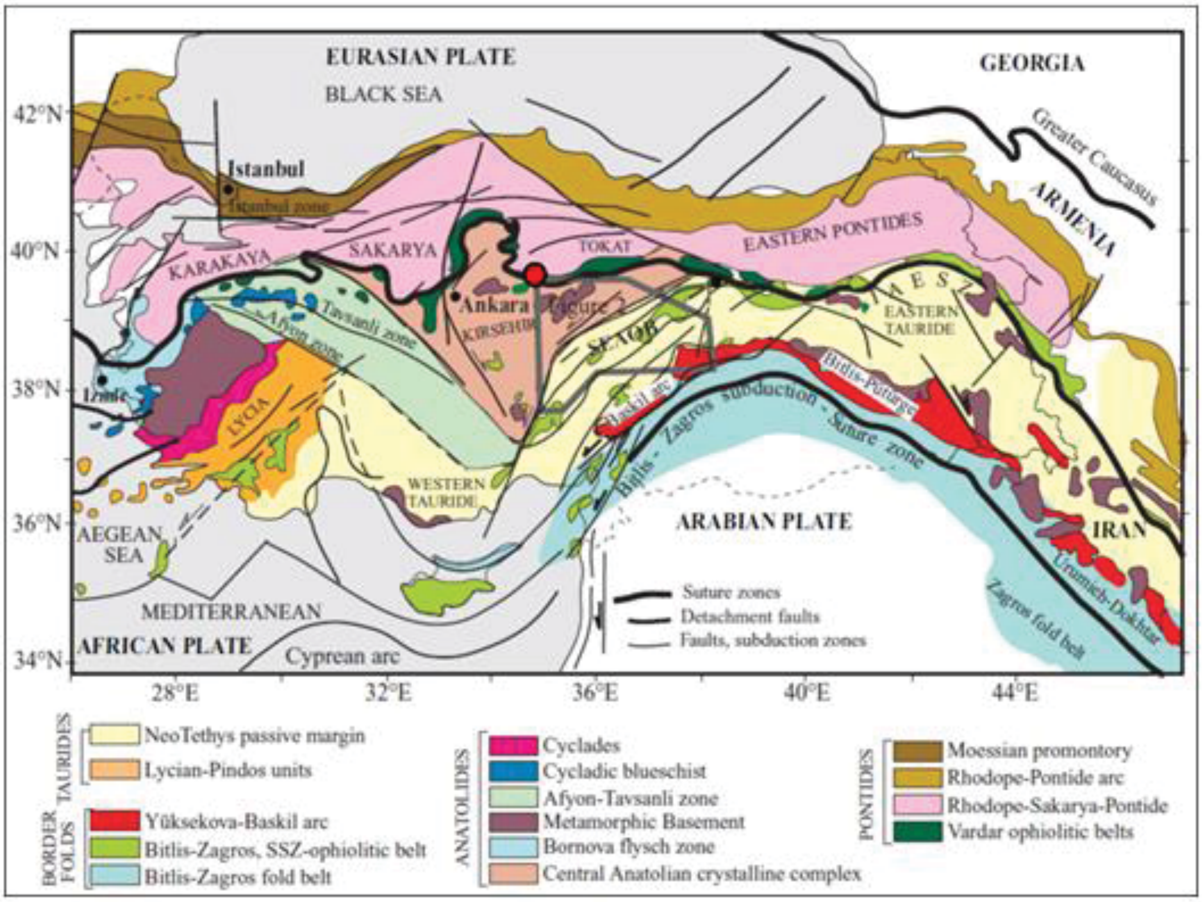


Figure 7.2 Tectonic map of western Tethys showing main tectonic units and mineral deposits. Simplified and modified from Stampfli et al. (1998), Stampfli (2001), Jolivet et al. (1994), and Kaymakçi and Kuscu (2007). Abbreviations: IAESZ = Izmir- Ankara-Erzincan suture zone, SEAOB = Southeastern Anatolian orogenic belt, SSZ = Suprasubduction zone location of licence area (red point) (Source: Ilkay Kuscu et al., 2013).

The Vardar ophiolite belt rock types are comprised of mixed mafic-ultramafic intrusive and volcanic-volcanoclastic units. The belt is likely thrust into its current location, during IAESZ development.

Local to the licence area, Miocene and Oligo-Miocene back-arc sedimentary hosted copper prospects are found (Figure 7.3; Çankırı-Çorum-Yozgat Basin Area). The ophiolites are interpreted as a potential source for the copper.

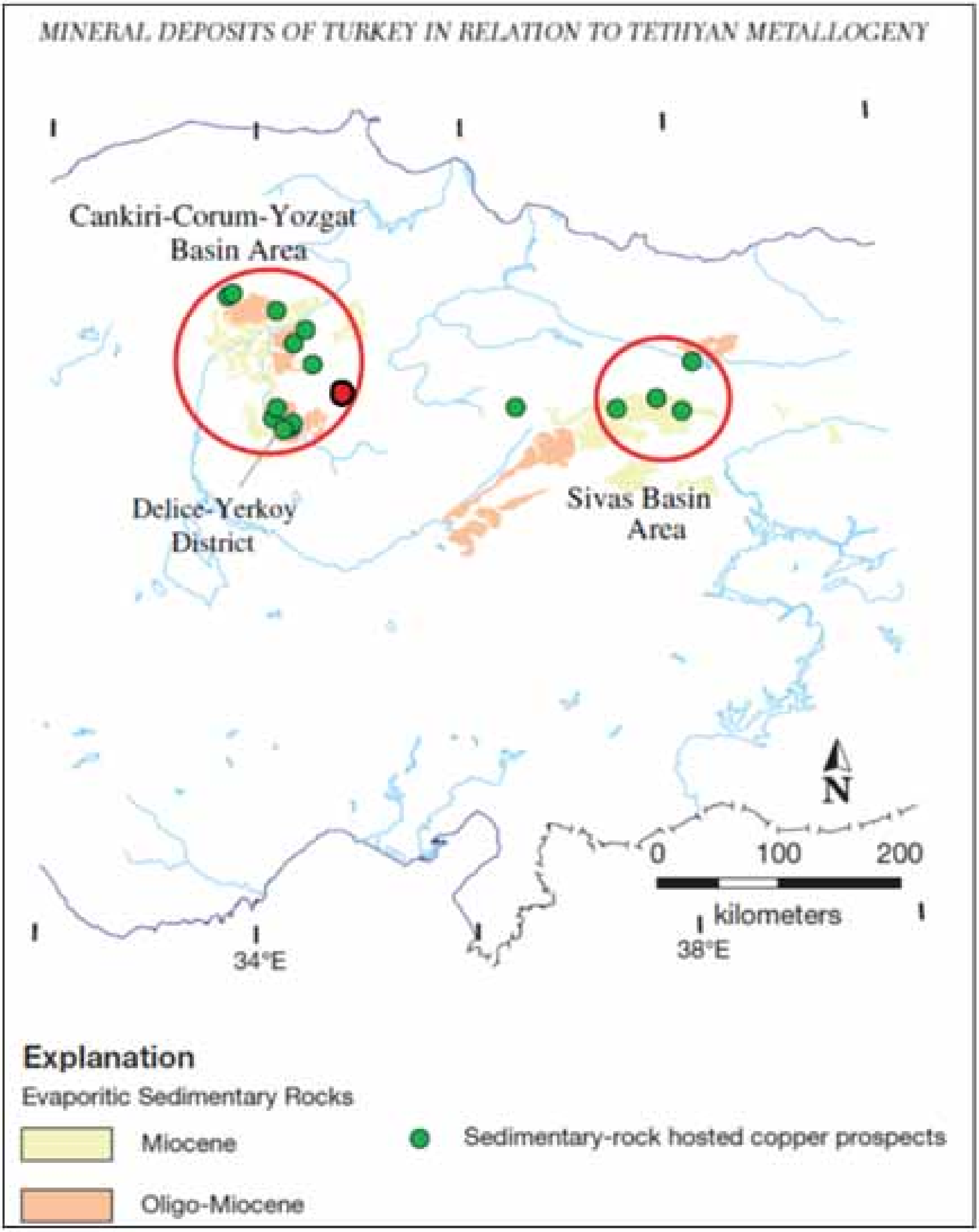


Figure 7.3: Distribution of the sedimentary-rock hosted copper prospects of Turkey with emphasis on host-rock lithology; location of licence area (red point) (Source: Ozcan Yigit, 2009).

7.3 Local Geology

The overall metallogenic setting is ophiolitic and the Çankırı-Çorum-Yozgat Basin metallogenic province is well known and described in the literature.

The project area appears to be largely covered by mafic lithologies. Ultramafic lithologies have been observed in the eastern part of the licence, where a small part mining licence for Mn exists. Sedimentary units are also present in form of carbonates and cherts, possibly radiolarites. The main observations are noted and illustrated in Figure 7.4.

- Typical rock types of an ophiolite complex are widespread.
- Lithologies of interest appear to be folded and deformed.
- Serpentinisation of ultramafic units is common.
- Clearly identified lithologies are pillow basalts, carbonates and cherts. In the eastern part serpentinite after dunite, harzburgite and chromitite has been observed.
- Strong sea floor alteration is evident. Chloritisation and epidotisation together with stockwork of calcite and quartz indicate an overprint by a hydrothermal system

Ophiolites are tectonically emplaced at their current position and are generally very strongly deformed. Observations in the field show Zone A comprising 40-50° N striking faults, as reflected in the creek orientation. The creek also has sulfide mineralisation outcropped and road trenched zones. These outcrops display secondary perpendicular structures and 125°N oriented junctions containing enrichments with a crushed, fractured, and friable characteristic, amenable to easy extraction/free digging.

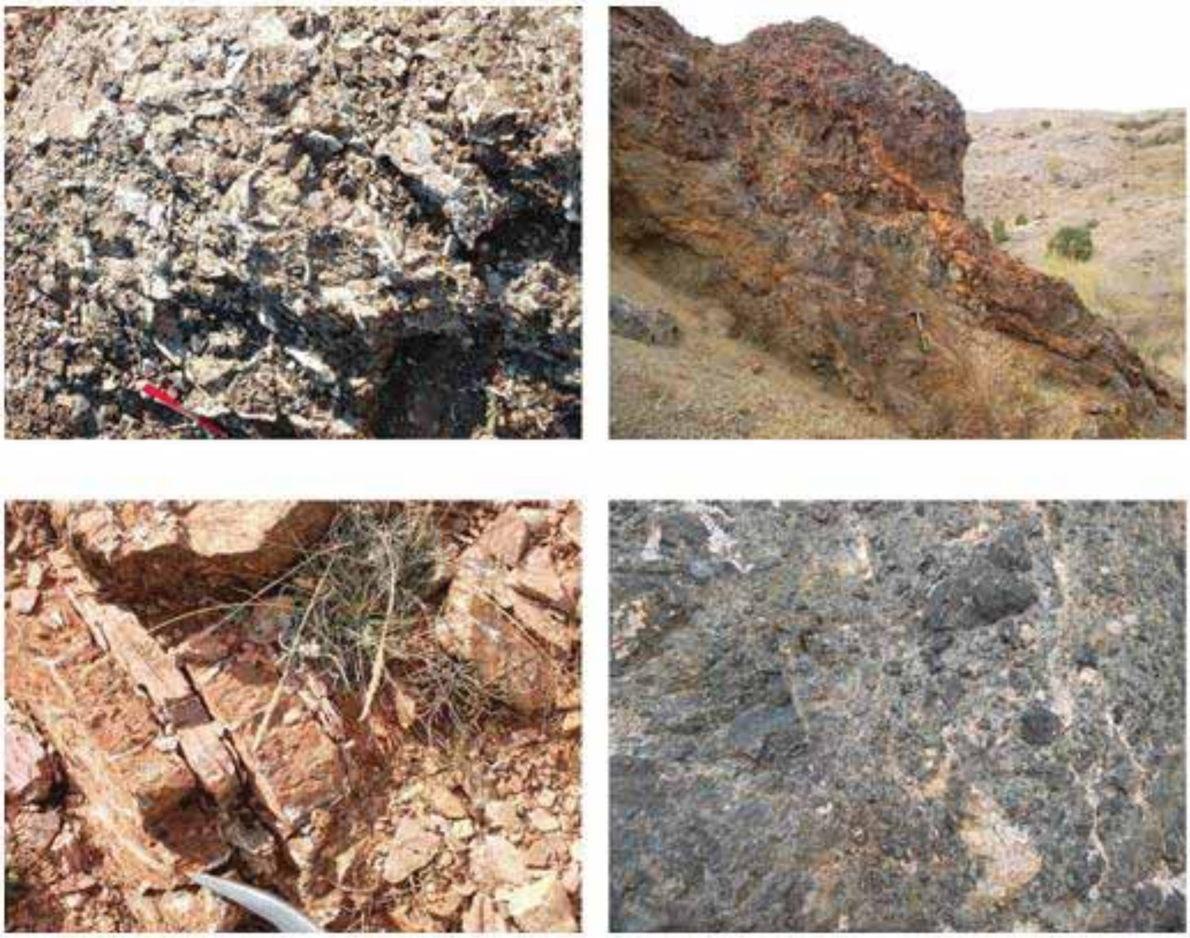


Figure 7.4 Lithologies observed. Top left: pillow basalt with calcite stockwork. Top right: gossanous layer. Bottom left: interbedded chert and carbonate. Bottom right. Basaltic breccia (Source DMT 2018).

7.3.1 Mineralisation

The following types of mineralisation have been observed within the project area:

- Massive chromitite: a very small lens has been discovered in the eastern part of the licence
- Gossan/gossanous rocks: along a zone of strong alteration several lenses of gossanous material can be observed. Malachite staining is rare. The gossan is clearly after sulphide, presumably pyrite and the massive part represents oxidized cupriferous pyritic sulphide bodies. One malachite-stained outcrop was subject to testing by German explorers in the 50s. This pit is not open anymore.
- Disseminated minor to accessory pyrite is present in the underlying plagioclase phenocryst basalt, which is typical for a mid-ocean ridge setting.

- Malachite-stained basaltic breccias: They appear to be spatially separated from the gossanous zone, possibly stratigraphically above and several locations are known. Breccias do general show a quartz-calcite-stockwork.
- Manganiferous chert is developed in the licence and is hosted by pinkish carbonates. In the eastern part the mineralization has been tested by trial mining. The pits are still open and some of the stockpile is still on site.

7.3.2 Weathering

At Zone A current drilling and confirmed mineralization is restricted to a topographic low, the mineralization within this low is interpreted to be the slightly weathered hypogene sulphide zone. Moving up slope from the valley (to the east or west) some iron oxidation is visible which may be consistent with the leach cap of a partially eroded supergene zone. There is also potential for a supergene oxide and secondary supergene sulphide zone to be present.

In the field at Zone B transitions between supergene and hypogene zones are not well observed, however this profile is well defined by drilling and is described in detail in section 14.

Secondary copper mineralization is seen on the surface as malachite & azurite & bornite & chrysocolla stains. Avod geologists reported with DMT geologists the occurrence of native copper at the leached-oxide zone boundaries.

Figure 7.5 Sulfide Copper mineralization as Pyrite & Chalcopyrite from the Zone A, looking W.

8 Deposit Types

The Çorum Copper deposit is considered an ophiolite hosted Volcanogenic Massive Sulphide (VMS) type deposit.

Ophiolite complexes are tectonically transported slices of ancient oceanic lithosphere, ranging in age from Early Proterozoic to Paleocene, that occur in orogenic belts formed by convergent plate motions (Galley, 1997). Ophiolites can represent any number of extensional environments in which mafic dominated sea floor is dominated (Galley, 1997).

In summary, two general settings are permissive for ophiolite formation:

- Normal oceanic ridges and mature back-arc basin environments.
- Supra-subduction zone spreading axis that occur in fore-arc and immature back-arc environments.

Regardless of the exact setting, the fault-related crustal permeability and high-level emplacement of plutons in basalt-dominated extensional sea floor environments creates favourable conditions for hydrothermal circulation and formation of massive sulphide deposits (Galley, 1997).

Ophiolite-hosted VMS deposits represent some of the oldest recorded sources of copper and gold, with these metals being recovered from gossans in the Troodos ophiolite, Cyprus, since 2500 B.C. (Bear, 1963). Ophiolite-hosted VMS deposits in Turkey supplied copper to the Assyrian Empire before 2000 A.D. and similar deposits in Oman exported copper over a span of ancient time to a area that included the Sumerian and Roman empires (Griffitts et al., 1972).

The overall stratigraphic setting for Çorum appears to be higher in the typical ophiolite sequence (Figure 8.1). The setting is typical for a volcanic cupriferous (+/- Zn-Pb-Au) massive sulphide mineralisation, as shown in Figure 8.2.

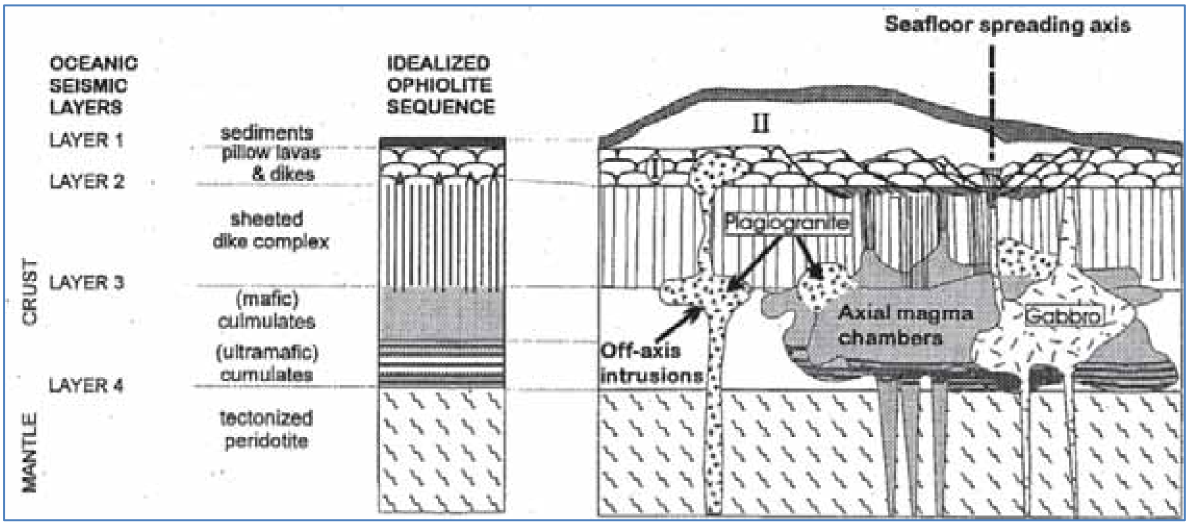


Figure 8.1: A composite schematic comparing a section through an idealized ophiolite sequence with a more realistic section through an ophiolite formed above a subducting plate margin. Lower lavas (I) consist of either N-MORB or arc tholeiite. In a fore-arc environment the upper lavas (II) would contain boninitic units, whereas in back-arc environments, picrites and fractionated tholeiite suites would be included in the upper part of the extrusive sequence (source Galley, 1997).

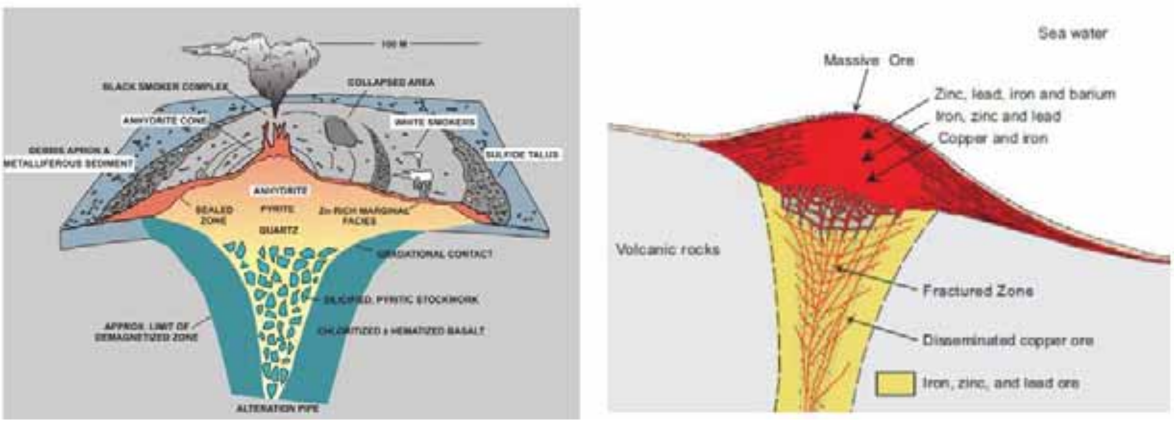


Figure 8.2: Typical cross-sections through volcanic massive sulphide deposits. Note: Vertical and lateral zonation (Cu, Zn, Pb, Fe, Mn, Ba), demagnetization and alteration. Laterally the ore-equivalent layer may develop into cherts (source: DMT, 2018).

The Çorum copper mineralisation demonstrates both primary and secondary weathered characteristics of ophiolite hosted VMS deposits.

By weathering these volcanic massive sulphide deposits the characteristics can be altered as shown in Figure 8.3. The process of weathering, leaching and re-precipitation can result in a supergene enrichment zone of copper carbonates, oxides and silicates and a secondary sulphide supergene enrichment zone below a redox boundary containing chalcocite, covellite and bornite.

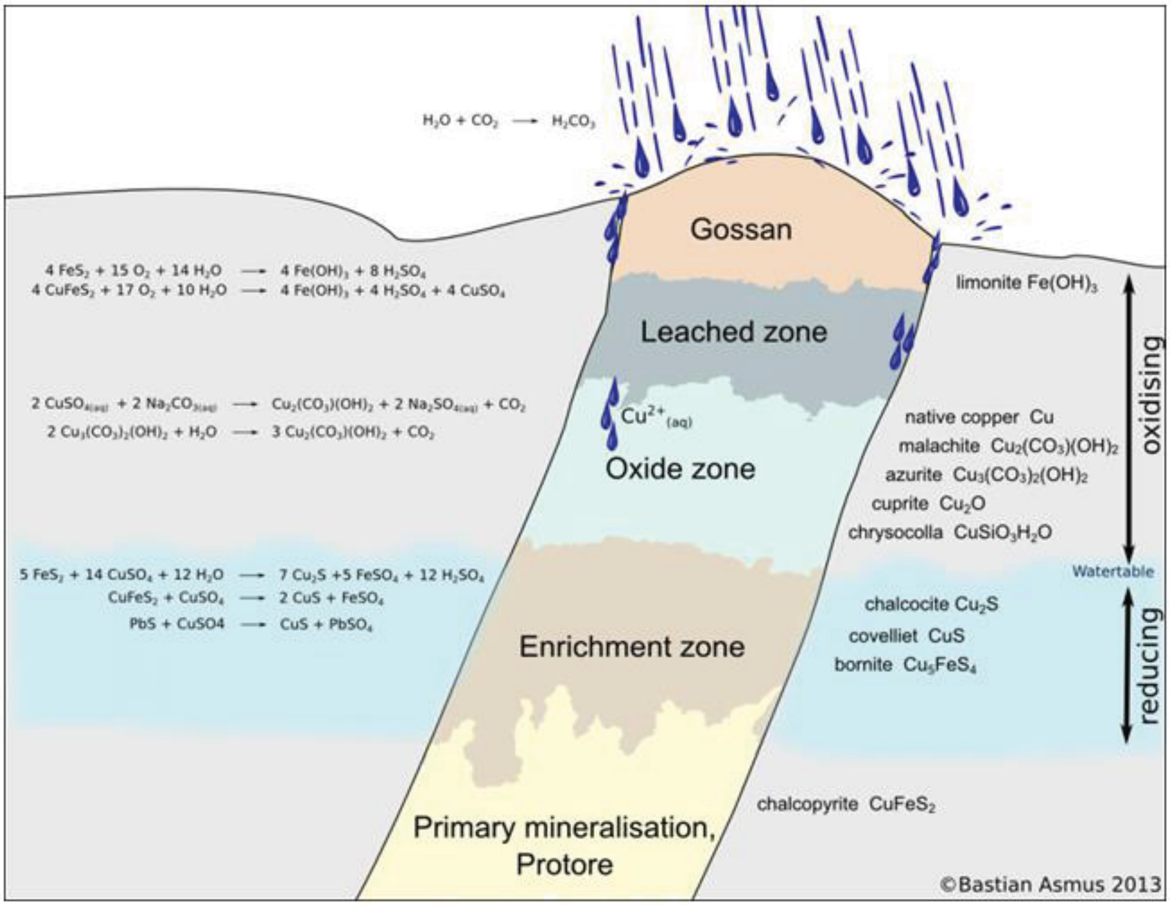


Figure 8.3: Schematic view of a sulphide vein. You can see the oxidation zone, consisting of the gossan, the leached zone and the oxidised zone. The reducing zone consists of the enrichment zone and the area of primary mineralisation. Significantly modified after Evans (1992) and Ottaway (1994) (Source: http://en.archaeometallurgie.de/gossan-iron-cap).

9 Exploration

Section modified from DMT, 2019.

The company Aktif Yerbilimleri A.S. (AY) was contracted to complete a ground magnetics survey in 2013 (Area A - Figure 9.1). The governmental institution 'General Directorate of Mineral Research and Exploration (MTA)' completed a ground IP survey, in 2013, discovering anomalies along a valley indicating disseminated sulphides also in Area A (Figure 9.1). Maps and sections of chargeability and resistivity for Area A are shown in in Figure 9.2.

Based on these geophysical results, a mapping programme was implemented by AVOD in 2016. A 1:25,000 scaled governmental geological map H33-D3 was available before commencing mapping (Figure 9.4). The IP survey points can be seen on satellite image at Figure 9.4.

Figure 9.1: Prospects A and B (Source Google Earth, DMT 2018).

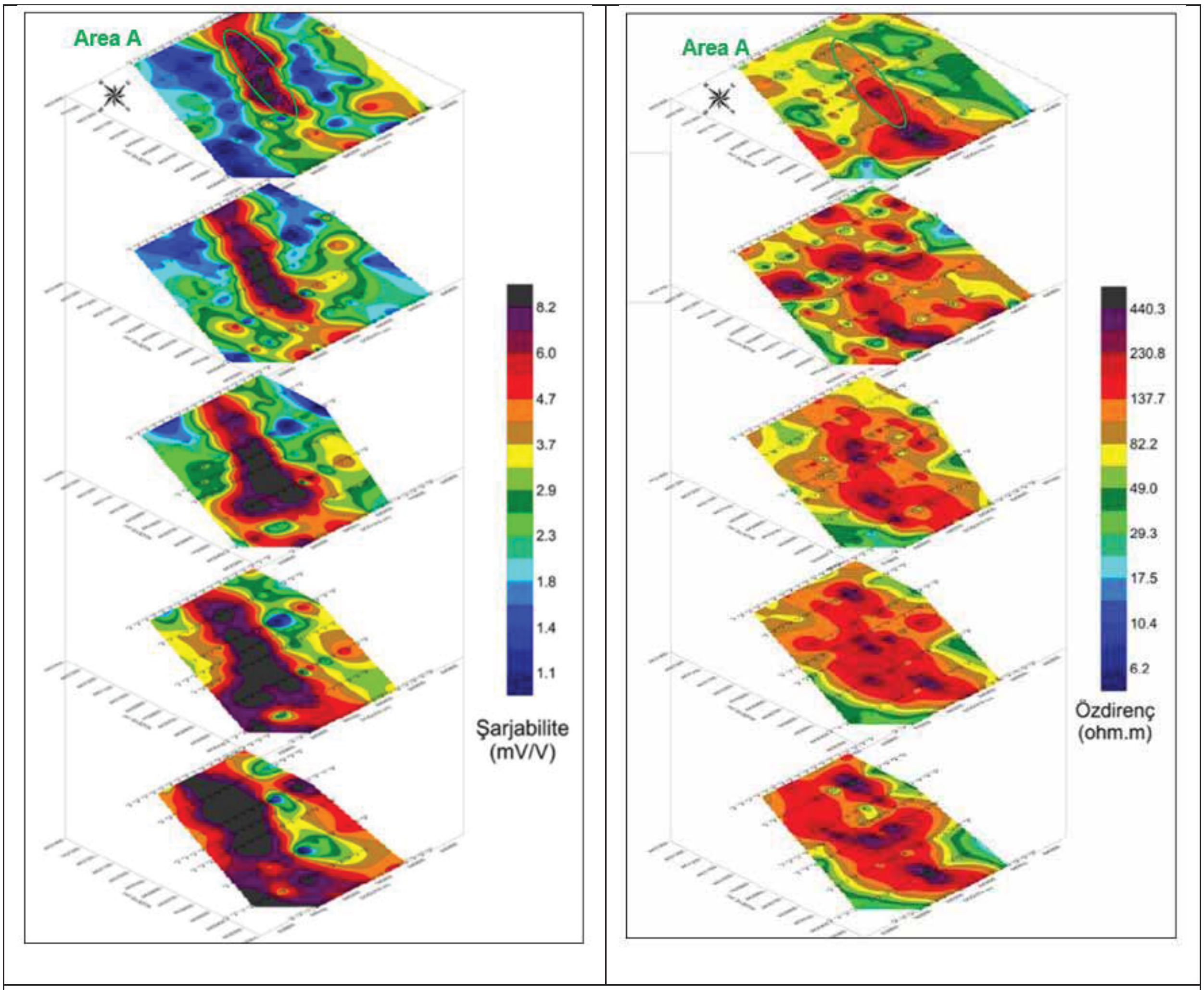


Figure 9.2: Stacks of Chargeability (Left) and Resistivity (right) Images (source DMT 2018)

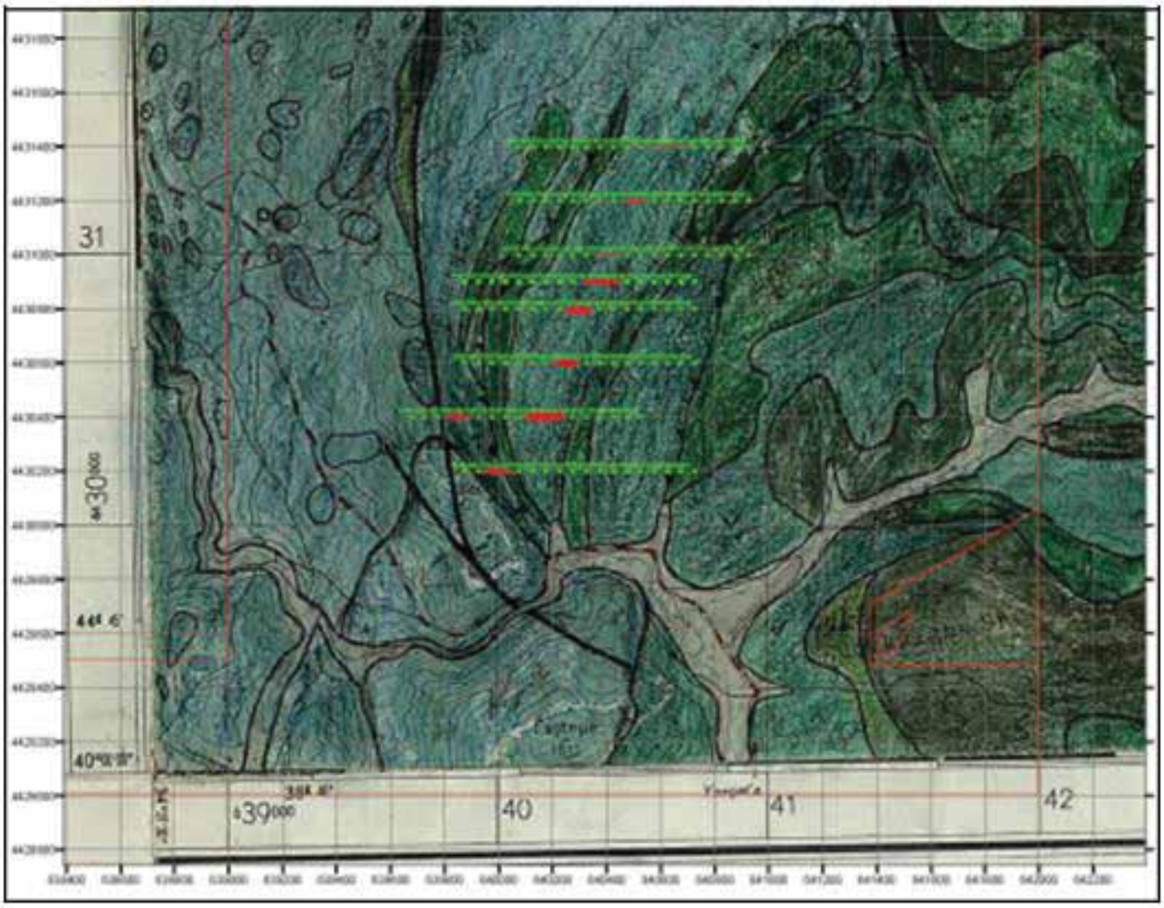


Figure 9.3: Outcrop of 1:25 000 scaled governmental geological map H33-D3 (source DMT 2018).

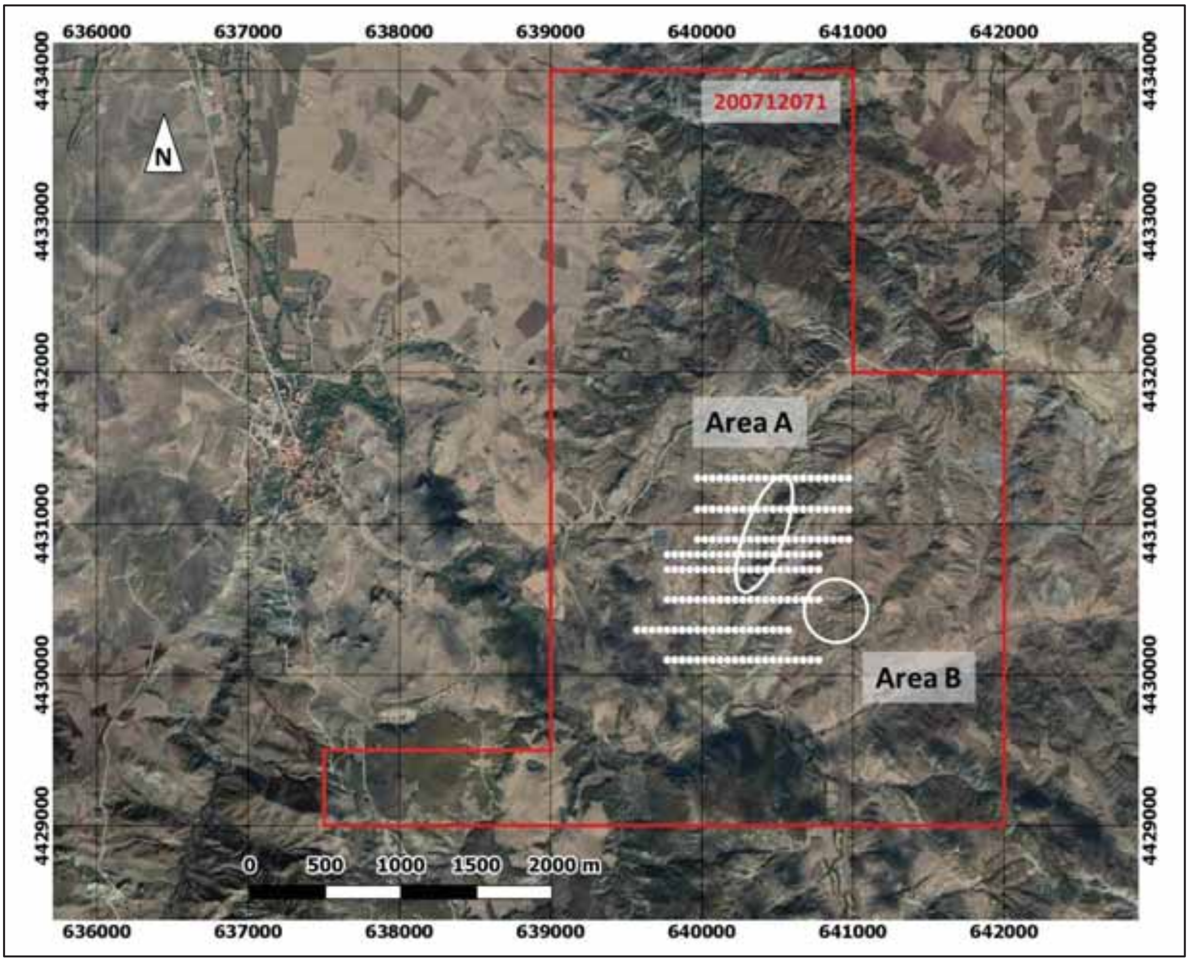


Figure 9.4: IP survey point locations corresponding on the licence.

The AVOD mapping identified another mineralised gossan-like body in Area B, around 700 metres west of the valley However, a large proportion of the licence area remains unmapped, as shown in Figure 9.6.

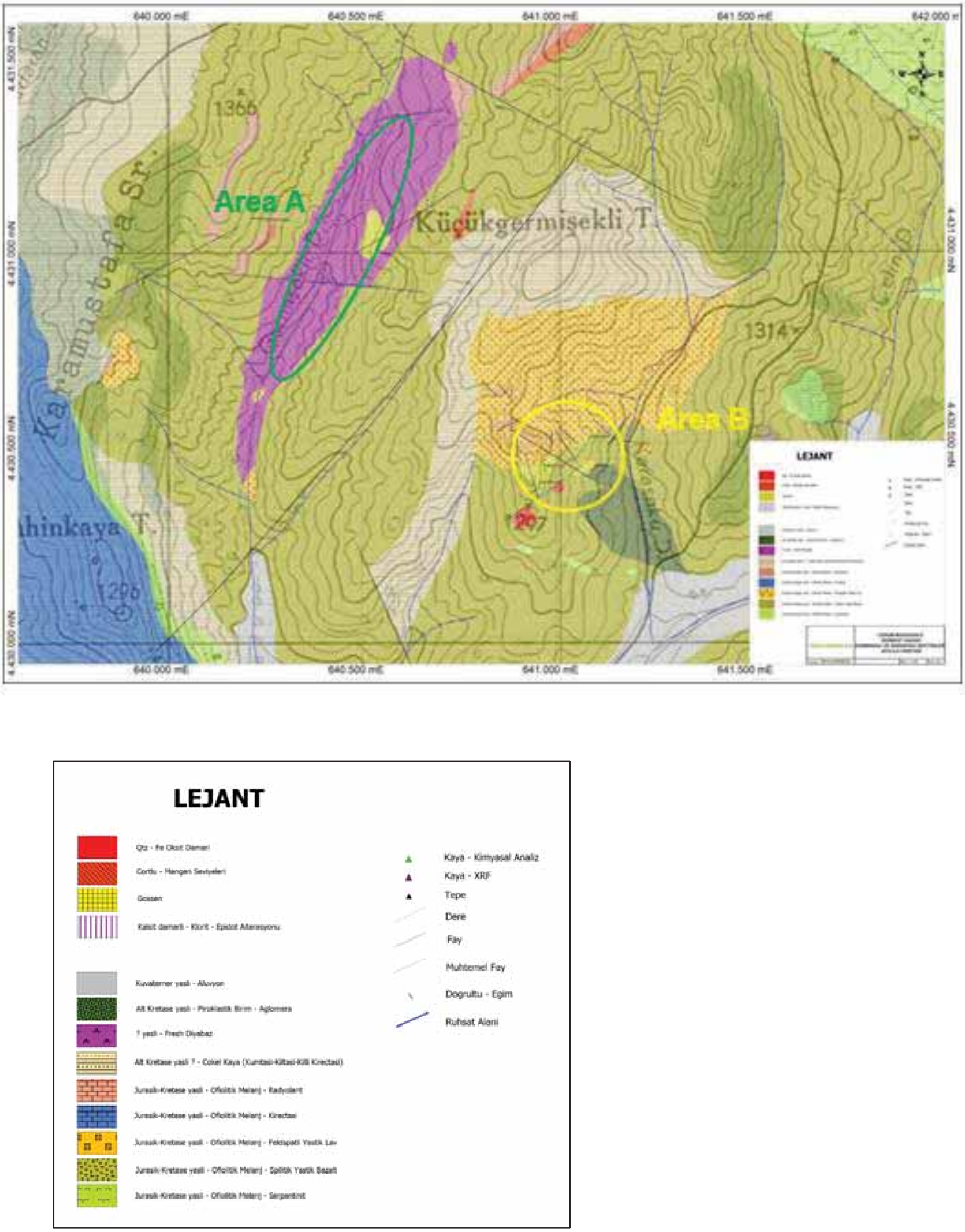


Figure 9.5: AVOD Geological Map (source DMT 2018).

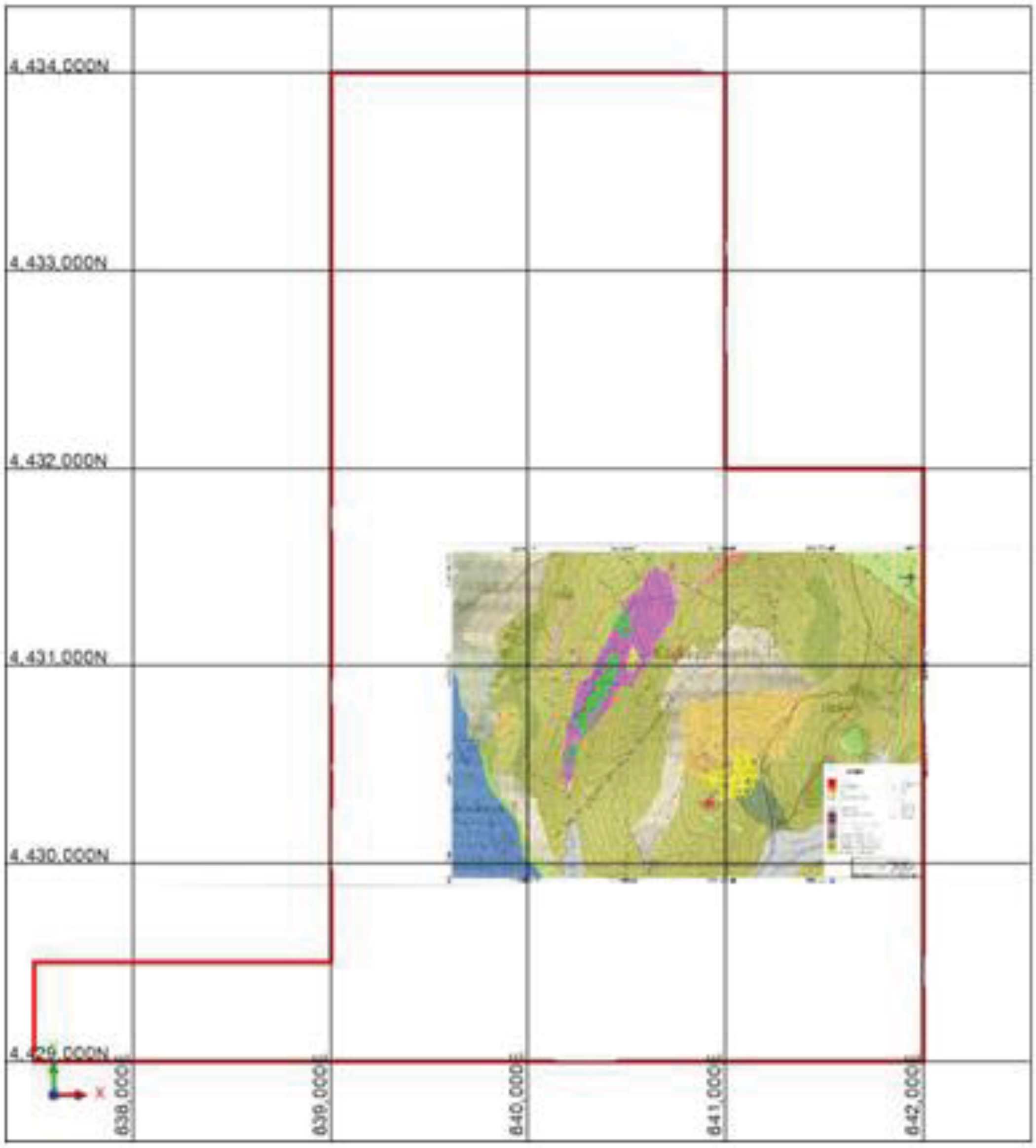


Figure 9.6: Licence Showing Mapped and Drilled Areas (source DMT 2018).

The 2016 mapping program, historic data compilation and associated field observations indicated the possibility for the project to host a volcanic massive sulphide deposit, potentially economic for copper. Based on these results, DMT recommended a drilling program to delineate the copper mineralisation and to test any depth continuation of mineralisation with the main objective to develop a shallow resource.

DMT planned and implemented Standard Operating Procedures (SOPs), including a drilling programme in 2018 to achieve a representative database for relevant geochemical assay results and bulk density measurements. Details of the drilling completed in 2018 are summarised in Section 10 below.

As of 26th July 2018, there has been no further exploration work undertaken on the project.

10 Drilling

The following section is modified from DMT, 2018.

10.1 Overview

Based on results of the 2013 geophysical surveys and 2016 geological mapping, 20 diamond drill holes for 1,380 metres were drilled to target the potential copper mineralisation in Area A and Area B.

Of these 20 holes, 13 holes were drilled completely with PQ diameter and the 7 deeper holes were reduced to HQ. In total, 1,062 m were drilled in PQ and 318 m were drilled in HQ.

Majority of holes were drilled vertical, with a small number angled -60 degrees. No core orientation was performed.

The drilling program was managed by contractor Aktif Yerbilimleri A.S. Drilling was done by Asyatek Drill Company, and drill rig is Tetra 1500 (Figure10.1). For the DH surveys, Devico Survey Tool has been used.

Figure 10.1: Drill Rig

Figure 10.2: Drill Holes of Areas A and B.

In Area A, line spacing of around 100 m was used with drillhole centres varying between 30 to 40 m. The lines crosscut the valley. The drilling of Area B is evenly distributed over the area with hole centres varying from 40 m to 60 m. Table 10.1 contains the drill holes details for the drilling programme in Areas A and B.

Drillhole collars were numbered during planning and not all planned locations were drilled. As such numbers are not sequential.

Table 10.1: Drill Hole Details

Hole ID	Area	Easting	Northing	Elevation	Azimuth	Dip	Depth
GERD-08	A	640518	4431208	1286	120	-60	60.0
GERD-10	A	640479	4431211	1283	0	-90	57.7
GERD-17	A	640431	4431008	1265	0	-90	67.9
GERD-22	A	640406	4431008	1264	270	-60	60.0
GERD-24	A	640356	4430908	1255	0	-90	60.0
GERD-26	A	640393	4430900	1256	140	-60	69.7
GERD-28	A	640306	4430808	1248	0	-90	64.8
GERD-30	A	640341	4430805	1248	0	-90	65.6
GERD-32	A	640275	4430729	1241	0	-90	79.6
GERD-33	A	640294	4430714	1242	0	-90	63.8
GERD-35	A	640241	4430547	1229	0	-90	105.0
GERD-47	B	641059	4430524	1278	98	-60	66.1
GERD-49	B	640954	4430468	1297	0	-90	69.4
GERD-51	B	640983	4430376	1284	305	-60	73.7
GERD-54	B	640931	4430436	1297	110	-60	76.6
GERD-57	B	641049	4430484	1277	0	-90	77.1
GERD-58	B	641114	4430499	1258	0	-90	61.4
GERD-60	B	641093	4430445	1259	275	-60	57.8
GERD-61	B	641087	4430401	1256	0	-90	75.6
GERD-63	B	641032	4430395	1273	0	-90	71.2

10.1.1 Diamond Core Handling and Logging

Drilling SOPs were designed by DMT and implemented in August 2018 by Aktif Yerbilimleri A.S. All data collection work was performed following these SOPs. The procedures document: 'Data Acquisition Manual – Standard Operating Procedures on the Copper Project for Licence 200712071, Çorum Province, Turkey finalized by DMT in August 2018 has been reviewed by the CP, discussed with AVOD technical staff and is considered adequate for data collection suitable for use in mineral estimation.

Figure 10.3: Core Photo from GERD-35 drillhole.

Firstly, the core was marked up metre by metre to assist with core logging and sampling, considering core losses. Core losses were allocated to the end of each drill run or allocated to distinct zones, when possible. The aim of the geological logging was to obtain the maximum amount of relevant standardised and accurate geological information from the core.

Logging is initially done on paper and the logs were digitized as codes and description to tabular files. Cross checks were made at the time of input to Excel. The hardcopy forms have been randomly checked by the CP against SOP log .xls file also and no typing mistakes are observed.

The geological information that was generated from logging the drill core includes the following:

- Thickness of copper mineralisation.
- Major rock types.
- Visual distribution of copper mineralisation.
- Relevant styles of alteration or weathering.
- Faults and their orientation.

All logging was done based on codes with a focus on major and minor rock types, colour, grain size, structure, texture, contact, type and degree of mineralization, type and degree of alteration.

The major rock type logged is basalt, predominantly brecciated, with several intervals logged as radiolarite.

Core samples have been geologically and geotechnically logged to a level of detail to support geological modelling. Logging results have been verified against drill core and core photographs by the Competent Person and based on these results, logging is sufficient to be used for modelling and input into estimation.

The samples were taken in one metre intervals starting two metres above visual mineralisation in the hanging wall and ending two metres below visual mineralisation in footwall. Before sampling, the mineralisation type and respective intervals were geologically logged.

Two types of mineralisation were observed in the drilling and described as follows:

- Disseminated sulphides in basalt with some intercalations of massive sulphides. The disseminated mineralisation is hosted by strongly fractured core. Large pieces of core are rare, generally not exceeding more than 10 cm in length. There is significant massive sulphide lying in between the broken core with disseminated sulphides throughout the core.
- Oxidized mineralisation generally contains azurite and malachite and is generally very fractured.

In total, 20 holes intersecting sulfidic, mixed or oxidic copper mineralisation have been representatively sampled resulting in 615 samples taken. Samples were taken on regular intervals of one metre, considering core losses. The average core recovery within mineralised zones was approximately 89%.

10.1.2 Density Determination

For density determination, pieces of mineralised unbroken core were selected, using the following parameters:

- Drill core of disseminated sulphides in basalt (5 samples per hole when available * 20 holes = 100 samples)
- Drill core of massive sulphide (5 samples per hole when available * 20 holes = 100 samples)
- Drill core of oxidization showing Cu mineralization (5 samples per hole when avail-able * 20 holes = 100 samples)

A total of 300 samples were planned for bulk density in maximum. However, only 209 pieces of unbroken core were available with a length of at least 10 cm. These pieces were packed in plastic bags and labelled with a sample ID.

A density sample sheet containing the sample ID, respective drill hole ID, interval depth and type of mineralisation was prepared and sent to ARGETEST for density determination using the water replacement method in a graduated flask.

Using this method, the volume of the sample is determined by placing the sample in a water filled graduated flask and reading off how much water is displaced calibrated in millilitres, where 1 ml = 1 cm^3, the mass of the sample is measured using a balance and density can be readily calculated using the equation below:

$$\text{Bulk Density} = \text{Weight Sample Dry} / \text{Volume Replaced Water}$$

Density measurements can be affected by the ability of water to penetrate through any open pores/fractures. However, waxing was not applied due to the solid and impermeable characteristics of the core selected. After density determination the pieces of core were sent back to AVOD’s core shed and put back into the core boxes.

10.1.3 Diamond Recovery and Geotechnical

The overall core recovery is 90 %. The core recovery within the sulphide zone was 88 % and within the oxidization was 85 %.

10.1.4 Survey

All surveying work was carried out by the company Aktif Yerbilimleri A.S. (AY). All holes were surveyed at the position and downhole, in order to identify any deviation.

A DTM drone survey was completed in 19.12.2019, the drone survey used photo-orthogrametry to produce a topographic model and provided detailed aerial photography.

10.1.5 Significant Intercepts

Significant intercepts generated from the mineralized wireframes are presented in Table 10.1 using length weighted averaging. True widths are approximately 90% of drilled thickness.

Table 10.2: Significant intercepts generated from mineralized models described in section 14.

Mineralization Style	Hole ID	Depth from [m]	Depth to [m]	Interval [m]	Cu%_Plot
Hypogene Sulphide	GRD-8	4	37	33	1.403
Hypogene Sulphide	GRD-10	5	39	34	1.268
Hypogene Sulphide	GRD-17	2	30	28	1.498
Hypogene Sulphide	GRD-22	4	24	20	1.599
Hypogene Sulphide	GRD-24	3	32	29	1.616
Hypogene Sulphide	GRD-26	5	22	17	1.847
Hypogene Sulphide	GRD-28	5	20	15	1.83
Hypogene Sulphide	GRD-30	4	18	14	1.739
Hypogene Sulphide	GRD-32	2	21	19	1.714
Hypogene Sulphide	GRD-33	4	22	18	1.68
Hypogene Sulphide	GRD-35	4	12	8	1.219
Mixed Sulphide/Oxide	GRD-47	0	12	12	1.66
Supergene Oxide	GRD-47	12	27	15	4.154
Hypogene Sulphide	GRD-47	27	38	11	1.224
Mixed Sulphide/Oxide	GRD-49	0	6	6	1.954
Supergene Oxide	GRD-49	6	25	19	2.952
Hypogene Sulphide	GRD-49	29	41	12	1.253
Mixed Sulphide/Oxide	GRD-51	0	6	6	1.887
Supergene Oxide	GRD-51	6	15	9	3.777
Hypogene Sulphide	GRD-51	15	30	15	1.168
Hypogene Sulphide	GRD-51	40	47	7	1.08
Mixed Sulphide/Oxide	GRD-54	0	8	8	1.538
Supergene Oxide	GRD-54	8	28	20	3.747
Hypogene Sulphide	GRD-54	35	43	8	1.009
Mixed Sulphide/Oxide	GRD-57	0	10	10	2.385
Supergene Oxide	GRD-57	10	24	14	2.654
Hypogene Sulphide	GRD-57	26	32	6	1.147
Hypogene Sulphide	GRD-57	45	53	8	1.067
Mixed Sulphide/Oxide	GRD-58	0	6	6	1.613
Supergene Oxide	GRD-58	6	18	12	3.008
Hypogene Sulphide	GRD-58	18	28	10	1.059
Mixed Sulphide/Oxide	GRD-60	0	5	5	1.576
Supergene Oxide	GRD-60	5	13	8	3.198
Hypogene Sulphide	GRD-60	13	29	16	1.181
Hypogene Sulphide	GRD-60	32	38	6	0.993
Mixed Sulphide/Oxide	GRD-61	0	7	7	0.882
Supergene Oxide	GRD-61	7	16	9	4.577
Hypogene Sulphide	GRD-61	16	28	12	1.147
Hypogene Sulphide	GRD-61	37	44	7	1.218
Mixed Sulphide/Oxide	GRD-63	0	5	5	1.734
Supergene Oxide	GRD-63	5	22	17	3.493
Hypogene Sulphide	GRD-63	22	36	14	1.018

10.2 CPs Comments

Checking the coordinates of Diamond Drill Hole locations at the field area by CP; the drilling done by a known, well-referenced and decent company named Asyatek Drilling Company for AVOD. Drilling company site-supervisor was called by CP and asked about their drilling experiences about the site for drill-campaign and their consistent data are welcome. On review of Drilling SOP's, discussion with AVOD technical personnel and comparison of drill logs against available core, it is the CP's opinion that data collection practices are to a standard suitable for input to reliable and robust geological model development.

11 Sample Preparation, Analysis and Security

The following section is modified from DMT, 2018.

11.1 Sample Preparation

In order to get a representative sample, the entire one metre sample was crushed using a Jaw crusher to -2 mm and reduced to approximately >1 kg using a riffle splitter, as illustrated in Figure 11.1. After sampling, the remaining crushed core samples are placed in the relevant meter at the core boxes.

Every 20th sample, the full reject was passed through the splitter again to produce a field duplicate of about >1kg. The 1 kg split samples were packed in plastic bags and labelled with sample ID.

The jaw crusher, riffle splitter and bins were cleaned with brushes and compressed air between each sample was processed in order to avoid contamination (Figure 11.1).

In each batch of 20 samples, three QA/QC samples were inserted; one CRM sample, one blank sample to monitor contamination in the laboratory and one field duplicate to control sample preparation (sample crushing and splitting) in the field and repeatability in the laboratory.

A sample sheet containing the sample ID, drill hole ID, interval depth, length of recovered core, the length of sulphide or oxide mineralization and sample weight was prepared including QA/QC samples.

In total, 705 samples (615 samples from drill holes and 30 standards, blanks and duplicates) were dispatched to laboratory ARGETEST, which is certified to ISO Quality Management System ISO 9001: 2015.

All samples were tracked, weighted, dried at 80 °C, fine crushed to 70% less than 2 mm diameter, then split off 500 g and pulverized to better than 85% less than 75 microns (ARGETEST sample preparation code: PREP-02, as shown in Figure 11.2).

Figure 11.1: Steps of sample preparation: Equipment in core shed (Top Left), Crushing (Top Right), Splitting (Bottom Left), Cleaning (Bottom Right) (source DMT 2018).

Numune Hazırlama / Karot-Kayaç Örnekleri

Core and Rock Preparation

Karot ve kayaç örnekleri için numune hazırlama sırası ile kurutma, kırma ve öğütme işlemlerinden oluşmaktadır. Numuneler cevher yapısına göre 60 - 80 - 105 °C'de kurutularak kırıcılardan % 70'i ≤ 2 mm olacak şekilde kırma işlemi yapılır ve standart bölücülerden öğütme numunesi alınarak % 85'i ≤ 75 mikron olacak şekilde öğütülerek numune hazırlama işlemi tamamlanır.

Karot ve kayaç örneklerinde farklı bir kurutma sıcaklığı belirtilmediği taktirde 80 °C olarak kurutma işlemi yapılır.

Numune arşivleri % 70 ≤ 2 mm olacak şekilde vakumlu paketlerde 3 ay saklanır ve 3 ay sonunda talep doğrultusunda numunelerin iadesi gerçekleşir.

Preparation of core and rock samples consists of drying, crushing and pulvarizing processes. The samples are dried at 60 - 80 - 105 °C according to ore structure, and the crushing process is made in a way that 85 % of the crushed material is less than 2 mm, and pulvarizing samples are gained from the standard dividers, and they are pulvarized in a way that 70 % will be less than 75 microns, then sample preparation process is completed.

If different drying temperature is not indicated in core and rock preparation, drying process is made in 80 °C.

Sample archives are stored in vacuum packages that contain material size will be 70% ≤ 2 mm for 3 months, and at the end of the 3 months, the samples are returned upon request.

Karot-Kayaç Numune Hazırlama / Core and Rock Preparation

Kod / Code	Açıklama / Description	
PREP 01	Kırma 1 kg %70 ≤2 mm / Öğütme 250 g %85 ≤75µm	Crush 1 kg 70% ≤ / Pulverization 250 g ≤85% 75µm
PREP 02	Kırma 1 kg %70 ≤2 mm / Öğütme 500 g %85 ≤75µm	Crush 1 kg 70% ≤ / Pulverization 500 g ≤85% 75µm
PREP 03	Kırma 1 kg %70 ≤2 mm / Öğütme 1000 g %85 ≤75µm	Crush 1 kg 70% ≤ / Pulverization 1000 g ≤85% 75µm
PREP 04	Kırma 1 kg %90 ≤2 mm / Öğütme 250 g %85 ≤75µm	Crush 1 kg 90% ≤ / Pulverization 250 g ≤85% 75µm
PREP 05	Kırma 1 kg %90 ≤2 mm / Öğütme 500 g %85 ≤75µm	Crush 1 kg 90% ≤ / Pulverization 500 g ≤85% 75µm
PREP 06	Kırma 1 kg% 90 ≤2 mm / Öğütme 1000 g %85 ≤75µm	Crush 1 kg 90% ≤ / Pulverization 1000 g ≤85% 75µm
CRUSH-EXT	1 kg fazlası ilave kırma/kg	Extra crushing over 1 kg per kg
CRUSH-EXT 01	Numune kırma/kg	Crushing/kg
PULV-EXT	İlave öğütme/250 g	Extra Pulverizing/250 g
DRY 01	60 °C kurutma/numune	Dry 60 °C per sample
DRY 02	80 °C kurutma/numune	Dry 80 °C per sample
DRY 03	105 °C kurutma/numune	Dry 105 °C per sample

Figure 11.2: Extract from ARGETEST Catalogue 2017-2018; sample preparation methods (source DMT 2018).

11.1 Sample Analysis

The pulverized 500 g samples were homogenised and 1 g of sample was digested by four-acid (HF:HNO3:HClO4:HCl) digestion, digesting the whole sample (Figure 11.3 and Figure 11.4). Then the dissolved sample was analysed by ICP (ARGETEST sample preparation code: AT-4 / GAR 05) (Figure 11.3 and Figure 11.4). When the upper detection limit of this method was reached for Cu, Pb, Zn or Ag then method AT-4 / Over was applied for the samples concerned (Figure 11.4).

For gold, the pulverized 500 g samples were homogenised, and 30 g of sample was used for a fire assay technique. The fire assay prill was analysed by AAS (ARGETEST sample preparation code: AT-1 / FA-01) (Figure 11.4).

All assays certificates, together with the related Excel sheets were sent directly to DMT by ARGETEST.

At all times, the drill core and samples were inaccessible for persons not involved in the project or not authorized to get in contact with the drill core and samples. The samples were stored in a locked core shed and under security. All transport was organized and carried out by authorized persons only.

All sample pulps and rejects were stored in vacuum packages that contain material size of 70% ≤ 2mm for 3 months. After 3 months, the samples were returned to AVOD's core shed to be stored by AVOD for future work, if required.

AT-4

Multi Asit / Multi-Acid

Multi asit çözünmesi HF:HNO_3:$HClO_4$:HCl kademeli çözünmesinde oluşmaktadır.

Bu çözme metot daha çok kuvars içerikli yapılar için uygundur. Numunenin tamamı multi asit ile parçalanır ve ICP-ES ile sonuçlandırılır.

Bu metot birçok yapıyı tamamen parçalama esasına dayanmaktadır.

Multi acid dissolution occurs in the gradula dissolution of HF:HNO_3:$HClO_4$:HCl.

This dissolution method is rather appropriate for quartz containing structures. Whole sample is decomposed with multi-acids and finalized with ICP-ES.

This method is based on the principle of complete decomposition of many structures.

Kod / Code	Açıklama / Description
GAR 05	**Multi acid** / 31 Element
GAR 05-Ext	
GAR 06	**Multi acid** / 48 Element
GAR 06-Ext	

GAR 06 Paketi iz elementlerini de içermektedir.

GAR 06 package also contains trace elements.

* İşaretli parametrelerde kısmi buharlaşma olabilir.

** In "*" marked parameters, volatilization during fuming may result in some losses.*

	Element	Dedeksiyon Limiti / Detection Limit		
GAR 05 / GAR 06	Ag	0.5	100	ppm
	Al	0.01	15.00	%
	As *	1	10000	ppm
	Ba	1	10000	ppm
	Be	0.5	5000	ppm
	Bi	5	5000	ppm
	Ca	0.01	40.00	%
	Cd	0.5	5000	ppm
	Co	1	1000	ppm
	Cr	1	10000	ppm
	Cu	1	10000	ppm
	Fe	0.01	30.00	%
	K	0.01	20.00	%
	La	1	1000	ppm
	Li	5	5000	ppm
	Mg	0.01	20.00	%
	Mn	1	10000	ppm
	Mo	1	10000	ppm
	Na	0.01	20.00	%
	Ni	1	10000	ppm
	P	0.001	10.00	%
	Pb	2	10000	ppm
	S *	0.01	30.00	%
	Sb *	5	10000	ppm
	Sn	5	10000	ppm
	Sr	1	10000	ppm
	Ti	0.01	10.00	%
	V	1	10000	ppm
	W	5	10000	ppm
	Zn	1	10000	ppm
	Zr	0.5	1000	ppm

Figure 11.3: Extract from ARGETEST Catalogue 2017-2018; multi acid digestion plus ICP finish (source DMT 2018).

AT-1

Değerli Metaller / Precious Metals

Altın / Gold

Altın analizi için uygulanan metotlar;

- Kupelasyon (Fire Assay) sonrası AAS - ICP veya gravimetrik metot ile sonuçlandırma.
- Asit liçi ile DIBK (DIBC) ekstraksiyonu sonrası AAS ile sonuçlandırma

The methods used for gold analysis;

- *Conclusion with AAS - ICP or gravimetric method after Fire Assay.*
- *Conclusion with AAS after DIBC extraction with acid leaching.*

Kupelasyon / Fire Assay-Au

Kod / Code	Açıklama / Description	Dedeksiyon Limiti / Detection Limit		
FA 01	30 g / AAS	0.005	10	ppm
FA 02	50 g / AAS	0.005	10	ppm
FA 03	30 g / ICP	0.005	10	ppm
FA 04	50 g / ICP	0.001	10	ppm
FA 05	30 g / Grav.	2	-	ppm
FA 06	50 g / Grav.	2	-	ppm
FA 07 *	(-75µm +75µm) Fire Assay / Grav. - AAS	0.005	-	ppm
FA 08 *	(-106µm +106µm) Fire Assay / Grav. - AAS	0.005	-	ppm

*Metalik kupelasyonda 1000 g'a kadar numune 75 µm veya 106 µm 'lik eleklerden geçirilerek elek altı ve elek üstü ayrı ayrı analiz yapılmaktadır. Sonuçlar elek altı / elek üstü olarak raporlanabildiği gibi ağırlıkça ortalama alınarak tek bir rapor halinde de verilmektedir.

**In the metallic fire assay, samples up to 1000 g are sifted through 75 µm or 106 µm sieves, and the upper sieves and the under sieves are analyzed separately. The results can be reported as under sieve / upper sieve as well as taking an average in weight, and also given as a single report.*

Au ≥ 10 ppm olması durumunda gravimetrik analiz metodu uygulanır.

In the event that Au ≥ 10 ppm, the method of gravimetric analysis is applied.

Figure 11.4: Extract from ARGETEST Catalogue 2017-2018; fire assay plus AAS finish (source DMT 2018).

11.2 Data Management

Exploration drill data was supplied to Bordokum and AMS as Excel table files, subsequently imported into Micromine Exploration and Mining Software package for database validation, processing and modelling.

A digital terrain model (DTM) was also provided.

Topographic, geological and geophysical maps have been draped onto the DTM, collar elevations were also queried from the DTM due to the use of non-differential GPS, surface topographic features, geology mapped and licence boundaries.

All these data are the underlying basis for the geological interpretation and wireframe modelling. Further comment on data management is given in the risk assessment of the resource estimation.

11.2.1 Drill Hole Database

The following data sets are available for the 20 drill holes (1380 m):

- Collar location and details
- Survey

- Drill diameter
- Core recovery
- RQD: geotechnical rock quality data
- Geological logs distinguishing host rocks and several types of copper mineralisation
- Sample list comprising samples for density determination from drill holes including sample ID, respective hole ID, depth interval and type of mineralization.
- Sample list comprising samples for chemical analysis from drill holes including 'from' and 'to' intervals of 1 m marking, sample recovery, type and portion of copper mineralization and QA/QC samples plus information about name of laboratory and methods to be applied for sample preparation and chemical analysis

Assay certificates as PDF sent by ARGETEST and corresponding Excel file including the specific gravity in t/m^3 and following chemical analyses: Ag (ppm), Al (%), As (ppm), Au(ppm), Ba (ppm), Be (ppm), Bi (ppm), Ca (%), Cd (ppm), Co (ppm), Cr (ppm), Cu (ppm), Fe (%), K (%), La (ppm), Li(ppm), Mg (%), Mn (ppm), Mo (ppm), Na (%), Ni (ppm), P (%), Pb (ppm), S (%), Sb (ppm), Sn (ppm), Sr (ppm), Ti (%), V (ppm), W (ppm), Zn (ppm), Zr (ppm), Cu (%), Zn (%).

11.3 CP Comments

The Competent Person is satisfied the methods employed for the preparation and analytical determination used for the drill samples. The data processing methods are considered satisfactory for the purpose of mineral resource estimation and reporting in accordance with UMREK 2018.

The bulk density measurement methodology and equipment used is considered satisfactory.

Minor improvements in the drillhole data capture and database management can be made and will help improve the quality of the data and subsequent accuracy and confidence in the geological models.

12 Data Verification

12.1 Competent Persons Site Visit

The CP site visit was conducted between the 29th and 31st of March 2020 by Mr. Özgür Çörekci (UMREK Competent Person) and Mr. Toygar Tanyıldız, Consultant Geologist of Bordokum. The purpose of the visit was to inspect the licence property, site situation, deposit geology (field and core observations), drill locations and logging procedures, sampling, QAQC and data handling protocols and to confirm the presence and style of mineralisation.

The site visit commenced with checking the coordinates of Diamond Drill Hole locations done well known Turkish drill contractor Asyatek Drilling Company. The drilling company site-supervisor was called by CP and asked about their drilling experiences about the site for drill-campaign and their descriptions are considered satisfactory. Diamond Drill Hole Locations were checked one by one with Garmin GPSMAP 64s handheld GPS and the differences at Easting and Northing measurements were satisfactorily below 10 meters.

Field check started with south-end of Zone A drill locations with GERD-35 and kept up to the north as GERD-33, GERD-32, GERD-30, GERD-28, GERD-26, GERD-24, GERD-17, GERD-22, GERD-10, and GERD-08, drill hole checks done, respectively.

Mineralization for Zone A was observed by CP as pyrite & chalcopyrite disseminations especially as cubic and euhedral shaped and can be seen at road trenches at drill locations as sulfidic mineralization and corresponds with drill logs.

Mineralization for Zone B was observed by the CP as oxidation on the surface as malachite & azurite & bornite & chrysocolla stains as mineralization. It can easily be seen at the trench nearby the drill location between GERD-57 and GERD-60 and corresponds with the drill logs GERD-17.

Figure 12.1: Oxide Copper mineralization at Zone B as Malachite & Azurite from the trench, looking East.

The surface geological map at DMT report has been done well and fits at the field geology.

At Zone A current drilling and confirmed mineralization is restricted to a topographic low, the mineralization within this low is interpreted to be the slightly weathered hypogene sulphide zone. Moving up slope from the valley (to the east or west) some iron oxidation is visible which may be consistent with the leach cap of a partially eroded supergene zone. There is also potential for a supergene oxide and secondary supergene sulphide zone to be present.

In the field at Zone B transitions between supergene and hypogene zones are not well observed, however this profile is well defined by drilling and is described in detail in section 14.

Secondary copper mineralization is seen on the surface as malachite & azurite & bornite & chrysocolla stains. Avod geologists reported with DMT geologists the occurrence of native copper at the leached-oxide zone boundaries.

The findings of the site visit were satisfactory and considered appropriate for the UMREK 2018 resource classification and reporting.

12.1.1 Collar Location Verification

Field locations were recorded by CP using a Garmin GPS MAP 64s handheld GPS. CP field locations, GPS collar and drill hole check locations are presented in Table 12.1 below.

Collar location control verification for the project is considered satisfactory.

GERD -30

GERD-35

GERD-28

GERD-24

GERD-26

Figure 12.2: GPS Pick Up Location; AVOD's Licence Area Site Visit by Competent Person (CP); All Drill Locations visited with Garmin GPSMAP64s handheld GPS.

GERD-10

GERD-08

GERD-17

Figure 12.3: CP Collar Location Checks.

Table 12.1: Bordokum AMS CP Collar Location Checks

	Garmin GPS Map 64s		Database		
Hole ID	**Easting**	**Northing**	**Easting**	**Northing**	**Comments**
GERD-8	640512	4431204	640518	4431208	Acceptable
GERD-17	640431	4431003	640431	4431008	Acceptable
GERD-24	640349	4430907	640356	4430908	Acceptable
GERD-47	641058	4430518	641059	4430524	Acceptable
GERD-54	640928	4430431	640931	4430436	Acceptable
GERD-61	641087	4430395	641087	4430401	Acceptable
GERD-10	640471	4431205	640479	4431211	Acceptable
GERD-22	640406	4431004	640406	4431008	Acceptable
GERD-26	640387	4430900	640393	4430900	Acceptable
GERD-28	640300	4430803	640306	4430808	Acceptable
GERD-30	640342	4430800	640341	4430805	Acceptable
GERD-32	640271	4430729	640275	4430729	Acceptable
GERD-33	640286	4430708	640294	4430714	Acceptable
GERD-35	640241	4430545	640241	4430547	Acceptable
GERD-49	640954	4430467	640954	4430468	Acceptable
GERD-51	640979	4430371	640983	4430376	Acceptable
GERD-57	641044	4430484	641049	4430484	Acceptable
GERD-58	641106	4430493	641114	4430499	Acceptable
GERD-60	641087	4430441	641093	4430445	Acceptable
GERD-63	641031	4430394	641032	4430395	Acceptable

12.1.2 Core Processing, Logging and Sampling

There were no issues or concerns related to the logging of the drill core.

Basic core and sample storage, handling, data capture and transfer methodologies were discussed, replicated and are considered satisfactory.

Drill core logging checks were completed on core intervals shown below.

Table 12.2: Drill Hole Log Verification.

Hole ID	From (m)	To (m)	Total (m)
GERD 20	0	21	21
GERD 32	0	20	20
GERD 30	0	13	13
GERD 49	0	12	12
GERD 63	0	10	10
Total			**76**

12.1.3 Verification Samples

10 core duplicate verification samples were taken from the core boxes and 10 pulp duplicate samples were taken from ARGETEST' s reject samples and sent to ALS Chemex İzmir as part of the CP site visit to independently confirm the presence of mineralisation and act as additional quality control samples. The samples and results are displayed in Table 12.3 and are discussed in the QAQC section (12.2).

Table 12.3: CP Check Samples both core samples and pulps versus AVOD Samples.

AVOD Primary Core Samples						Bordokum AMS CP Check Duplicate Core Samples				
Original Sample ID	Au ppm	Cu_%	Pb_ppm	Zn_ppm		CP Sample ID	Au ppm	Cu_%	Pb_ppm	Zn_ppm
A-18/13283	0,024	2,25	13,1	241,2		A-20/13283	0,033	2,12	6	201
A-18/13382	0,012	1,24	<2	186,6		A-20/13382	0,024	1,29	<2	194
A-18/13354	0,021	3,05	19,4	131,4		A-20/13354	0,047	2,88	5	122
A-18/13259	0,012	1,20	18,9	149,2		A-20/13259	0,033	1,21	2	142
A-18/13126	0,025	1,73	5,7	2453,0		A-20/13126	0,031	1,77	41	244
A-18/13480	0,031	3,78	20,7	798,3		A-20/13480	0,032	3,15	18	2200
A-18/13793	0,015	2,51	43,0	659,1		A-20/13793	0,028	2,68	27	2010
A-18/13666	<0,005	2,45	32,3	597,4		A-20/13666	0,029	2,55	20	1890
A-18/13772	0,064	1,43	23,0	3259,0		A-20/13772	0,035	1,3	40	245
A-18/13639	0,008	1,50	6,8	344,7		A-20/13639	0,026	1,555	42	318

Bordokum AMS CP Check Duplicate Pulp Samples				
CP Sample ID	Au ppm	Cu_%	Pb_ppm	Zn_ppm
A-20/13283R	0,008	2,31	34	220
A-20/13382R	0,008	1,25	61	301
A-20/13354R	0,014	3,12	33	233
A-20/13259R	0,007	1,22	40	236
A-20/13126R	0,013	1,71	6	3210
A-20/13480R	0,025	3,58	23	826
A-20/13793R	0,016	2,5	37	665
A-20/13666R	<0,005	2,22	15	584
A-20/13772R	0,064	1,405	18	2940
A-20/13639R	0,006	1,42	3	128

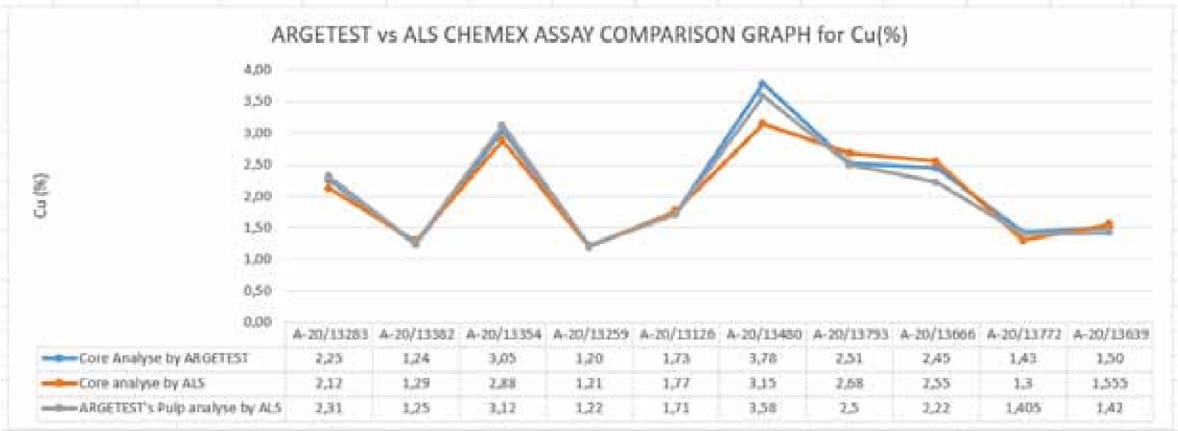


Figure 12.4: Core and Pulp Assay Comparison Graph ARGETEST vs ALS Chemex for Cu (%)

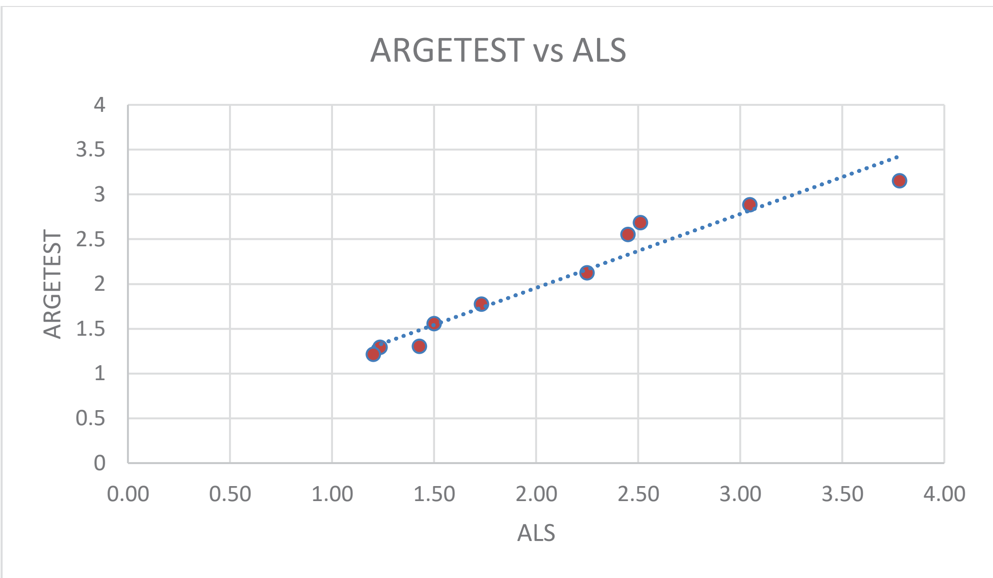


Figure 12.5: Core Sample Assay Comparison ARGETEST vs ALS for Cu (%).

12.1.4 Laboratory Inspection

Accredited analytical laboratories for the project have not been inspected at this stage.

The on-site preparation laboratory was inspected as part of the site visit.

The 10 CP check samples were taken with the same method as previously sampled by AVOD with splitter and bagged and shipped to ALS Chemex İzmir Turkey Laboratory as Figure 13.5

	
A. Sampling at Core Shack	**B.** Sampling from crushed samples
	
C. Splitting the crushed samples	**D.** Putting back the remaining sample
	
E. Cleaning with compressed air against contamination.	**F.** Sample bagging and sealing for ALS Chemex.

Figure 12.6: Resampling Period.

G. Packaged Samples for batching.	**H.** Both samples and rejects were shipped

Figure 12.6: Resampling Period

12.2 Quality Control

As part of the drilling, Bordokum submitted one type of certified reference materials (CRM), blank material and field duplicates, on an approximate ratio of 1:20. Thirty standards, blanks and duplicates (90 total) were submitted.

Quality control monitoring is undertaken to ensure that the chemical data used are as reliable as possible to meet the objective of the exploration and resource development programme. In advanced exploration projects, quality control and assurance programmes are designed to ensure the high integrity of data fit for the purpose of obtaining reliable and accurate, reportable mineral resource and reserve estimates.

The Quality Assurance and Quality Control (QA/QC) programme adheres to internationally accepted standards.

A summary of the QA/QC available for the 2018 drilling. Selected charts for the major QC databases are presented in the following sections.

12.2.1 Certified Reference Materials

One type of CRM was used in the programme, OREAS 623 which is a copper ore grade sulphide material. OREAS 623 was prepared from Zn and Cu VHMS ores sourced from the Gossan Hill deposit at Golden Grove located 338km NNE of Perth in the Murchison Province of the Archaen Yilgarn Craton, Western Australia. No oxide Cu CRM was used.

Shewhart Control Charts for the analysis of the Certified Reference Material samples are presented in Figure 12.7. No concerns were identified.

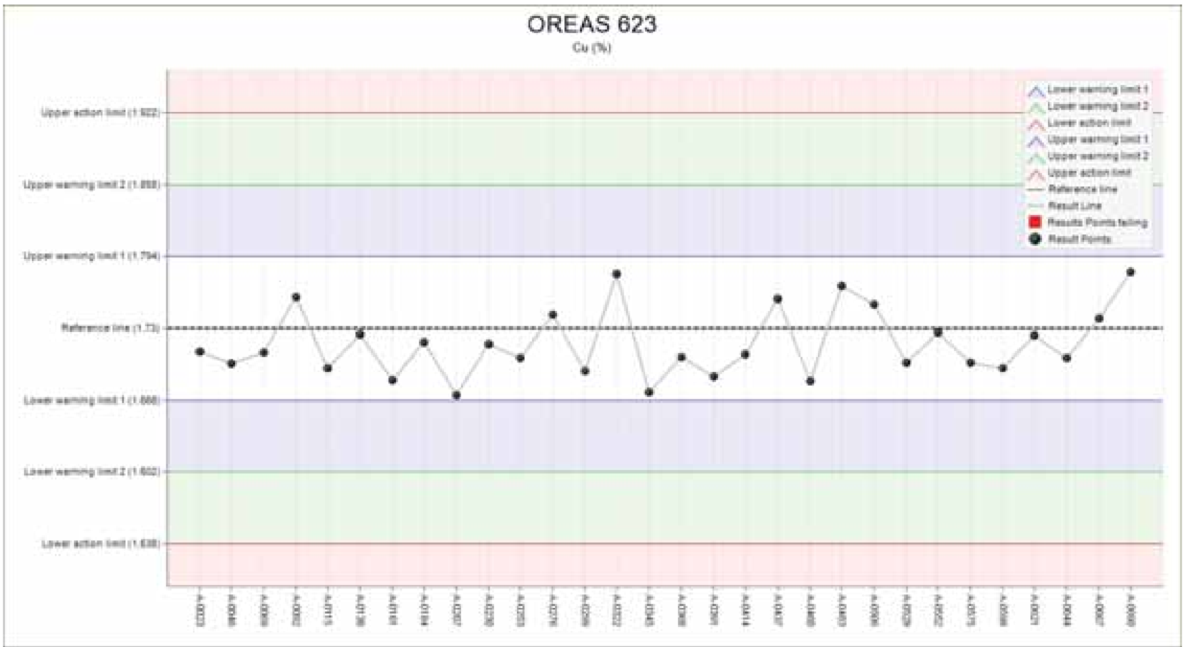


Figure 12.7: Shewhart Plot OREAS 623 – Cu%

12.2.2 Blanks

AVOD submitted 30 blanks as part of the database. There were no issues associated with this data.

12.2.3 Coarse Reject Field Duplicates

Every 20th sample, the full reject was passed through the splitter again to produce a field duplicate of about >1kg. Scattergram charts for the analysis of 30 duplicate drill core samples are presented in Figure 12.8. Precision was found to be excellent.

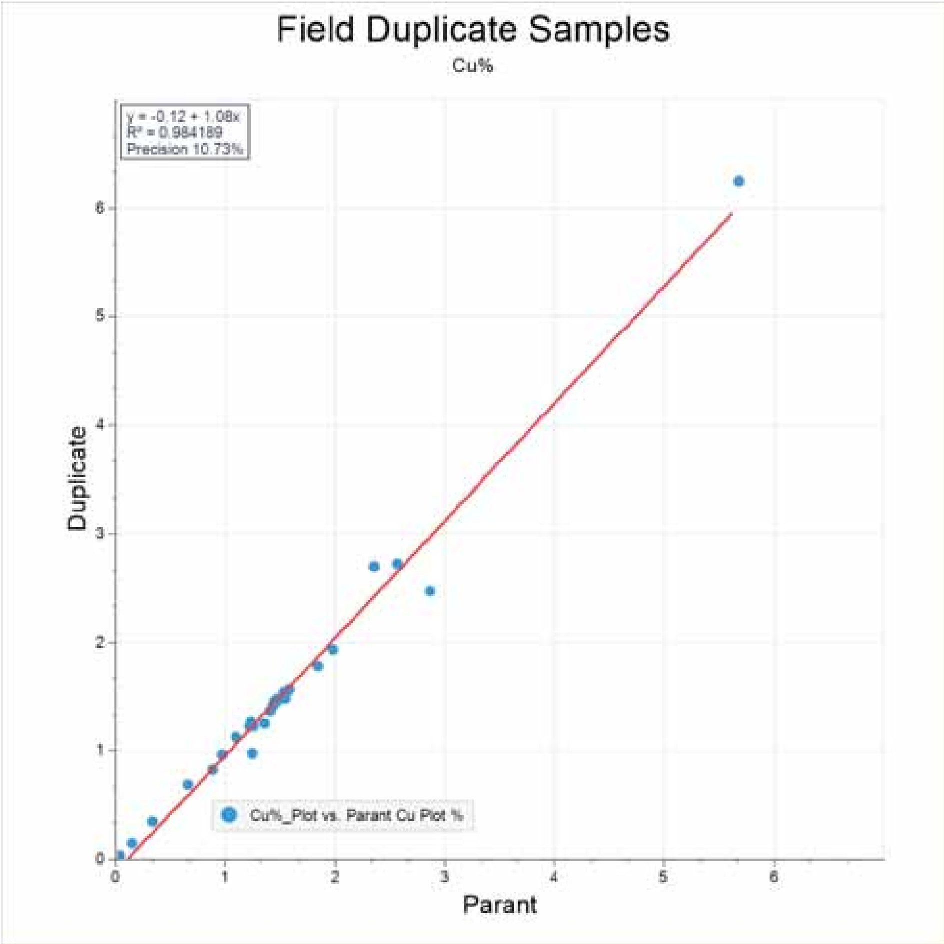


Figure 12.8: Field duplicate analysis.

12.3 Comments

No issues have been identified with the available quality control data. It is noted that quality control samples were inserted sequentially at a 1:20 ratio. It is better practice to target quality control samples towards a range of mineralization styles and grades and insert them on a random basis while maintaining the ratio.

13 Mineral Processing and Metallurgical Testing

No mineral processing or metallurgical test work has been completed.

14 Mineral Resource Estimates

The methodology for the Mineral Resource Estimate for the Avod Çorum Copper deposit to which this technical report relates is described in the following sections of the report.

14.1 Software Used

The Resource Estimate was completed using Micromine 2020 64bit 3d modelling and resource estimation software.

14.2 Input Data Summary

The input data used for estimation included:

- Topographic Digital Terrain Model (DTM) sourced from a drone survey of the project area generated using photo-orthogrametry with sub 1m resolution.
- 20 diamond drillholes:
    - Easting 640241 to 641114 mE
    - Northing 4430376 to 4431211 mN
    - Elevation (DTM) 1222.5 to 1302.8 mZ
    - Elevation (Orig) 1229 1297 mZ
    - Azimuth 0° to 305°
    - Inclination -90° to -60°
    - Max Depth 57.7 to 105 m
- 615 1 m long multi element assay samples over the same suite of elements
- 615 bulk density determinations
- 1377.2 m of geological logging.

14.3 Data Validation and Preparation

Micromine software was used to validate the drillhole database. Data checks include checks for overlapping and missing intervals, drillhole trace errors, missing survey data, lithology, consistency of drillhole lengths in collar and interval files. Checks for out of range values were also made. It was noted that different naming conventions for drillholes were used between different sheets in the excel database, for example different prefix for drillholes (GERD-001 vs GRD-001).

Downhole drilling surveys were completed every 30 m and showed little deviation from the collar survey, however all surveys for vertical drillholes had a recoded azimuth of 0.000 (North) and dips

< -90°. This indicates that some minor deviation of vertical holes occurred, but the direction of deviation was not recorded.

All drill collars were surveyed with non-differential GPS and as such may be subject to errors of up to 10m, although more typically 5-3 m. As such the above issues with drillhole survey are negligible at this point in time. The drillhole collar elevations were determined from the DTM.

The database is considered suitable for use in Resources Estimation.

14.4 Geological Interpretation and Modelling

Mineralization is hosted in basalt and brecciated basalt, mineralization is interpreted to be sub horizontal and in the eastern area (Zone B) can be split into a number of zones based on weathering described as follows.

- Leach Cap – Containing moderate Cu and S concentrations
- Supergene Zone – Containing elevated Cu and low S Concentrations
- 2 Hypogene Zones – Containing Cu Sulphide mineralization.

The Western zone (Zone A) only has hypogene mineralization identified at this point in time, although potential exists for supergene mineralization to be present outside of the immediate drilling footprint.

Interpretation of the respective mineralised zones was completed using a combination of S and Cu grades, using an approximate 0.5% Cu threshold and geological logging of observed sulphide and oxide Cu mineralization. Wireframe solids were generated for each domain and were restricted to the DTM.

Example cross sections for zone A and B are shown in Figure 14.1 and Figure 14.2.

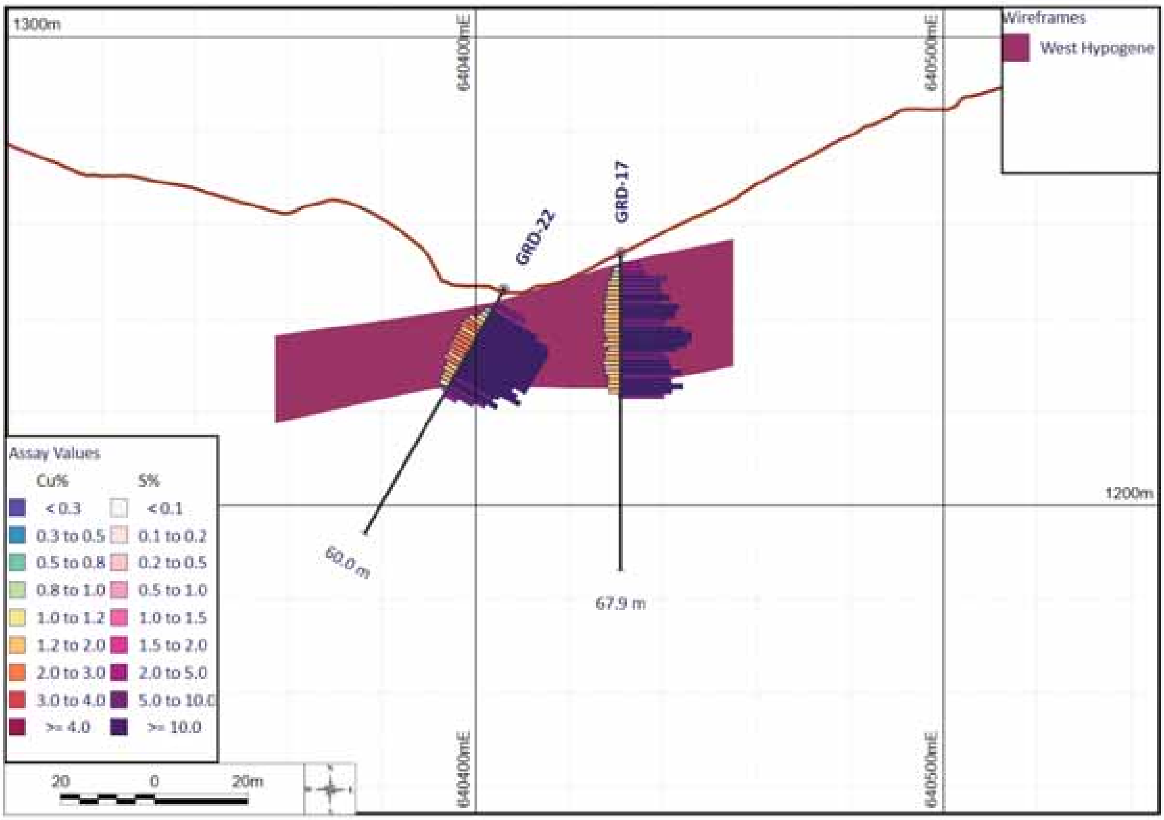


Figure 14.1: Example cross section Zone A (West)

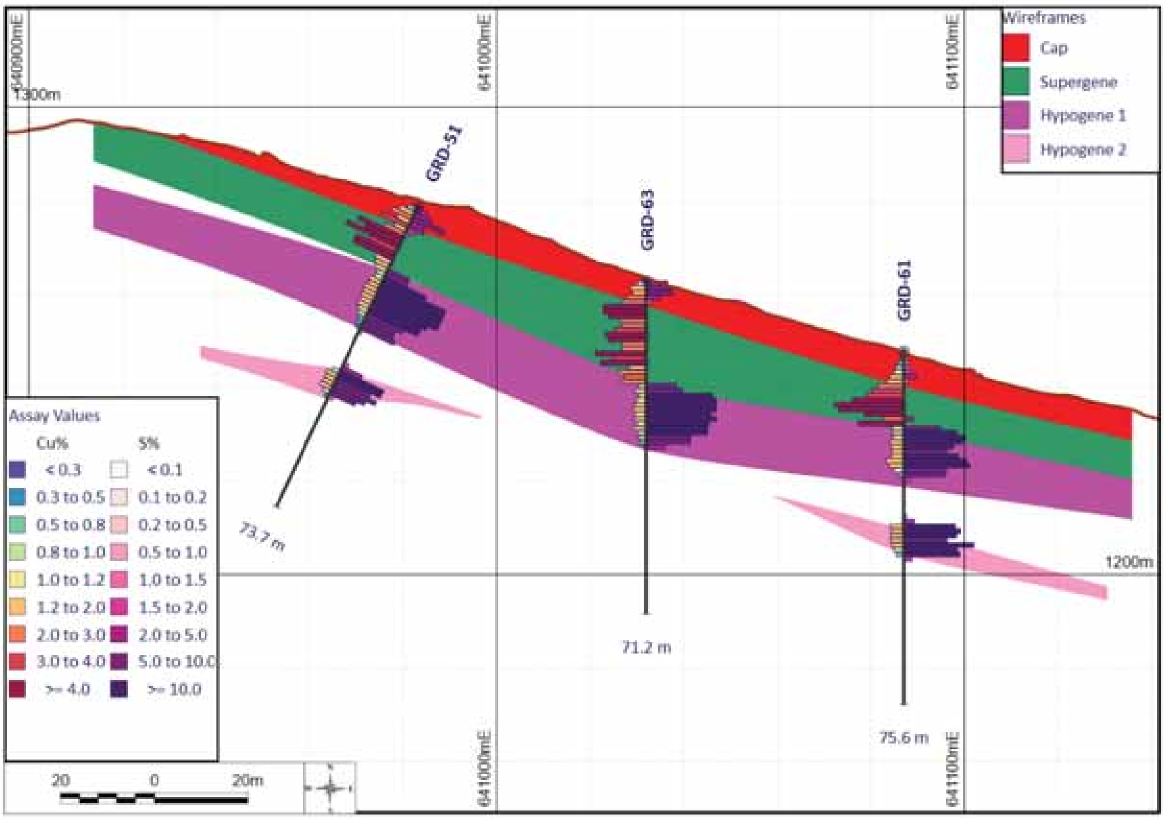


Figure 14.2: Example Cross Section Zone B (East)

14.5 Geochemical Analysis

Ternary diagram analysis (Figure 14.3) of Cu, Fe and S which are the mineral forming elements of most copper sulphide minerals shows distinct grouping of three material types. A further analysis was completed to assess S and Fe budgets to form Chalcopyrite ($CuFeS_2$) (Figure 14.4). White other Cu sulphide phases will be present in varying amounts (e.g. Chalcocite (Cu_2S) Covellite (CuS) Bornite (Cu_5FeS_4)) Chalcopyrite is likely to be the most common Cu sulphide mineral phase. Also note that Fe is present in the host rock forming minerals and as Pyrite (FeS_2). This analysis suggests that the Supergene zone contains insufficient S to form Chalcopyrite, Cu is most likely present as non-sulphide phases (e.g. Malachite) with minor secondary supergene Cu-S phases such as Chalcocite, Covellite and Bornite. The East Cap domain has a signature which suggests partially oxidized Cu sulphide mineralization, with a mix of Chalcopyrite and Cu oxide mineralization. The Hypogene domains have signatures that confirm sufficient S budgets to form Cu sulphides such as chalcopyrite, secondary supergene Cu-S phases may also be present.

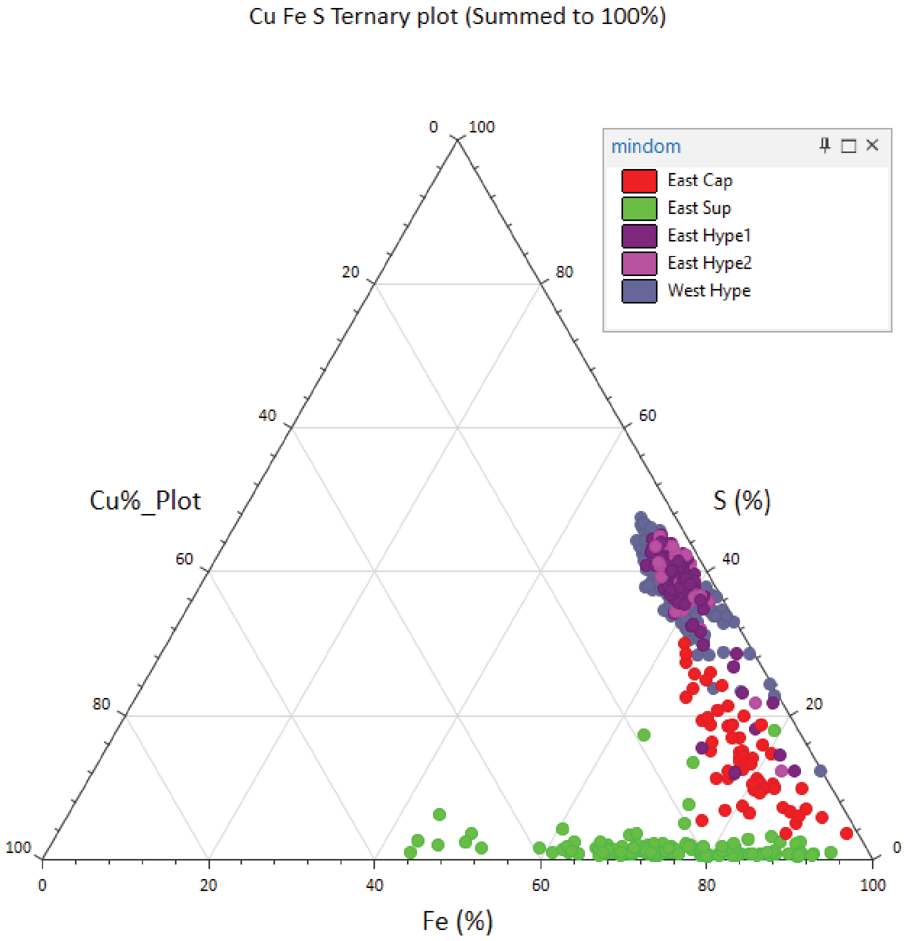


Figure 14.3: Ternary Plot for Cu Fe S.

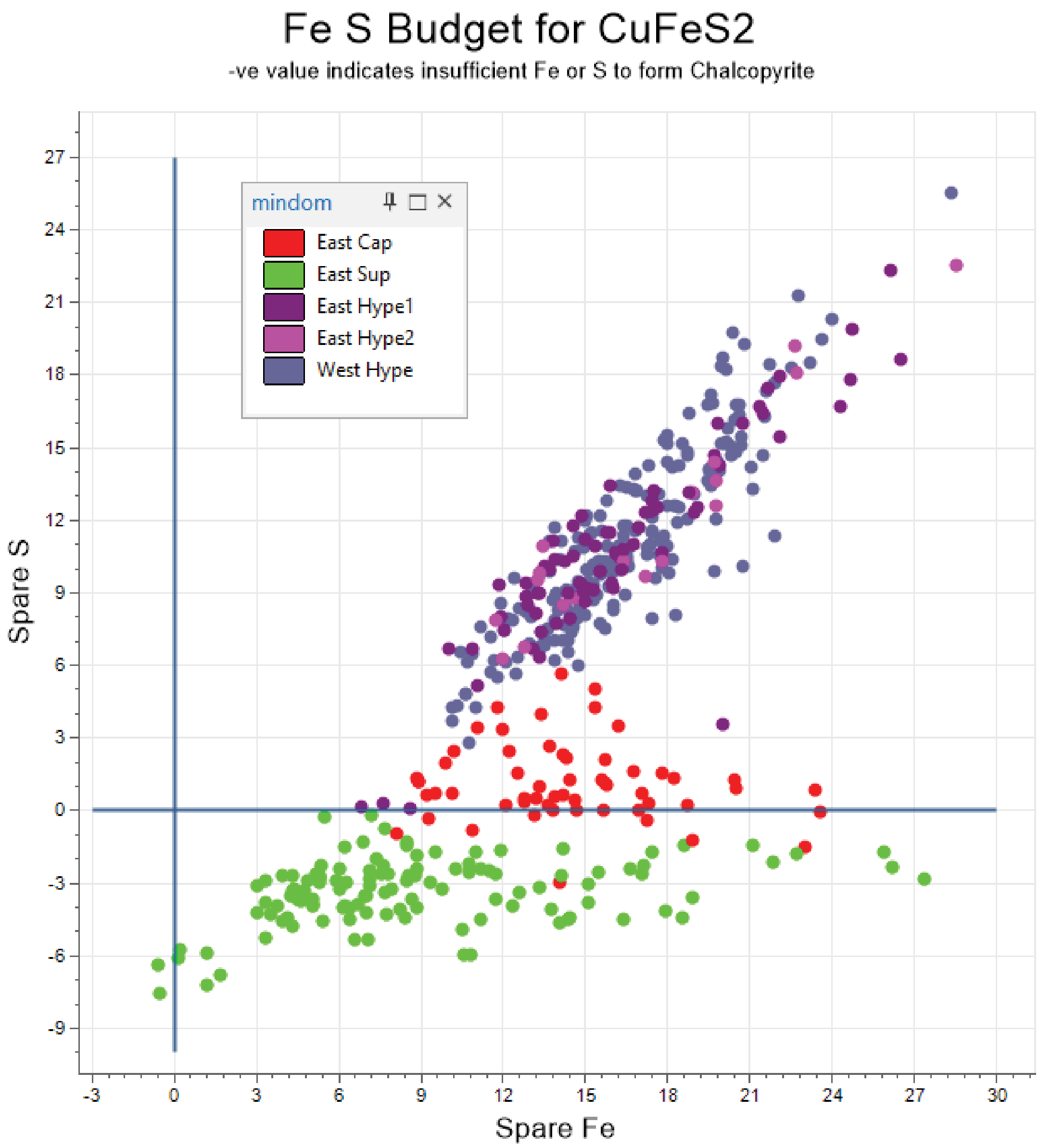


Figure 14.4: Fe S budget analysis for formation of Chalcopyrite.

14.6 Statistical Analysis

Descriptive statistics for all assays falling within mineral domain wireframes are shown in Table 14.1, histograms and box-whisker plots are shown in Figure 14.5. The statistics show data has been well domained into different sub populations, coefficient of variation values are low in all domains with noticeably lower S and higher Cu grades in the supergene oxide domain (East Sup).

Table 14.1: Cu and S descriptive statistics for assays in wireframe.

Field Name	Key	Min	Max	No of Points	Sum	Mean	Variance	Std Dev	COV
Cu%_Plot	ALL	0.01	7.83	555	1053.26	1.90	1.37	1.17	0.62
S (%)	ALL	0.06	27.79	555	4573.92	8.24	39.16	6.26	0.76
Cu%_Plot	West Hype	0.01	3.05	235	365.94	1.56	0.30	0.55	0.35
S (%)	West Hype	1.19	27.79	235	2865.36	12.19	18.41	4.29	0.35
Cu%_Plot	East Cap	0.14	4.14	65	111.52	1.72	0.43	0.65	0.38
S (%)	East Cap	0.39	7.64	65	190.18	2.93	2.43	1.56	0.53
Cu%_Plot	East Sup	0.29	7.83	123	426.74	3.47	1.89	1.38	0.40
S (%)	East Sup	0.06	2.01	123	32.57	0.26	0.09	0.29	1.11
Cu%_Plot	East Hype1	0.10	1.90	104	118.49	1.14	0.15	0.39	0.34
S (%)	East Hype1	0.86	23.89	104	1150.31	11.06	19.88	4.46	0.40
Cu%_Plot	East Hype2	0.44	1.56	28	30.58	1.09	0.13	0.36	0.33
S (%)	East Hype2	1.12	23.81	28	335.51	11.98	23.11	4.81	0.40

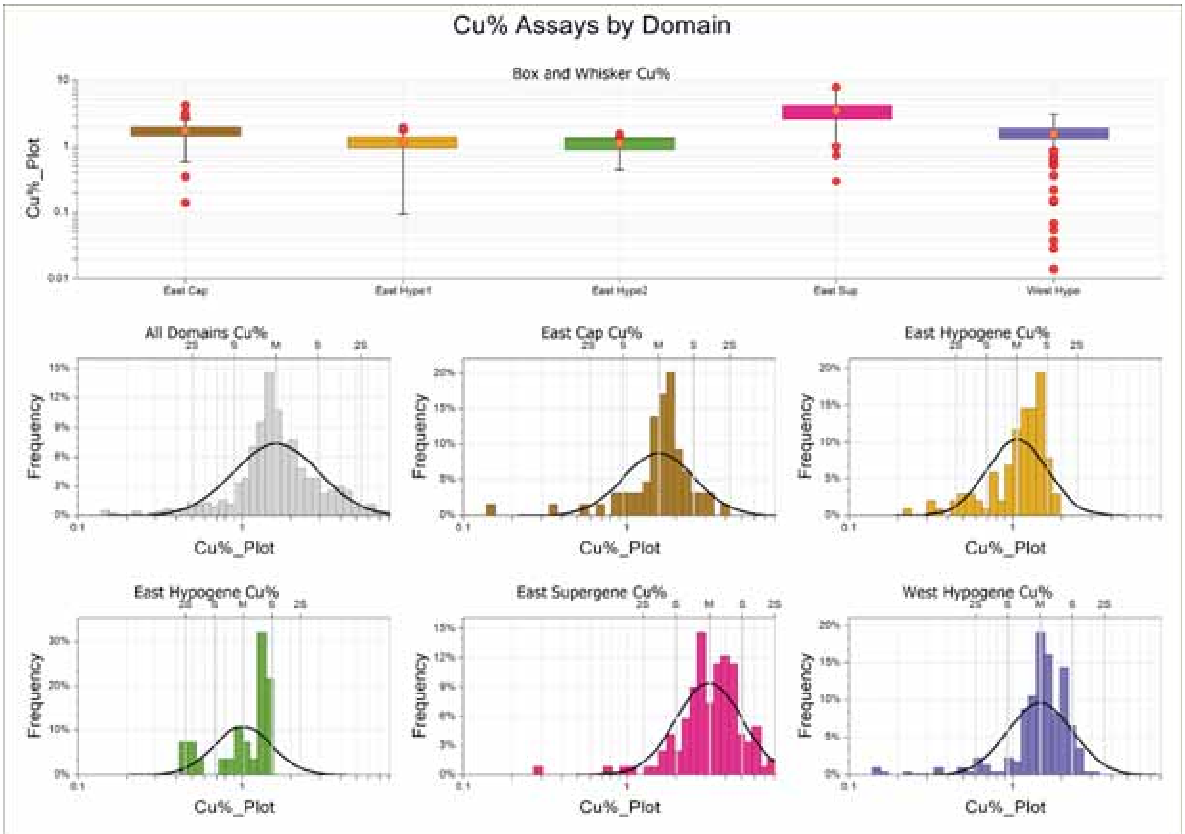


Figure 14.5: Histograms and Box-Whisker plot for assays in mineralized wireframe domains.

Cu oxide and Cu sulphide mineralization would require different processing methods with different operating costs and anticipated metallurgical performance. In the absence of metallurgical testwork and petrographic and mineralogy studies the following observations are important in making assumptions relating to mineral processing. It should be noted that identification of different Cu-S mineral phases in drill core can be difficult and estimation of model percentages of different phases is qualitative.

14.7 Compositing and top cutting

Drillhole data was composited to 2 m with a minimum accepted length of 1 m. Composites were not allowed to span domain boundaries. Length weighted averaging was used. New coordinates were generated for the composite mid-point.

Analysis of Cu histograms and cumulative frequency curves for the composite data showed no significant outlier values and no top cutting was applied. This was also confirmed during grade interpolation. Copper descriptive statistics for assays and composites are shown in Table 14.2.

Table 14.2: Cu % Statistics for Assays and Composites.

Key	Min	Max	No of Points	Sum	Mean	Variance	Std Dev	Weighted Mean
Assay Samples Cu%								
ALL	0.01	7.83	555	1053.26	1.90	1.37	1.17	1.90
East Cap	0.14	4.14	65	111.52	1.72	0.43	0.65	1.72
East Hype1	0.10	1.90	104	118.49	1.14	0.15	0.39	1.14
East Hype2	0.44	1.56	28	30.58	1.09	0.13	0.36	1.09
East Sup	0.29	7.83	123	426.74	3.47	1.89	1.38	3.47
West Hype	0.01	3.05	235	365.94	1.56	0.30	0.55	1.56
2 m Composites Cu%								
ALL	0.25	7.16	286	540.30	1.89	1.19	1.09	1.90
East Cap	0.25	3.17	34	58.85	1.73	0.30	0.55	1.72
East Hype1	0.32	1.60	53	59.78	1.13	0.12	0.34	1.14
East Hype2	0.44	1.51	15	15.90	1.06	0.10	0.32	1.09
East Sup	1.07	7.16	64	220.46	3.44	1.25	1.12	3.47
West Hype	0.27	2.80	120	185.31	1.54	0.27	0.52	1.56

14.8 Variography

Due to a relatively small amount of data in each mineral domain variography was conducted on the east hype 1 domain only and applied to all domains. Although the West Hypogene domain contained more data points overall, few sample pairs were present across strike (approximately E-W direction).

Variogram axis were determined by estimating the strike dip and pitch of the mineralization. The azimuth and plunge of each axis, with angular tolerance and intervals is shown in Table 14.3 below. No bandwidth was applied to maximize sample pairs. A nugget value of 0.4 and a total sill of 0.116 were applied to single component spherical models with ranges of 110, 100 and 10 m (Figure 14.6).

Table 14.3: Experimental semi variogram parameters.

Axis	Azi°	Tolerance°	Plunge°	Tolerance°	Interval m	No of intervals.	Nugget	Total Sill	Range
1	178.9	90	0.1	10	30.3	5	0.4	0.116	110
2	268.9	90	-9.7	10	31.9	5	0.4	0.116	100
3	269.5	10	80.3	45	1.9	5	0.4	0.116	10

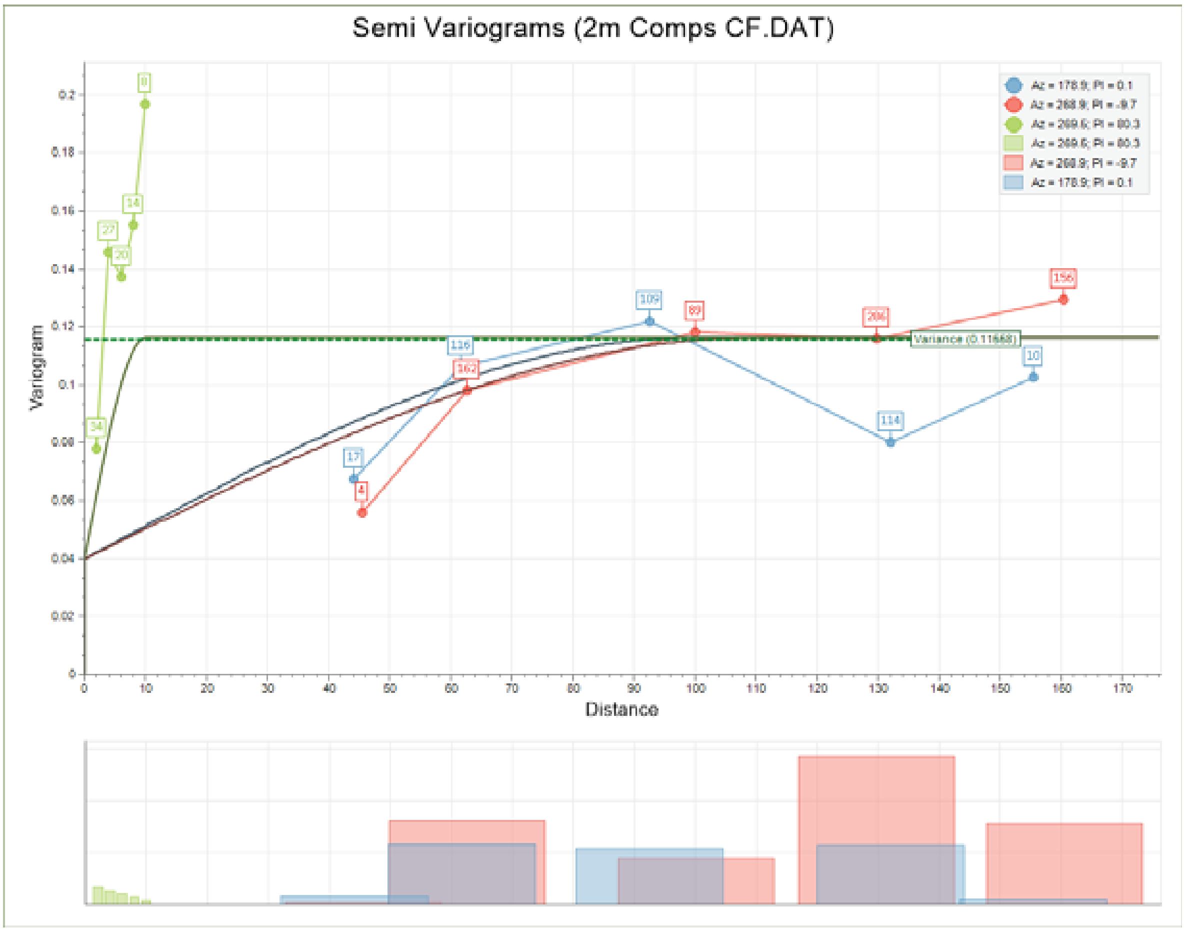


Figure 14.6: Directional Semi Variograms for East Hypogene 1 domain, sample pairs shown as pars and numbers.

14.9 Block Model Estimation

A Block model was generated and restricted to the mineralization wireframes; the wireframe domain codes were written to the block model. The block model had a cell size of 25 mE x 25 mN x 4 mZ, a minimum sub block size of 2.5 mE x 2.5 mN x 1mZ was applied. Drill spacing is variable and the block size is approximately a half to one quarter of the drill spacing in the east zone. In the western zone blocks are approximately half to one third of the drill spacing across strike (EW) and approximately one firth in the north south direction.

The block model was interpolated on a domain by domain basis using ordinary kriging and the single variogram model described in section 14.8. Block kriging was used with discretization of 10 x 10 x 4 divisions E x N x Z. Blocks were interpolated at the parent block scale.

A variable search was written to the block model to aid grade mapping which was generated from wireframe contact surfaces using a cell size off 100 m and the unfold trend function in Micromine 2020. For the western are the base of the mineralized contact was used, in the eastern are the base of the supergene domain was used.

The data search in the eastern area was 150 x 150 x 20 m and 180 x 180 x 20 m in the west. Both ellipsoids used one sector and a maximum number of 16 composites and a maximum of 4 samples per drillholes.

Due to some negative weights being introduced by screening effects negative kriging weights were set to zero, experimentation with kriging parameters did not remove the negative weights while restricting local conditional bias.

The above parameters were tested and optimized using Quantitative Kriging Neighbourhood Analysis and by inspection of the block model in cross section.

14.10 Block Model Validation

The block model was validated on a local and global basis by comparison of input data and the block model in 2 dimensions and by comparison of input and output statistics. A comparison of statistics shows that mean values are within extremely close limits, the output histograms are indicative of smoothing which is to be expected given the sparse data. No estimates of declustered means was undertaken at this point in time due to the sparse data spacing. Grade mapping is found to be satisfactory with higher and lower grades well preserved (Figure 14.9 and Figure 14.10).

Table 14.4: Comparison of 2 m Composite and Block Model Cu% statistics.

Key	Min	Max	No of Points	Sum	Mean	Variance	Std Dev	Weighted Mean
2 m Composites Cu%								
ALL	0.25	7.16	286	540.30	1.89	1.19	1.09	1.90
East Cap	0.25	3.17	34	58.85	1.73	0.30	0.55	1.72
East Hype1	0.32	1.60	53	59.78	1.13	0.12	0.34	1.14
East Hype2	0.44	1.51	15	15.90	1.06	0.10	0.32	1.09
East Sup	1.07	7.16	64	220.46	3.44	1.25	1.12	3.47
West Hype	0.27	2.80	120	185.31	1.54	0.27	0.52	1.56
Block Model Cu%								
ALL	0.51	4.71	22716	42422.21	1.87	0.76	0.87	1.86
East Cap	0.99	2.43	5336	9474.08	1.78	0.04	0.20	1.77
East Hype1	0.77	1.44	5087	5682.07	1.12	0.01	0.10	1.13
East Hype2	0.89	1.16	1016	1053.56	1.04	0.00	0.06	1.04
East Sup	2.21	4.71	5448	17929.01	3.29	0.13	0.36	3.33
West Hype	0.51	2.26	5829	8283.50	1.42	0.07	0.27	1.52

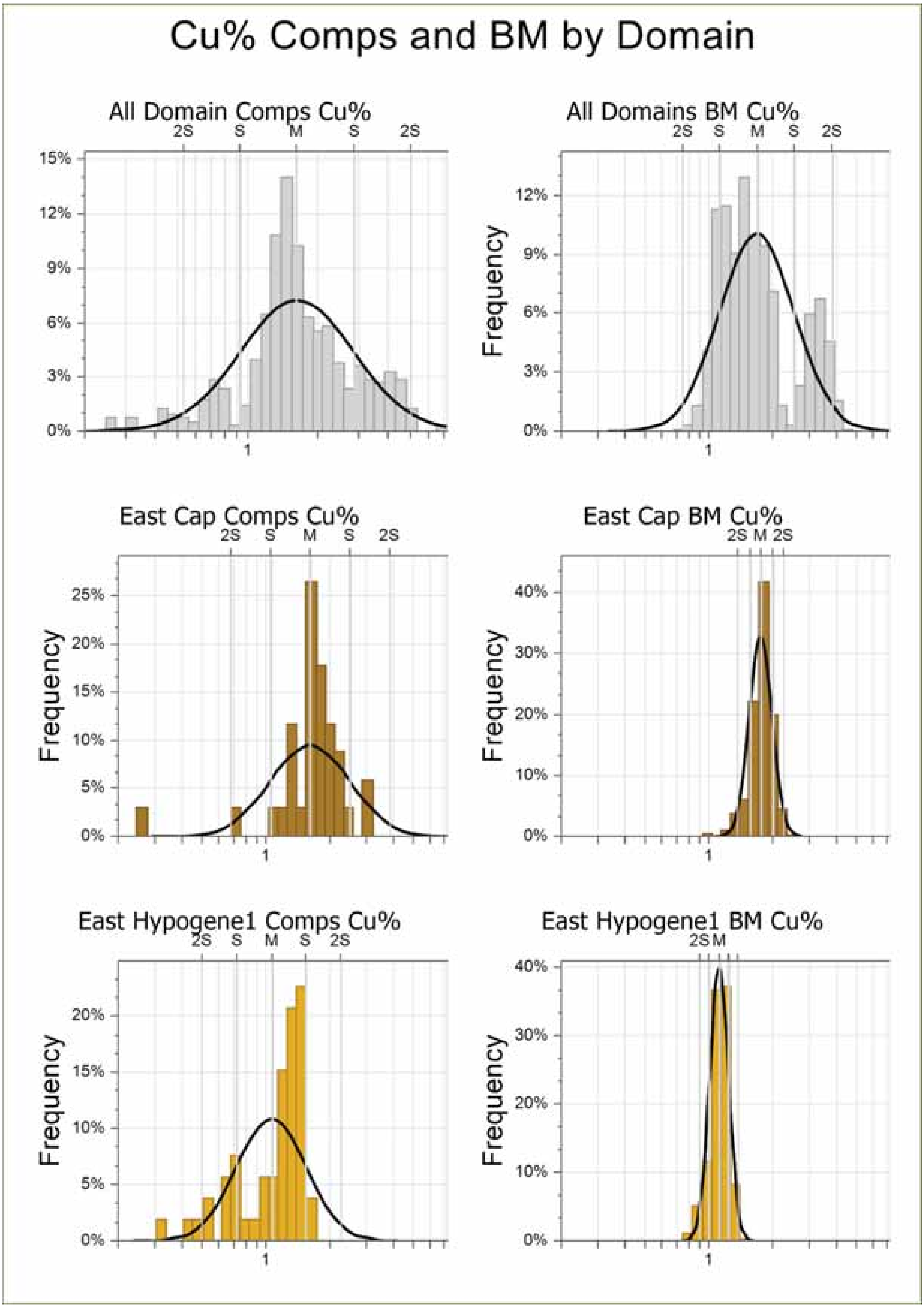


Figure 14.7: Composites vs Block Model Histograms

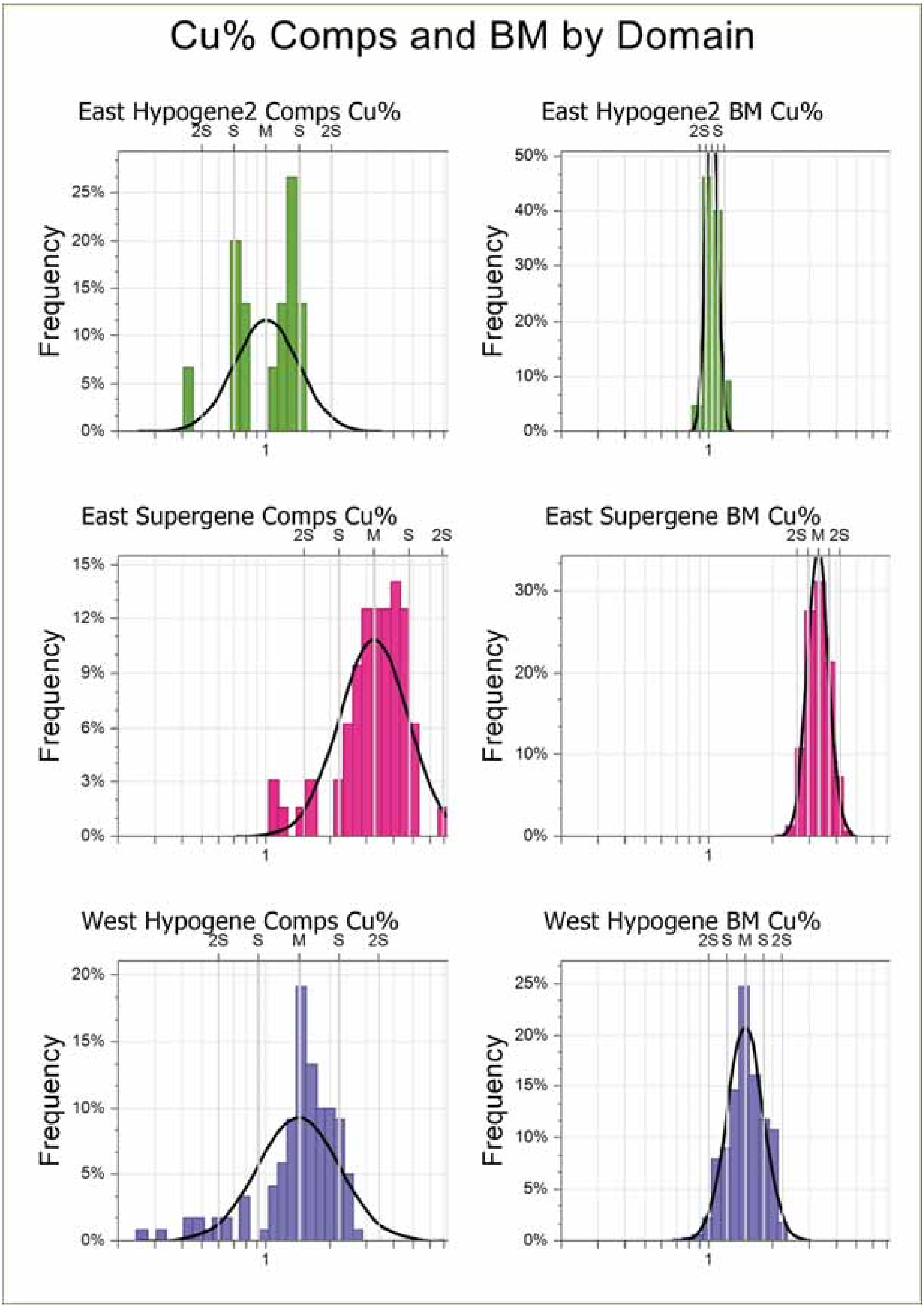


Figure 14.8: Composites vs Block Model Histograms cont.

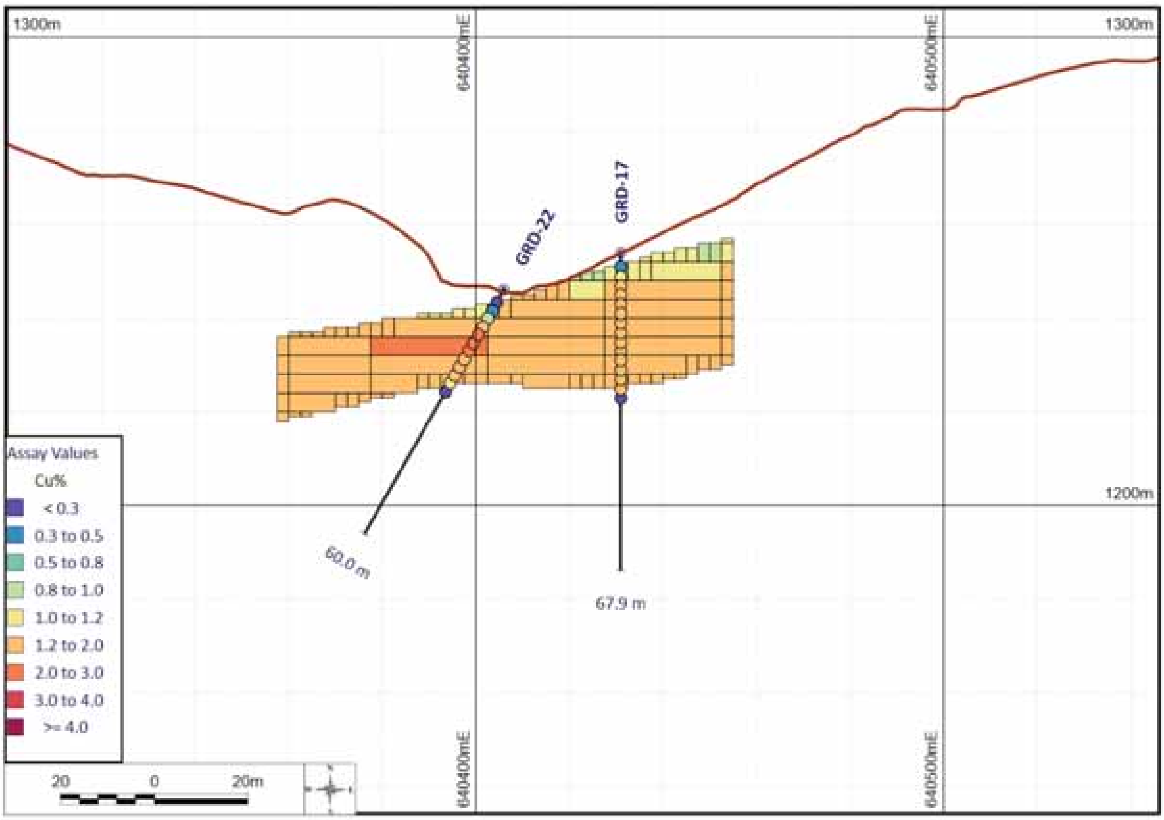


Figure 14.9: Example Block model cross section zone A (West)

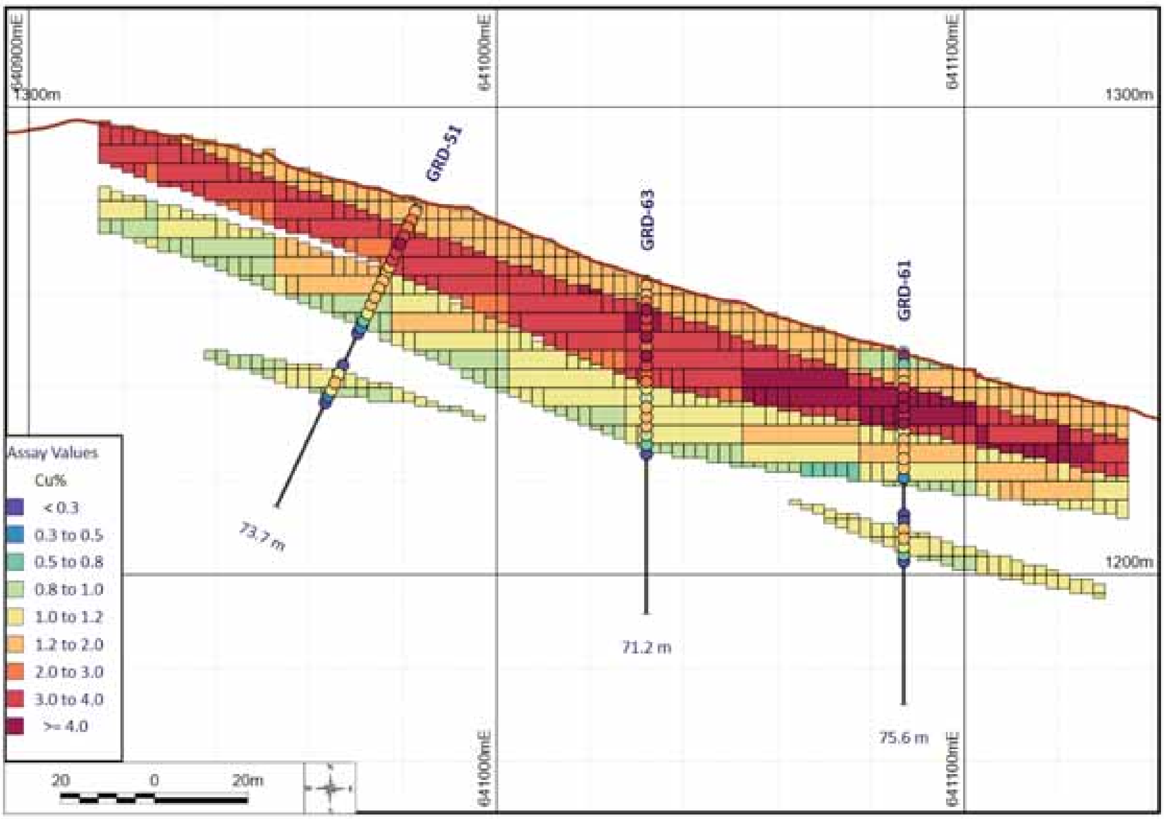


Figure 14.10: Example Block model cross section zone B (East)

14.11 Grade Tonnage Curves and Tabulations

The estimated grade tonnage curve for all blocks in the block model are presented in Figure 14.11 with tabulations presented for each material type in Table 14.5.

The grade tonnage curve for the current model is fairly insensitive below 1% Cu, should the resource be updated with tighter drill spacing and a smaller block size, the sensitivity may increase.

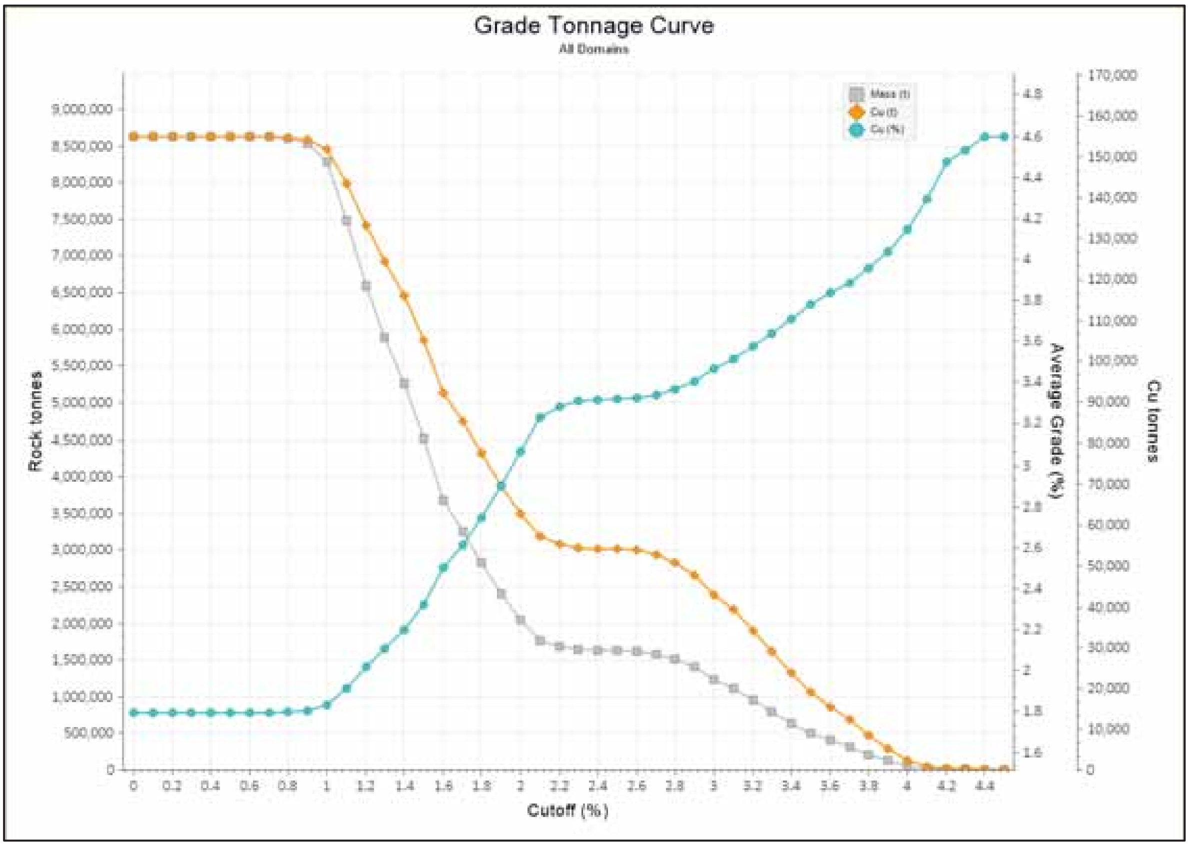


Figure 14.11: Grade tonnage curves for all material types

Table 14.5: Estimate of rounded grade tonnage estimates.

Cut-Off	Zone	Oxidation	Volume	Tonnes	Density	Cu[%]	Cu[t]
2	Zone A - West	Sulphide	100,000	320,000	3.2	2.1	6,700
1.8	Zone A - West	Sulphide	270,000	860,000	3.2	2	17,000
1.6	Zone A - West	Sulphide	460,000	1,500,000	3.2	1.9	27,000
1.4	Zone A - West	Sulphide	930,000	3,000,000	3.2	1.7	50,000
1.2	Zone A - West	Sulphide	1,200,000	3,900,000	3.2	1.6	62,000
1	Zone A - West	Sulphide	1,400,000	4,500,000	3.2	1.5	69,000
0.8	Zone A - West	Sulphide	1,400,000	4,600,000	3.2	1.5	69,000
0	Zone A - West	Sulphide	1,400,000	4,600,000	3.2	1.5	70,000
4	Zone B - East	Oxide	22,000	57,000	2.7	4.1	2,400
3	Zone B - East	Oxide	460,000	1,200,000	2.7	3.5	43,000
2	Zone B - East	Oxide	620,000	1,600,000	2.7	3.3	55,000
1	Zone B - East	Oxide	620,000	1,600,000	2.7	3.3	55,000
0	Zone B - East	Oxide	620,000	1,600,000	2.7	3.3	55,000
2	Zone B - East	Oxide/Sulphide	29,000	79,000	2.7	2.1	1,700
1.8	Zone B - East	Oxide/Sulphide	120,000	330,000	2.7	1.9	6,300
1.6	Zone B - East	Oxide/Sulphide	200,000	550,000	2.7	1.8	10,000
1.4	Zone B - East	Oxide/Sulphide	230,000	630,000	2.7	1.8	11,000
1.2	Zone B - East	Oxide/Sulphide	240,000	660,000	2.7	1.8	12,000
0	Zone B - East	Oxide/Sulphide	240,000	660,000	2.7	1.8	12,000
1.4	Zone B - East	Sulphide	1,200	3,800	3	1.4	54
1.2	Zone B - East	Sulphide	130,000	380,000	3	1.3	4,800
1	Zone B - East	Sulphide	480,000	1,500,000	3	1.1	17,000
0.8	Zone B - East	Sulphide	560,000	1,700,000	3	1.1	19,000
0.5	Zone B - East	Sulphide	560,000	1,700,000	3	1.1	19,000
0	Zone B - East	Sulphide	560,000	1,700,000	3	1.1	19,000
4	TOTAL		22,000	57,000	2.7	4.1	2,400
3	TOTAL		460,000	1,200,000	2.7	3.5	43,000
2.5	TOTAL		610,000	1,600,000	2.7	3.3	54,000
2	TOTAL		750,000	2,000,000	2.7	3.1	63,000
1.8	TOTAL		1,000,000	2,800,000	2.8	2.7	78,000
1.6	TOTAL		1,300,000	3,700,000	2.9	2.5	92,000
1.4	TOTAL		1,800,000	5,300,000	3	2.2	120,000
1.2	TOTAL		2,200,000	6,600,000	3	2	130,000
1	TOTAL		2,700,000	8,300,000	3	1.8	150,000
0.8	TOTAL		2,800,000	8,600,000	3	1.8	150,000
0	TOTAL		2,900,000	8,600,000	3	1.8	160,000

14.12 Estimates of Process Recoveries and Operating Costs

The estimates have been made based on a private database of operations and feasibility studies and also on public domain material. Data from a number of sites have been selected and then modified as considered appropriate for the material at the Çorum copper project.

Estimates have been made for the three material types which have been defined- sulphide, oxide and mixed.

Research based assumed inputs to process recoveries and operating costs are considered reasonable for the purpose of establishing indicative marginal cut-off grades for the reporting Inferred resources which demonstrate potential for future economic extraction.

14.12.1 Process recoveries

As no metallurgical testwork has been completed and no data is available for any operations in the vicinity high level and conservative estimates have been made for process recoveries.

Note that for sulphide, the process recovery and concentrate grade are inter-related and depend on economic factors and trade-offs. Concentrate grade also depends on the proportions of the different copper minerals present. A degree of oxidation is expected in the majority of the sulphide mineralization and such a conservative value has been applied. Also note that for oxide, there is no knowledge of the acid soluble Cu (Cu_{AS}) content only of the total copper content (Cu_{TOT}). Cu_{TOT} is not a reliable predictor of Cu_{AS} which is used to predict the acid leachable copper content. The mixed material is anticipated to have lower recoveries than fresh sulphide material. Estimated process recoveries are shown in Table 14.6.

Table 14.6: Assumed process recoveries

Unit	Process recovery (%)
Sulphide	80
Oxide	50
Mixed (overall)	50
Mixed (sulphide)	60
Mixed (oxide)	40

14.12.2 Operating costs

The process routes are assumed to be industry standard. Due to the lack of site specific information, very high level and conservative estimates of operating costs have been made.

For sulphide material this process route is crushing, milling, flotation to produce a saleable concentrate and conventional tailings disposal. Concentrate will be transported to a third party operation for toll smelting and refining to cathode, the cost of which is included in the estimate.

For oxide material the process is crushing, milling, tank leach, solvent extraction, electrowinning to produce saleable cathode, neutralisation and conventional tailings disposal. The grades and quantities suggest that tank leach is preferred to heap leach. The sulphide and oxide components of the mixed material will be processed by a combination of the methods outlined for the main material types. Allowances have been made for general and administrative costs and rehabilitation. Operating costs are estimated as shown in Table 14.7.

Due to the shallow nature of the deposits open pit mining is assumed.

Table 14.7: Estimated operating costs

Material Type	Mining USD$/t	Processing cost (USD$/t feed to plant)	Rehabilitation USD$/t	G&A USD$/t (Assumed $1.5M PA and 750 Ktpa)	Total USD$/t
Sulphide	2	27	1	2	32
Oxide	2	22	1	2	27
Mixed (overall)	3	25	1	2	31

14.13 Economic Cut-Off

Based on the estimates presented in section 14.13, a breakeven economic cut-off grade was determined using a Cu price of USD$5500/t based on the London Metal Exchange December 2022 contract price as of 27th May 2020. The breakeven cut-off grade calculations are presented in Table 14.8. Numbers have been rounded for final selection of cut-off grade. The cut-off grade is calculated using the following formula.

$$\frac{(Total\ Operating\ Cost\ USD\$/t)}{(Cu\frac{USD\$}{100}) * (Total\ Recovery\ Factor) * (Selling\ Cost\ Factor)}$$

Table 14.8: Cut-off grade determination

Material	Cu USD $/t	Mining Recovery Factor	Process Recovery Factor	Total Recovery Factor	Selling Cost Factor (2.5%)	Total Operating Cost USD$/t	Cut-off Grade Cu%	Cut-off Grade (Rounded) Cu%
Sulphide	5500	0.95	0.8	0.76	0.975	32	0.79	0.8
Oxide	5500	0.95	0.5	0.475	0.975	27	1.06	1
Mixed	5500	0.95	0.5	0.475	0.975	31	1.22	1.2

14.14 Risk Assessment and Resource Classification

An assessment of risk and the decision-making process leading to mineral resource classification is given in Table 14.9 along with the recommended mitigation to be completed in future work programs.

Table 14.9: Risk Assessment.

Subject	**Comments**	**Risk Rating 1:Low-5:High**	**Recommended Mitigation**
Database Integrity	Database was found to be without significant validation errors, although data was transcribed from paper to Excel where transcription errors may occur. The Excel workbook required some manipulation to import (e.g. different naming conventions for collars).	2	Future drillholes should be logged directly to tabulated software. All existing logs should be re checked for correctness. A relational database should be constructed and maintained with built in validation checks.
Survey	Non differential GPS survey of drill collars. Collar location accuracy may be >10 m. Downhole surveys were completed every 30 m and generally showed little deviation; however azimuths and dips were not correctly recorded. Drillhole azimuths make no reference to true, magnetic or grid north.	4	Complete Differential GPS survey of all drill collars. Continue DGPS survey of all collars moving forward. Improve downhole survey by recording azimuth between 0 and 360 and dip between -90 and 0 Record azimuth type and declination and date in drillhole database
DTM	DTM is of high accuracy (<1m)	1	Continue to use current DTM. Where earthworks have been completed for drill pad preparation, use DGPS elevations for collars. Update DTM if significant earthworks are completed which may be material to the resource estimate or further studies.
Sampling	Steps have been taken to achieve representative samples through crushing and splitting. Sampling has not been conducted to geological or domain boundaries, although this may be difficult to see.	2	Review sampling boundaries during further sampling to ensure samples do not span domain boundaries e.g. Supergene /Hypogene mineralization.

Subject	**Comments**	**Risk Rating 1:Low-5:High**	**Recommended Mitigation**
Quality Control	Ratio of insertion of QC samples is good. No issues identified with QC results. However only one certified reference material was used which was sourced from sulphide material. Assessment of accuracy of Cu Oxide material is therefore not possible.	3	Increase the number of certified reference materials in use to include a Cu oxide CRM at or around oxide resource grade.
Geological Interpretation and Continuity	The geological interpretation is reasonably apparent from the current data spacing. Alternative interpretations may include steep angle feeder zones which may impact on tonnage. The current geological continuity is largely implied but not confirmed.	3	Complete infill drilling to confirm geological continuity. See below for further comments.
Grade continuity and data spacing	Data spacing is wide, grade continuity is implied but not confirmed. A significant portion of the resource is extrapolated.	4	Complete infill drilling to confirm grade continuity. Initially 50 mE x 50 mN spacing is recommended with a small area of closer spaced (~25 m) drilling, approximately 4-5 drillholes. This may be achieved with inclined drillholes which would also support geological interpretation.
Metallurgy	No metallurgical test work has been completed and metallurgical recovery is assumed. The metallurgical recovery can seriously impact on cut off grade and resource tonnages. No Acid soluble Cu assay tests (only total Cu) were completed.	5	Complete initial bench scale metallurgical study of all material types. Re analyse all coarse rejects for acid soluble Cu
Overall Perceived Risk	**The input data is of a reasonably high quality, geological and grade continuity are implied to be high, but this is not confirmed. The current data spacing and use of non-differential GPS for collar surveys both prevent classification above Inferred. An Inferred classification is warranted and is consistent with the perceived risk and stage of the project.**	**3-4**	**All resources are classified as Inferred for this study.** **Further infill drilling and improved survey are key for increasing confidence in resources and classification, along with initial metallurgical testing and other recommendations identified above.**

14.15 Resource Statement

The total estimated Resources reported in accordance with the UMREK Code 2018 for the Avod Çorum Cu deposit have an effective date of 27th May 2020 and are reported as **approximately 8.6 million tonnes at 1.8 % Cu for 150,000 tonnes of Cu metal**. **All Resources are of the Inferred category.** A breakdown of the resources is shown in Table 14.10.

An Inferred Resource is defined by the UMREK code 2018 as follows.

"An Inferred Mineral Resource is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling.

Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

An Inferred Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to a Mineral Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration."

Table 14.10: Resource Estimate for the Avod Çorum Cu deposit, Turkey. All resources are Inferred resources. Numbers are rounded to reflect the relative accuracy of the estimate and as such discrepancies between individual values and totals may be present.

Zone	Oxidation	Cut-off Grade	Volume	Tonnes	Density	Cu grade %	Cu Tonnes
Zone A - West	Sulphide	0.8	1,400,000	4,600,000	3.2	1.5	69,000
Zone B - East	Oxide	1	620,000	1,600,000	2.7	3.3	55,000
Zone B - East	Mixed	1.2	240,000	660,000	2.7	1.8	12,000
Zone B - East	Sulphide	0.8	560,000	1,700,000	3	1.1	19,000
TOTAL			2,800,000	8,600,000	3	1.8	150,000

The Mineral Resource Estimates are based on all available exploration drilling data to the end of October 2018, metal pricing of USD$5500 per tonne of Cu is based on London Metal Exchange December 2022 contract price as of 27th May 2020. The cut off grades were estimated based on assumed and estimated operating costs and metallurgical recoveries described in section 14.12 of this report. The Mineral Resource Estimate was completed using wireframe restricted block models and ordinary kriging. The resource estimation methodology is described in detail in this section, 14, of this technical report.

In Zone A mineralization ranges from surface to approximately 45 m below surface and ranges approximately 260 mN x 245 mE. The model is extrapolated approximately 25 m outside the limits of the drilling with a maximum spacing between drill fences (North-South) of approximately 210

m. Mineralization ranges in thickness from approximately 8 to 35 m. The Resource is not extrapolated beyond the nominal sample spacing. The Resource is open to the north, south, east and west, limited exploration has been completed at depth beyond the current resource.

In Zone B mineralization ranges from surface to approximately 55 m below surface and ranges approximately 260 mN x 245 mE. The model is extrapolated approximately 50 m outside the limits of the drilling. Mineralized thickness includes coherent zones of approximately 35 m with some internal waste which is 2-5 m thick. Some smaller zones of mineralization down to a minimum of 1 m have been modelled where mineralization is interpreted to pinch. The Resource is not extrapolated beyond the nominal sample spacing. The Resource is open to the north, south, east and west, limited exploration has been completed at depth beyond the current resource.

The Resource block models are shown in plan view in

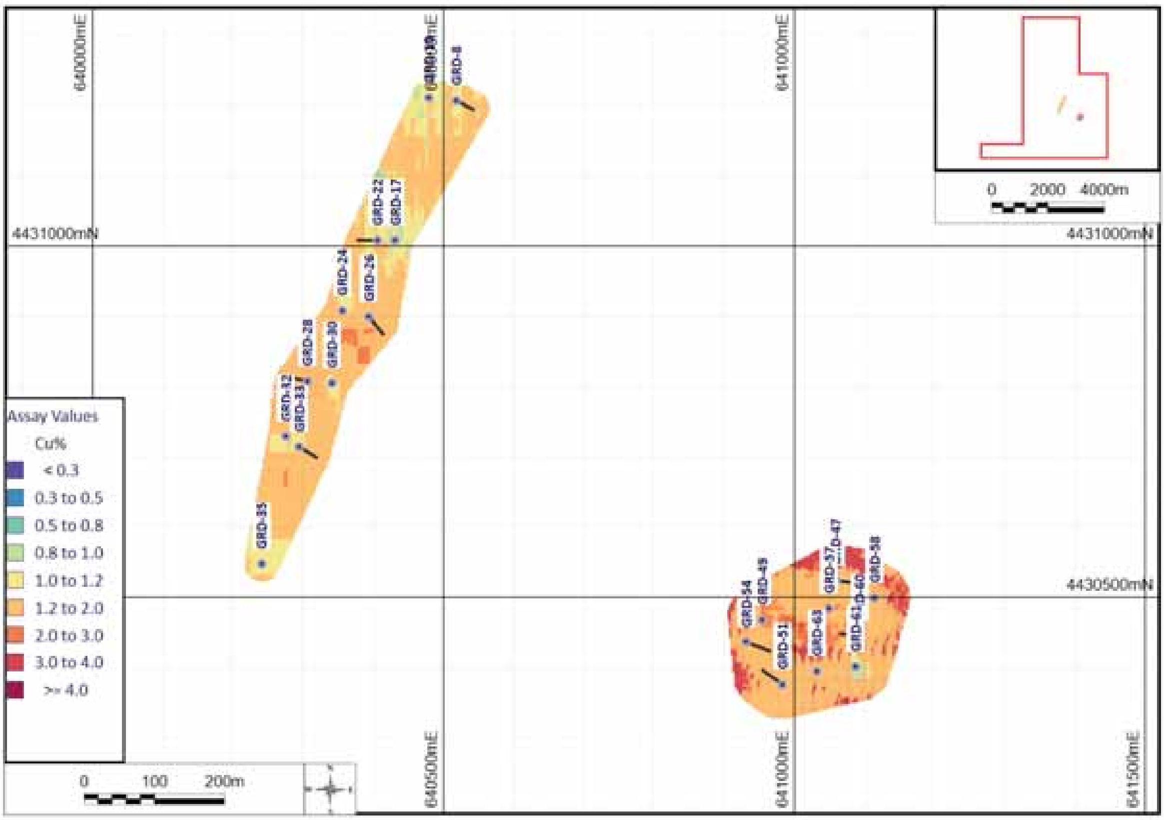


Figure 14.12: Resource Block Models in plan view.

15 Mineral Reserve Estimates

There are currently no mineral reserves defined for the project.

16 Mining Methods

There are currently no studies on mining methods defined for the project. It is anticipated open pit mining method is most likely due to the shallow, horizontal lentoid like nature of the deposit and proximity of deposit at or close to the surface.

17 Recovery Methods

There are no studies on recovery methods defined for the project. Based upon current understanding of ore mineralogy and comparison with similar deposits it is anticipated acid heap leach (oxide/mixed) and froth floatation (mixed/sulphide) are likely process and metal recovery methods, followed by refining by smelting.

18 Project Infrastructure

There is no additional project infrastructure for the project.

19 Market Studies and Contracts

No current market studies have been completed for the project at this time.

20 Environmental Studies, Permitting and Social or Community Impact

There are no environmental studies for the project. No red flags were identified during the site visit.

21 Capital and Operating Costs

No Capex or Opex calculations have been completed for the project at this time.

22 Economic Analysis

There has been no economic analysis completed for the project at this time.

23 Adjacent Properties

There are no known formal exploration, resource evaluation or mining studies for the immediate adjacent licences.

24 Other Relevant Data and Information

BDK and AMS are not aware of any other relevant information for the project.

25 Interpretations and Conclusions

The Çorum Copper deposit is considered an ophiolite hosted Volcanogenic Massive Sulphide (VMS) type deposit.

Limited exploration work to date within the project has identified two main mineralised areas.

At Zone A current drilling and confirmed mineralization is restricted to a topographic low, the mineralization within this low is interpreted to be the slightly weathered hypogene sulphide zone. Moving up slope from the valley (to the east or west) some iron oxidation is visible which may be consistent with the leach cap of a partially eroded supergene zone. There is also potential for a supergene oxide and secondary supergene sulphide zone to be present.

In the field at Zone B transitions between supergene and hypogene zones are not well observed, however this profile is well defined by drilling and is described in detail in section 14.

Secondary copper mineralization is seen on the surface as malachite & azurite & bornite & chrysocolla stains. Avod geologists reported with DMT geologists the occurrence of native copper at the leached-oxide zone boundaries.

Results of the block model estimations for the mineralised zones using the available data collected thus far for the areas are positive and offer potential for development of additional resources and reserves within the immediate Zone A and Zone B deposit areas. Upside exploration potential also exists within the wider licence area.

The current models and estimations for the Çorum deposit are by no means exhaustive. Strike, lateral and dip directions remain open and offer potential for the development of additional resources.

26 Recommendations

Mineral resource estimation, general exploration and development strategy recommendations are listed below:

26.1 Mineral Resource Estimations

Future upgrade of mineral resources to a higher classification and the identification of additional resources at Çorum is not guaranteed. However, it is reasonable to expect such increases as a result of the following work:

- Infill and extension drilling in areas of approximately +0.5% Cu mineralisation along strike, laterally and down-dip to increase the quantity of resources and improve confidence in the model.
- Accompanying controlled surface trench sampling and logging on drill traverses.
- Improved Quality Assurance and Quality Control.
- Understanding the controls and orientation of mineralisation and using this data to create 3D models
- Clarification of location and extent of historic underground mining activities and production.
- Collection of further density measurement across all lithologies, material types and grade ranges within the mineralised areas and in the surrounding waste rocks.
- Analysis and re-analysis of samples for acid soluble copper to understand oxide copper content.
- Improved drillhole survey (downhole and DGPS of collars)
- Further risk mitigation steps are given in section 14.14.

26.2 General Exploration Recommendations

General exploration recommendations are listed below:

- 3D software (i.e. Micromine) for the exploration team to assist in drill planning and exploration targeting.
- Increased geological mapping and prospecting over the whole licence area.
- Extension of geophysical ground surveying with focus on IP and/or electromagnetics (EM).
- Detailed survey of morphology and production of a digital terrain model covering the area of resource and potential mining activities.
- Mapping, trenching, soil or stream channel sediment sampling to identify anomalous zones at surface.

26.3 Development Strategy Recommendations

Recommended development strategy:

- Step out and infill drilling to increase resource tonnages to +10Mt to support initial conceptual Scoping Studies and Preliminary Economic Analysis reportable in accordance with UMREK and JORC 2012.
- Preliminary metallurgical test work program on the currently identified three material types (Oxide, Mixed, Sulphide).
- University based mineralogical and petrographical studies (possible student project).
- Masters student study to improve understanding on deposit characteristics and controls.
- Update mineral resource estimates.
- Scoping Study PEA and updated UMREK/JORC 2012 Competent Persons Technical Report to determine order of magnitude technical and economic viability for the project (Conceptual pit designs, mining inventory, conceptual mining plan, site layouts, market studies, preliminary environmental review, conceptual DCF, NPV, IRR).

27 References

Lowicki, F. 2018. Technical Report and Mineral Resource Estimate for the Çorum Copper Project Licence 200712071, Çorum Province, Turkey

Ozcan Yigit (2009) Mineral Deposits of Turkey in Relation to Tethyan Metallogeny: Implications for Future Mineral Exploration. Economic Geology (2009) 104 (1): 19-51.

Uysal, M. B. Sadiklar, M. Tarkian, O. Karsli, and F. Aydin (2005) Mineralogy and composition of the chromitites and their platinum-group minerals from Ortaca (Mugla-SW Turkey): evidence for ophiolitic chromitite genesis. Mineralogy and Petrology (2005) 83: 219–242

Galley, A. (1997) Setting and Characteristics of Ophiolite-hosted Volcanogenic Massive Sulfide Deposits. Economic Geology.

28 Illustrations

All illustrations are contained with the relevant sections of the report.

29 UMREK Table

Table attached below.

The UMREK Code TABLE 1
SECTION 1 General

Assessment Criteria	UMREK Code Explanation			Commentary
	Exploration Results	Mineral Resources	Mineral Reserves	
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.*			• This document has been reported to meet the requirement of SPK (Capital Markets Board of Turkey) for the companies that are listed on the Istanbul Stock Exchange. • The resource estimates have an effective date of the 20th October 2019 and are based on recent exploration drilling and sampling completed up to the 20th October 2019. • The document meets the requirement of UMREK Code.
General Info on Project	• *Summary explanation of project scope (for instance, historical sampling, advanced exploration, conceptual, Pre-Feasibility or Feasibility Study, Mining schedule for a future or ongoing mining facility shall include the geological condition, deposit type, commodity, project area, infrastructure and business agreements.*	• *Brief explanation of key technical factors that have been considered.*	• *Brief explanation of mining, processing / beneficiation and other key technical factors.*	• The project is an early staged exploration project, prospective for copper. • The Çorum license area is located some 200 km to the east of Ankara, the capital city of Turkey. • The overall stratigraphic setting appears to be higher in the typical ophiolite sequence. The setting is typical for a volcanic cupriferous massive sulphide.
History	• *Indicate the background of the project and/or related adjacent areas, include known results (type, quantity and development), former owners and changes for past exploration and/or mining activities.*	• *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*	• *Compare the known or existing historical Mineral Reserve estimates and performance statistics with past and current operations, include their reliability and how they are related to UMREK code*	• According to Avod, there was limited mining activity in the mid-20th Century. However, no historic exploration or production information is available.

	• *Quote references for all data from other sources.*	*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.*		
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.*			• All Plans, maps and diagrams have been prepared in in accordance with UMREK Code by Bordokum and AMS.
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 licence area is located some 200 km to the east of Ankara, the capital city of Turkey and located in the Çorum province between the villages of Bogazkale in the west, Yuksekyayla in the east, Emirler in the north and Derbent in the south. • Licence number 200712071 covers an area of 1375 ha (13.75 km2). • Data was captured and located using a Universal Transverse Mercator (UTM). The geographic coordinate reference system used by the client was UTM ED50 Zone 36 Northern Hemisphere ('ED50 / UTM36N').
Topography and Climate	• *All issues related to the mining project (such as topography and climate), issues that could possibly affect mining activities must be indicated and explained.* • *A general topographic-cadastral map must be ready to support the above explanation.*	• *A topographic-cadastral map with sufficient details to assist evaluation of eventual technical and economic viability. Known related climate risks must be indicated. They are related to the UMREK Code.*	• *A detailed topographic-cadastral map. Where possible, weather and ground conditions that must be mitigated, particularly for difficult ground conditions, dense vegetation and/or high-altitude areas.*	• The altitude of the drilled areas inside the licence range between 1230 m and 1300 m. The licence area is hilly and steeply incised by minor streams. • Çorum has the Mediterranean climate prevailing. Çorum has a warm dry-summer continental climate with dry summers and cold, snowy winters, and mild to cool wet springs and autumns with light rain. The climate may be a challenge for open cast mining during the winter months
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;* • *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*			• AVOD holds licence 200712071. License granted at 06.03.2020 and expires at 06.03.2024. • Exploration and drilling programmes are covered by this licence. • There are no legal cases that could affect mineral exploration rights that AMS are aware of.

	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.*	
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.	• March 29th, 2020; AVOD's Çorum License was visited by Mr Ozgur Corekci (Independent Mining & Metals Professional, UMREK Competent Person) and Toygar Tanyıldız (Bordokum Mining, Consultant Geologist). • Mr Ozgur Corekci accompanied by the License owner; Mr. Mehmet Çetiner and his field geologist Mr. Ali Çilek from AVOD. • Details and verification of drillhole locations, logging and sampling procedures and confirming the presence of Cu mineralisation was completed.

The UMREK Code TABLE 1
SECTION 2 Sampling Techniques and Data
(Criteria in this section apply to all succeeding sections.)

Assessment Criteria	UMREK Code Explanation			Commentary
	Exploration Results	Mineral Resources	Mineral Reserves	
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.			• No Soil geochemical or geotechnical surveys completed to date. • No downhole geophysical tools, spectrometers or handheld XRF instruments were used in the exploration and resource work. • Surface mapping was completed at 1/25000 scale. • A ground magnetics survey and ground IP survey were completed in 2013, discovering anomalies along a valley indicating disseminated sulphides in Area A. • Asyatek Drill Company drilled core holes and collected samples from the drill cores for AVOD.
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.			• Of the 20 diamond holes, 13 holes were drilled completely with PQ diameter and the 7 deeper holes were reduced to HQ. In total, 1,062 m were drilled in PQ and 318 m were drilled in HQ. • Drill hole spacing is In Area A, line spacing of around 100 m was used with drillhole centres varying between 30 to 40 m. The lines crosscut the valley. The drilling of Area B is evenly distributed over the area with hole centres varying from 40 m to 60 m • Tube type / orientated using the Devico Tool. • The overall core recovery is 90 %. The core recovery within the sulphide zone was 88 % and within the oxidization was 85 %. •
Drilling 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).			• The drill core sample intervals marked by the geologists and are typically 1 m length. Samples may be shorter or slightly longer than 1 m to accommodate changes in lithology. • Logging information is recorded onto paper and then into Access. • Drilling is angled to intercept mineralised structures at high angle, as close to perpendicular to dip and strike as practicable. • No sample bias is introduced by drilling orientation. • There appears to be no relationship between grade and sample quality.
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 quantitative. Core (or channel, trench etc.) photographs must be attached.			• All logging was done based on codes with a focus on major and minor rock types, colour, grain size, structure, texture, contact, type and degree of mineralisation, type and degree of alteration. • The major rock type logged is basalt, predominantly brecciated, with several intervals logged as radiolarite. • Core samples have been geologically and geotechnically logged to a level of detail to support geological modelling. • Logging results have been verified against drill core and core photographs by the Competent Person and based on these results, logging is sufficient to be used for modelling and input into estimation. • Summary interval information was transferred from paper into Access, descriptions to

		describe logged lithology, alteration, mineralisation and major structure for the interval. • Core was routinely photographed. • Drill core logging is considered satisfactory for the level of study and resource class.
Other sampling techniques	• Sampling type and quality (for instance, cut channels, grab samples etc.) and the measures taken to ensure representative capability of the samples must be indicated. By quoting reference to a coordinate system (to be indicated), precise location and unique numbering of each sample must be ensured.	• Drill collars were surveyed in ED50 / UTM36N. • Drillhole samples were given unique sample numbers.
Sub-sample 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. 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 entire one metre sample was crushed using a Jaw crusher to -2 mm and reduced to approximately >1 kg using a riffle splitter. The remaining crushed samples for the intervals are left at the core boxes. • Sample collection, sample size, preparation and analysis are considered appropriate and for the mineralogy and deposit type. • Samples are considered representative of the in-situ material collected. • As part of the drilling, Avod submitted one type of certified reference materials (CRM), blank material and field duplicates, on an approximate ratio of 1:20. • The CRM is appropriate for this style of mineralisation. • Samples were sent to ARGETEST, which is certified to ISO 9001: 2015. • At all times, the drill core and samples were inaccessible for persons not involved in the project or not authorized to get in contact with the drill core and samples. The samples were stored in a locked core shed and under security. All transport was organized and carried out by authorized persons only.
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 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.	• Samples were sent to ARGETEST, which is certified to ISO 9001: 2015. • All samples were tracked, weighed, dried at 80 °C, fine crushed to 70% less than 2 mm diameter, then split off 500 g and pulverized to better than 85% less than 75 microns. • The pulverized 500 g samples were homogenised and 1 g of sample was digested by multi-acid digesting the whole sample. Then the dissolved sample was analysed by ICP. • For gold, the pulverized 500 g samples were homogenised, and 30 g of sample was used for a fire assay technique. The fire assay prill was analysed by AAS. • Multi-element analysis, including Ag (ppm), Al (%), As (ppm), Au(ppm), Ba (ppm), Be (ppm), Bi (ppm), Ca (%), Cd (ppm), Co (ppm), Cr (ppm), Cu (ppm), Fe (%), K (%), La (ppm), Li(ppm), Mg (%), Mn (ppm), Mo (ppm), Na (%), Ni (ppm), P (%), Pb (ppm), S (%), Sb (ppm), Sn (ppm), Sr (ppm), Ti (%), V (ppm), W (ppm), Zn (ppm), Zr (ppm), Cu (%), Zn (%) by ICP-ES were completed on all samples. • Over limits samples were re-analysed using ore grade methods of determination. • Bordokum conducted a QC programme of inserting coarse field duplicates, CRMs and blanks. No significant issues were identified in the QC data. • ALS were used as for umpire analysis. • Sample analytical techniques are considered in line with industry standard for this style of mineralisation and satisfactory for the level of study and resource class.

Verification of the results	• It is recommended that independent or alternative personnel confirm the selected intersection points and twinned holes, deflections or duplicate samples are used.	• The QA/QC program includes CRM's, blanks and field duplicates and is acceptable according to industry standards. • All the available primary and quality control analytical data has been assessed by AMS and although the number of data are relatively small, no issues have been identified at this stage. • 2018 lab certificates were verified and checked against database assays. • No adjustment to the analytical data was considered necessary and raw analytical data remained unchanged. • No twin drilling was completed. • Analytical data is considered reliable and fit for the purpose of input to mineral resource estimation.
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.	• Drill collars were surveyed using a GPS in ED50 / UTM36N. • Downhole survey measurements taken using Devico downhole survey tool. • Topographic DTM was sourced from Global Mapper software using SRTM in 1arc-second resolution in map datum UTM ED50 Zone 36 Northern Hemisphere. DTM taken from 10 m resolution Lidar data.
Data density and distribution	• Data density must be given to report Exploration Results. • A statement must be given to indicate whether data density and distribution is sufficient enough to 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.	• A total of 20 diamond drill holes for 1,380 metres were drilled in the project area. • Drill holes were angled between -40º to -87º from horizontal, sufficient for the geometry of the mineralised body. • The Project is at an early stage of development, the number of drillholes and the spacing are sufficient to define an Inferred Mineral Resource. • There is sufficient sampling according to deposit type.
Reporting Archives	• Primary data documentation, data input procedures, data confirmation, data storage (physical and electronic) must be provided to support report preparation.	• All data is transferred from paper then stored and validated within an Access database. Drill data is recorded by company staff and entered into an Access spreadsheet. • Assays from the laboratory are received and loaded electronically. • Analysis certificates are available for verification checks. •
Audits or Reviews	• Results of any audit or review of sampling techniques and data should be presented and discussed.	• The CP site visit was conducted between the 29th and 31st of March 2020 by Mr Ozgur Corekci (Independent Mining & Metals Professional, UMREK Competent Person) and Toygar Tanyıldız (Bordokum Mining, Consultant Geologist. • Logging procedures, sampling, QAQC and data handling protocols were reviewed. • Findings were satisfactory.

The UMREK Code TABLE 1
SECTION 3 Reporting of Exploration Results
(Criteria listed in the preceding sections also apply to this section)

Assessment Criteria	UMREK Code Explanation			Commentary
	Exploration Results	Mineral Resources	Mineral Reserves	
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.			• The Çorum licence area is located some 200 km to the east of Ankara, the capital city of Turkey and located in the Çorum province between the villages of Bogazkale in the west, Yuksekyayla in the east, Emirler in the north and Derbent in the south. • Licence number 200712071 area covers an area of 1375 ha (13.75 km2). • Licence renewal date is 6th March 2019 and expire date is 6th March 2024. • AVOD holds licence 200712071. • All exploration and drilling programmes are covered by this licence.
Exploration works carried out by other parties	• Acknowledgement and appraisal of surveys carried out by other parties.	•	•	• All exploration work described within this report has been carried out by Avod.
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.			• Kuroko-type deposits in Turkey are restricted to the Late Cretaceous bimodal volcanic rocks of northeastern Turkey, while Cyprus-type deposits are associated with ophiolitic rocks of the Kure district in northern Turkey and Ergani district in southeastern Turkey. • The licence area is located in the Vardar Ophiolitic Belt along the Izmir- Ankara-Erzincan suture zone. • Locally, the overall metallogenic setting is ophiolitic. This metallogenic province is well known and described in the literature. Ophiolites are tectonically emplaced at their current position and are generally very strongly deformed. • The project area appears to be largely covered by mafic lithologies. Ultramafic lithologies have been observed in the eastern part of the licence, where a small part mining licence for Mn exists. Sedimentary units are also present in form of carbonates and cherts, possibly radiolarites. • The deposit is classified as a volcanic massive sulphide deposit
Mineralogy /Mineralization	• Definition, frequency, size and other characteristics of the minerals inside the ore. Effect of the secondary and economically non-valuable minerals on the steps of beneficiating the main mineral and the variability of each significant mineral within the deposit should be indicated.			• Ternary diagram analysis of Cu, Fe and S which are the mineral forming elements of most copper sulphide minerals shows distinct grouping of three material types. A further analysis was completed to assess S and Fe budgets to form Chalcopyrite ($CuFeS_2$). White other Cu sulphide phases will be present in varying amounts (e.g. Chalcocite (Cu_2S) Covellite (CuS) Bornite (Cu_5FeS_4)) Chalcopyrite is likely to be the most common Cu sulphide mineral phase. Also note that Fe is present in the host rock forming minerals and as Pyrite (FeS_2). This analysis suggests that the Supergene zone contains insufficient S to form Chalcopyrite, Cu is most likely present as non-sulphide phases (e.g. Malachite) with minor secondary supergene Cu-S phases such as Chalcocite, Covellite and Bornite. The East Cap domain has a signature which suggests partially oxidized Cu sulphide mineralization, with a mix of

				Chalcopyrite and Cu oxide mineralization. The Hypogene domains have signatures that confirm sufficient S budgets to form Cu sulphides such as chalcopyrite, secondary supergene Cu-S phases may also be present.
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.	•	•	• Significant intercepts are reported as the length weighted average of all assays falling inside wireframe domains used in the mineral resource estimation.
Relationship between mineralization widths and intercept lengths	• These relationships are particularly important when reporting Exploration Results. If the relative geometry of the mineralization to drill hole angle is known, its nature should be reported. If it is not known and only drill hole dimensions have been reported, this effect must be clearly stated (e.g. 'drill hole length, actual true width not known').	•	•	• Mineralization is relatively shallow and drillholes are roughly perpendicular. True widths are approximately 80-90% of the drilled 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.	•	•	• All Plans, maps and diagrams have been prepared in in accordance with UMREK Code by Bordokum and AMS.
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 available exploration data for the Çorum deposit area has been collected and reported. Representative data from all drillings have been reported.
Other available 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.	•	•	• A ground magnetics and a ground IP survey, in 2013, discovering anomalies along a valley indicating disseminated sulphides, also in Area A. • A total of 209 samples were prepared and sent to ARGETEST for density determination using the water replacement method in a graduated flask. • The volume of the sample is determined by placing the sample in a water filled graduated flask and reading off how much water is displaced calibrated in millilitres, where 1 ml = 1 cm3 • There has been no metallurgical testwork, underground water testwork, geotechnical and rock characteristics, moisture content, potentially deleterious or contaminating conditions and characteristics testwork.
Additional works	• Nature and dimension of the planned future development (e.g. additional exploration). Descriptions of estimated environmental liabilities	•	•	• Avod plans trench work and additional drilling along strike of the resource area.

The UMREK Code TABLE 1
SECTION 4 Mineral Resource and Mineral Reserve Estimations and Reporting
(Criteria applicable to reporting groups as shown)

Assessment Criteria	UMREK Code Explanation			Commentary
	Exploration Results	Mineral Resources	Mineral Reserves	
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.		• Analytical data is digitised from paper logs into the Microsoft Excel. The CP has cross referenced a selection of paper logs, drill core, and the digital database during the site visit with no errors identified. • The assay database was reconstructed from laboratory certificates and paired with the sampling intervals by means of query. • Micromine software was used to validate the drillhole database. Data checks include checks for overlapping and missing intervals, dh trace errors, missing survey data, lithology, consistency of drillhole lengths in collar and interval files. Checks for out of range values were also made. • The database is robust and suitable for resources estimation.
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		• Wireframe models were used to restrict and domain the data using a combination of geological logs and Cu and S grades to identify Supergene and Hypogene zones of mineralization. • All mineralized domains were interpreted to be relatively flat lying zones, in the absence of additional information to the contrary and as was consistent with field observations. Alternative interpretations include a steeper feeder zone in the lower supergene, however there is insufficient data to verify this. Steeper feeder zones may result in a reduction in tonnes and increase stripping ratios. • The technical report provides a more detailed overview of the geological interpretations.
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 is taking these data properly into consideration. 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		• A detailed overview of the resource estimation technique is given in the technical report with appropriate supporting images and is summarized as follows. • All resource estimation work was completed using Micromine 2020 software. • Assay data was assigned a code value for each domain wireframe. • Ordinary Kriging and Block Modelling was used. The block model was restricted to the domain wireframes and blocks informed on a domain by domain basis. All boundaries were hard boundaries. • Drillhole data was composited to 2 m with a minimum accepted length of 1 m. Residual values were added to the last interval. Composites were not allowed to span domain boundaries. Length weighted averaging was used. New coordinates were generated for the composite mid-point. • No outlying values were identified in Cu grades and no top cutting was applied. • Directional semi variograms were generated Cu data for the East Hype 1 domain and applied to all domains. Insufficient data was present across all domains to warrant individual domain semi variograms. Semi variogram parameters are described in detail in the technical report. A nugget value of 0.4 and a total sill of 0.116 were applied to single component spherical models with ranges of 110, 100 and 10 m.

		mining units (e.g., non-linear 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 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	• A Block model of 25 mE x 25 mN x 4 mZ was generated and restricted to the wireframes. A minimum sub block size of 2.5 mE x 2.5 mN x 1mZ was applied. Drill spacing is variable and the block size is approximately 0.5 to 0.25 the drill spacing in the east zone. In the western zone blocks are 0.5 to 0.3 the drill spacing across strike (EW) and approximately 0.2 in the north south direction. • The block model was interpolated on a domain by domain basis using ordinary kriging and a single variogram model. Block kriging was used with discretization of 10 x 10 x 4 divisions E x N x Z. Blocks were interpolated at the parent block scale. • A variable search was written to the block model to aid grade mapping which was generated from wireframe contact surfaces. • The data search in the eastern area was 150 x 150 x 20 m with one sector and a maximum number of 16 composites, a maximum of 4 samples per drillholes was applied. • The data search in the western area was 180 x 180 x 20 m with one sector and a maximum number of 16 composites, a maximum of 4 samples per drillholes was applied. • Due to some negative weights being introduced by screening negative kriging weights were set to zero, experimentation with kriging parameters did not remove the negative weights while restricting local conditional bias. • The above parameters were tested and optimized using Quantitative Kriging Neighbourhood Analysis • The block model was validated statistically by comparing input and output data and inspection in cross section. • In the East area mineralization ranges from surface to approximately 55 m below surface and ranges approximately 260 mN x 245 mE. The model is extrapolated approximately 50 m outside the limits of the drilling. Mineralized thickness includes coherent zones of approximately 35 m with some internal waste which is 2-5 m thick. Some smaller zones of mineralization down to a minimum of 1 m have been modelled where mineralization is interpreted to pinch. • In the West area mineralization ranges from surface to approximately 45 m below surface and ranges approximately 260 mN x 245 mE. The model is extrapolated approximately 25 m outside the limits of the drilling with a maximum spacing between drill fences of approximately 210 m. Mineralization ranges in thickness from approximately 8 to 35 m • No reconciliation data is available to compare to the block model • No deleterious element have been identified at this point in time. • A previous resource estimate completed by DMT in November 20108 retuned similar mean grades but was not used as a reliable comparison of tonnage due to no extrapolation being applied beyond drill traces. See the technical report for a more detailed discussion.
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;	• No Metal Equivalents were applied. Only Cu is anticipated to have a reasonable prospect of economic extraction at the time of writing.

	• o 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.) • o For all metals, metallurgical test results and basis from which assumed recoveries have been derived (metallurgical test study, detailed mineralogy, similar deposits etc.); • A clear statement indicating it is the 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 test work, 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.	• A break even cut-off for each material type was determined using estimated process recovery values, mining costs and USD$5500/t price for Cu based on LME December 2022 prices as of 27 May 2020.
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.	• Tonnages are calculated on a dry basis. • Density was determined by displacement method on a sample by sample basis. • 545 density determinations were inside mineralized wireframes. • A mean density for each domain was estimated separately and applied to the domain within the block model as follows. The bulk density database is considered of high quality for the level of study. • East Cap 2.730 • East Hype1 3.036 • East Hype2 3.125

				• East Sup 2.667 • West Hype 3.217
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.	• Methods and assumptions made for converting the Mineral Resource into a Mineral Reserve (through application of appropriate factors, through optimization or through preliminary or detailed design). Relevant design issues, selection, nature and appropriateness of mining parameters including pre-strip, access etc. and mining method. Geotechnical parameters and hydrogeological regime (e.g., pit slopes, stope sizes, dewatering methods and requirements etc.), grade control and assumptions made through drilling prior to production. Main assumptions made and the Mineral Resource model used for pit optimization (if appropriate). Mining dilution factors, mining recovery factors and minimum mining widths used and the infrastructure requirements of the mining methods selected. Historic	• Open pit mining is assumed with 5% loss and dilution. • No further assessment has been done at this point in time due to the early stage of the project and shallow nature of mineralization.

			reliability of performance parameters, if applicable.	
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 by-product 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 the process, and all unwanted or possible by-products should be revealed, and appropriate process steps should be included in the flowchart. •	• The proposed flowsheet and the appropriateness of these processes to the mineralization of the deposit. Whether the process is unique or incorporates well-tested technology previously used on the type of mineral deposit. Nature, quantity and representativeness of the metallurgical tests. Existence of bulk samples or pilot-scale test studies, and the capability of these tests and test results to represent the whole ore characteristics. Metallurgical recovery and any upgrading factors used and their relevance to those defined in test studies. All assumptions and allowances for deleterious minerals or elements affecting the process or their variability within the mine must be indicated. Environmental, health and safety risks for each section of the flowsheet and the planned mitigations to overcome these risks must be detailed. • Tonnages and grades	• As no metallurgical testwork has been completed and no data is available for any operations in the vicinity high level and conservative estimates have been made for process recoveries. • Note that for sulphide, the process recovery and concentrate grade are inter-related and depend on economic factors and trade-offs. Concentrate grade also depends on the proportions of the different copper minerals present. A degree of oxidation is expected in the majority of the sulphide mineralization and such a conservative value has been applied. Also note that for oxide, there is no knowledge of the acid soluble Cu (Cu_{AS}) content only of the total copper content (Cu_{TOT}). Cu_{TOT} is not a reliable predictor of Cu_{AS} which is used to predict the acid leachable copper content. The mixed material is anticipated to have lower recoveries than fresh sulphide material. • Estimated recoveries are • Sulphide 80% • Oxide 50% • Mixed (overall) 50% • Mixed (sulphide) 60% • Mixed (oxide) 40%

			reported for Mineral Reserve, and whether they are related to the material delivered to the facility or to the resulting recovered material, must be indicated. Comments must be made with regards to the appropriateness of usage of the existing equipment in the facility within the recommended life of the mine. •	
Mineral Resource estimation for Mineral reserve conversion			• Declaring the Mineral Resource estimation used as a basis for Mineral Reserve conversion. Clear statement whether Mineral Reserves have been reported as part (inclusive) of Mineral Resources.	• No mineral reserves have been estimated.
Cost and revenue factors		• State basis for assumptions. • Currency, exchange rates and dates of estimates. See Table 2.	• The derivation of the assumptions made in relation to the project capital and operating costs. Assumptions made for revenues including the main grade(s), metal or commodity prices, foreign exchange rates, transportation and treatment charges, penalties etc. The allowances made for royalties payable according to state and private rights. Basic cash flow inputs for a given period. See Table 2.	• Mining cost is estimated at USD$2 per tonne for sulphide and oxide material and $3 per tonne for mixed. • • The process routes are assumed to be industry standard. Due to the lack of site specific information, very high level and conservative estimates of operating costs have been made. • • For sulphide material this process route is crushing, milling, flotation to produce a saleable concentrate and conventional tailings disposal. Concentrate will be transported to a third party operation for toll smelting and refining to cathode, the cost of which is included in the estimate. • • For oxide material the process is crushing, milling, tank leach, solvent extraction, electrowinning to produce saleable cathode, neutralisation and conventional tailings disposal. The grades and quantities suggest that tank leach is preferred to heap leach. The sulphide and oxide components of the mixed material will be processed by a combination of the methods outlined for the main material types. Allowances have been made for general and administrative costs and rehabilitation. Operating costs are estimated as shown below.

<table>
<tr><td></td><td></td><td></td><td></td><td>• A nominal selling cost or royalty allowance of 2.5% has been made
<table><tr><th>Material Type</th><th>Mining USD$/t</th><th>Processing cost (USD$/t feed to plant)</th><th>Rehabilitation USD$/t</th><th>G&A USD$/t (Assumed $1.5M PA and 750 Ktpa)</th><th>Total USD$/t</th></tr><tr><td>Sulphide</td><td>2</td><td>27</td><td>1</td><td>2</td><td>32</td></tr><tr><td>Oxide</td><td>2</td><td>22</td><td>1</td><td>2</td><td>27</td></tr><tr><td>Mixed (overall)</td><td>3</td><td>25</td><td>1</td><td>2</td><td>31</td></tr></table></td></tr>
<tr><td>Market assessment</td><td></td><td></td><td>• Demand, supply and stock situation for a particular mineral, consumption trends and factors that could possibly affect supply and demand. Defining the market framework, and following customer and competitor analysis, possible price and volume estimations for products and the basis for these estimations. Market assessment may indicate that minerals cannot be sold in the produced quantities; hence reserve estimations might be needed to be revised.</td><td>• No market assessments have been completed at this point in time.</td></tr>
<tr><td>Other</td><td></td><td>• All obstacles such as land access, environmental or legal permits, potentially affecting mining. Location plans of mineral rights and titles.</td><td>• Impacts of natural risk, infrastructure, environmental, legal, marketing, social or governmental factors on the possible viability of the project and/or classification and estimation of Mineral Reserves. Conditions of</td><td>• The CP is not aware of any obstacles such as land access, environmental or legal permits, potentially affecting mining.</td></tr>
</table>

			important ownerships and approvals related to the construction of the project, mining leases, discharge permits, government or statutory approvals etc. Environmental obligations. Site plans of Mine State rights and ownership.	
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?	• Basis of classifying Mineral Reserves into various confidence classes. Does the resultant classification properly reflect the Competent Person's opinion on the deposit? The portion of the Probable Mineral Reserves derived from Measured Mineral Resources (if any).	• All resources are of the inferred category. • In application of the mineral resources the following was considered. A more detailed discussion is presented in the technical report. • Data base integrity is good with good quality control results from analytical data • Collar locations are not captured by differential GPS and present a moderate to high risk with accuracy expected to be in the order of 10m. This may impact on thicknesses of mineralization and effect the ability to conduct detailed mine planning. Collars should be resurveyed by more accurate method to allow classification of indicated resources in the future. • Drill data is relatively sparse and restricts the category to inferred. • Geological and grade continuity are interpreted to be relatively high at this point in time, although this interpretation is based on sparse data. • Topographic controls are good with <2 m accuracy • A robust bulk density database has been collected.
Audits and reviews		• Audit or review results of Mineral Resource estimations.	• Audit or review results of Mineral Reserve estimations.	• No Audits or reviews have been completed other than internal peer review among the study team and discussion between the CP and Resource Geologist.
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 geo-statistical 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		• At this point no statistical estimates of confidence have been completed and as such a discussion of grade and tonnage estimates in terms of selectivity miss identification of ore and waste blocks is not possible. • The resource is of the inferred category, infill and extensional drilling may identify areas of lower grade or no mineralization which could significantly affect the global tonnages and grade. While close grade is expected to be within relatively close limits (+/-20%) the global tonnages may increase or decrease by 30-40% • It should be noted that extrapolation at this point in time is relatively conservative given the apparent continuity and style of mineralization a significant upside potential exists.

		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.	