MINERAL RESOURCES REPORT
GADIR UNDERGROUND MINE

ANGLO ASIAN MINING PLC

January 2019

1. Executive Summary

1.1. Introduction

Anglo Asian Mining PLC. ("AAM"; London Stock Exchange Alternative Investment Market (AIM) ticker "AAZ") are pleased to provide a Maiden Mineral Resource estimate for the Gadir Mine, an underground polymetallic (gold-silver-copper-zinc; "Au-Ag-Cu-Zn") mine, located adjacent to the city of Gedabay in the Republic of Azerbaijan. Datamine International Limited ("Datamine") was requested by AAM to carry out the resource estimation and the results of this work are outlined in this release. This study is considered to be a new geological model and Resource Estimate – Gadir resources have previously been reported as part of the Gedabek deposit [1]* but have now been separated.

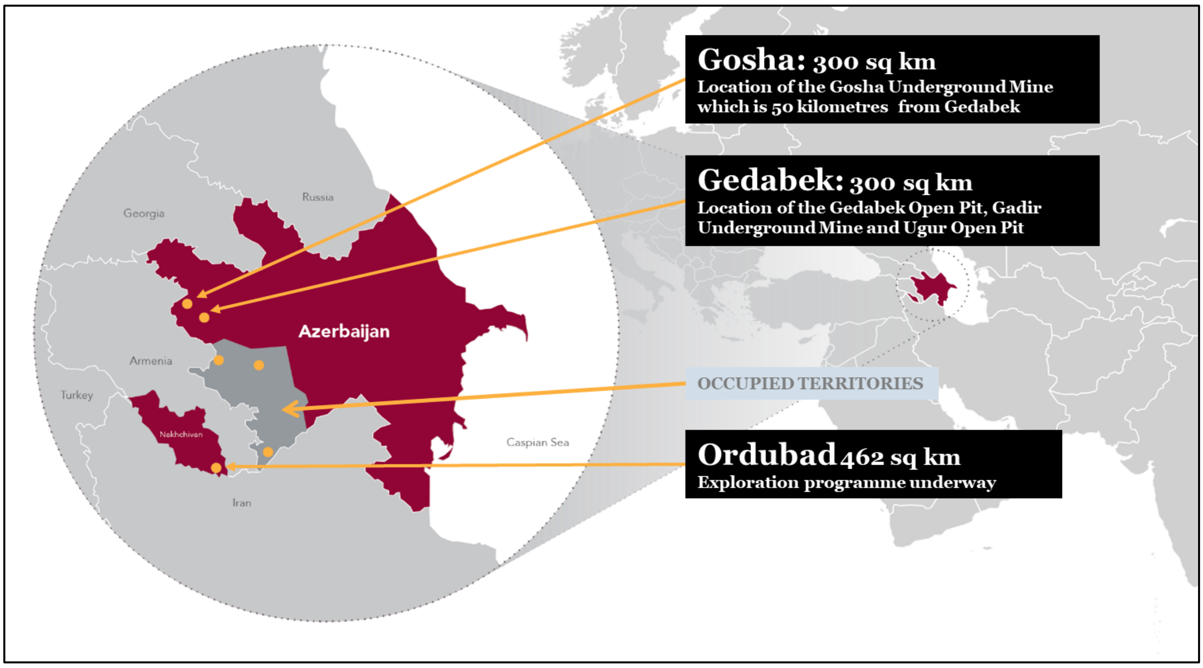
1.2. Requirement and Reporting Standard

This estimation was completed in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves ("The JORC Code, 2012 Edition"; [2]). Reporting of mineral intervals has been previously reported by AAM via regulated news service (RNS) announcements on the London Stock Exchange (AIM), on the Company website or at conferences and roadshows.

1.3. Project Location and History

The Gadir polymetallic deposit is located in the Gedabek Ore District of the Lesser Caucasus mountain range in north-western Azerbaijan. The 'Contract Area' in which the underground mine is situated is approximately 300 km^2 in size and is one of six Contract Areas held by AAM (Figure 1.1), as defined in the Production Sharing Agreement (described below; "PSA"). The AAM Contract Areas are located on the Tethyan Tectonic Belt, one of the world's significant Cu-/Au-bearing metallogenic belts.

Figure 1.1 – Location of the Gedabek Contact Area



**References can be found at the end of the main report.*

Mining activity around Gedabek is reported to have started as far back as 2,000 years ago; old workings, adits and even pre-historic burial grounds can still be identified in the region to this day. More recent documented mining activity began around 1849 when the Mekhor Brothers, followed by the German Siemens Brothers Company in 1864, developed and operated the Gedabek copper mine under an arrangement with Czarist Russian authorities. At least five large (>100,000 t) and numerous smaller sulphide lenses were mined during the period between 1849 and 1917. Various base and precious metals were extracted from the region including gold and silver. Mining activity ceased in 1917 during the onset of the Russian Revolution – the reader is referred to [3] for further information regarding the history of the area, with specifics relating to the Gedabek open pit covered.

Whilst carrying out geological exploration in 2012, AIMC geologists discovered an outcrop of subvolcanic rhyolite displaying silica and potassic alteration (showing close similarities with the rhyolites found at the nearby open pit) on the northwest flank of the Gedabek operation. Samples were subsequently taken and assayed – anomalous results were returned, justifying follow-up. Campaigns to develop the resource (including surface drilling, a soil geochemistry study and detailed geological and structural mapping) were completed between 2012 and 2015, with the aim of determining the extent of the potentially economic minerals. The drilling identified a series of vertically stacked, shallow-dipping mineralised lenses within an area of approximately 50 x 100 metres over about 150 m height.

The Gadir underground deposit was thus identified, preliminarily evaluated and deemed economical. A pilot block model was constructed based on the initial drilling, allowing a resource estimate of 797,000 tonnes at 4.08 g/t Au (Inferred) to be calculated by CAE [4]. The surface drilling provided sufficient information to allow for the decision to be made to access the mineralisation by adit tunnel development. This was especially the case when comparing the cost of accessing the mineralisation by tunnel as compared to further deep drilling from surface. The initial objective of this was to carry out bulk sampling and assess the ground conditions for underground extraction potential.

The drilling results and subsequent unclassified internal resource estimate were encouraging and constrained sufficiently to warrant underground mining of the deposit. Work commenced to bring it into production with a 650 m decline access that was developed during March-May 2015. Based on this strategy, underground exploration work was simultaneous with mining, and only short-term planning was possible.

Development of ore drives commenced at Gadir in May 2015 and stope production began in September 2015, adding to the Company's operating asset portfolio. Since start-up, the deposit has been exploited for Au-Ag-Cu. With the development of the mine at depth, zinc content is increasing and studies are currently underway to establish the potential for processing Zn as a concentrate.

The Gedabek (open pit) and Ugur (open pit) deposits are other mines in the region, owned by AAM and operated by Azerbaijan International Mining Company (herein "AIMC") within the Gedabek Contract Area.

1.3.1. Mineral Tenement and Land Tenure Status

The Gadir underground project is located within a licence area ("Contract Area") that is governed under a PSA, managed by the Azerbaijan Ministry of Ecology and Natural Resources

("MENR"). The PSA grants AAM a number of 'time periods' to exploit defined Contract Areas, as agreed upon during the initial signing. The period of time allowed for early-stage exploration of the Contract Areas to assess prospectivity can be extended if required.

A 'development and production period' that runs for fifteen years, commences on the date that the Company holding the PSA issues a notice of discovery, with two extensions of five years each at the option of the company. Full management control of mining within the Contract Areas rests with AIMC. The Gedabek Contract Area, incorporating the Gadir underground, Gedabek open pit and Ugur open pit, currently operates under this title.

Under the PSA, AAM is not subject to currency exchange restrictions and all imports and exports are free of tax or other restrictions. In addition, MENR is to use its best endeavours to make available all necessary land, its own facilities and equipment and to assist with infrastructure. At the time of reporting, no known impediments to obtaining a licence to operate in the area exist.

1.4. Geology and Geological Interpretation

The Gadir ore deposit is located within the large Gedabek-Garadag volcanic-plutonic system. This system is characterised by a complex internal structure indicative of repeated tectonic movement and multi-cyclic magmatic activity, leading to various stages of mineralisation emplacement. Gadir has been interpreted as being a Low Sulphidation ("LS") epithermal-type deposit by the geology team at AIMC following fieldwork and geological interpretation. The presence of Au, Ag, Cu and Zn, hosted predominately in vein systems, supports this characterisation.

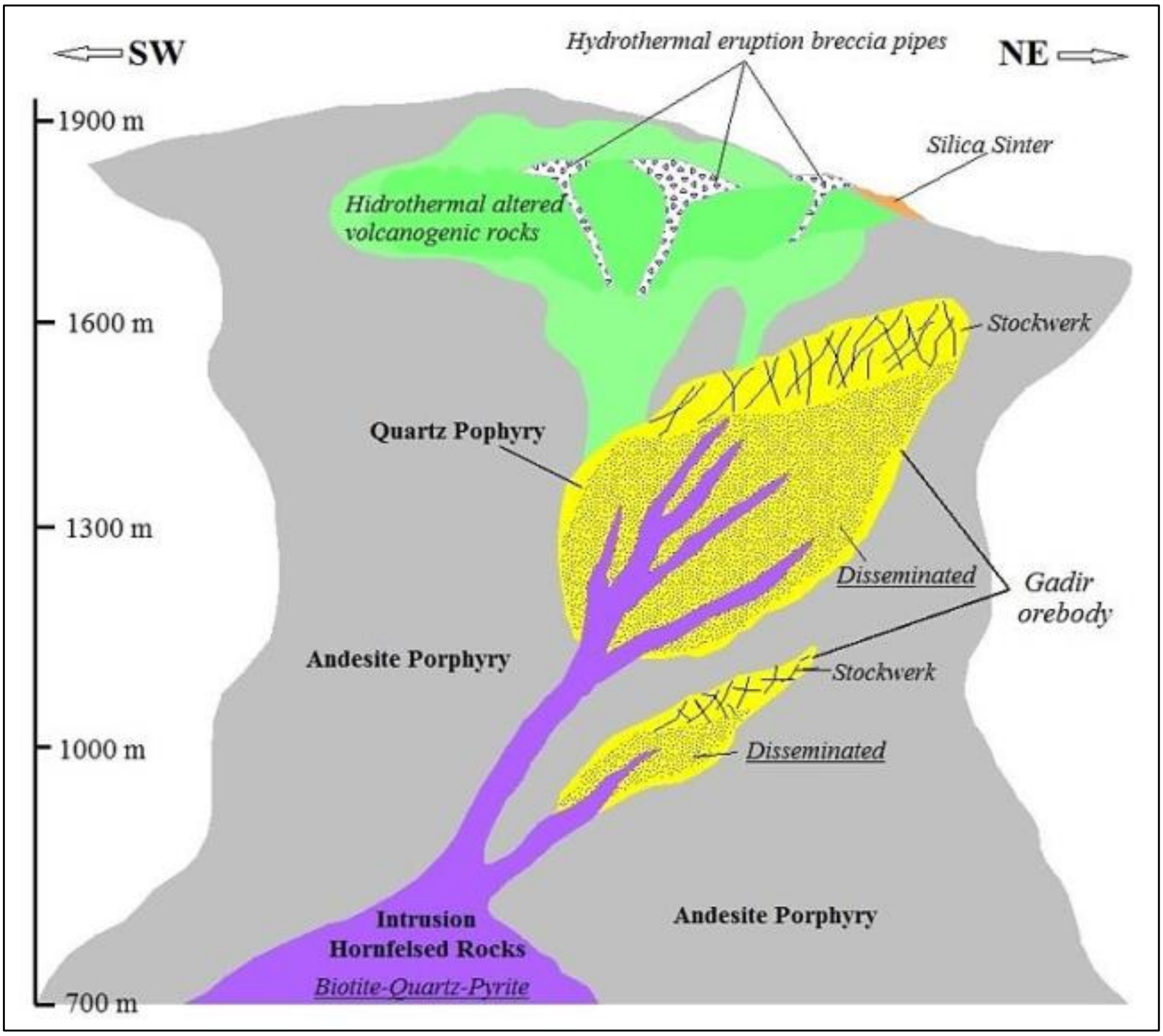
In recent years geological exploration and scientific studies around the Gedabek region confirm that the Gedabek deposit is part of an epithermal system (high-sulphidation type) with Au-Cu-Ag ore mineralisation. The discovery of Gadir and it being classified as LS-type, in addition to the other known mineral occurrences and deposits of varying mineral content in the Gedabek Contract Area, lends support to the existence of a large regional mineral-forming system.

The Gadir orebody has a complicated geological structure and hosts intrusive rocks of different ages and compositions (Figure 1.2). Three sets of regional fault zones controlling mineralisation have been identified and are characterised on the basis of strike direction and morphological characteristics:

- NW-SE striking faults (e.g. Gedabek-Bittibulag Deep Fault, Misdag Fault)
- NE-trending faults (e.g. Gedabek-Ertepe Fault, Gerger-Arykhdam Fault, Gadir ore-controlling faults)
- Local transverse faults

The large Gedabek-Bittibulag Deep Fault runs through Gadir, having a local strike between 270-310° and a steep dip of 80-85° to the south. Fault zone thickness does not exceed 50 m and the rocks found within and alongside these faults are brecciated, slightly schistose and kaolinised. Fault displacement generally exhibits vertical downthrow of the northern side by 60-75 m. This faulting compartmentalises the mineralisation into blocks. Also several parallel faults to the Gedabek-Bittibulag Deep Fault illustrate similar offsets.

Figure 1.2 – Idealised cross-section of the geological model through the Gadir deposit



Source: Universal Journal of Geoscience 6(3): 78-101, 2018

Various forms of hydrothermal alteration are found to occur at Gadir. Propylitic alteration (epidote-chlorite) is mostly developed around the north/northwest of Gadir and is observed in the andesitic tuff formation. Argillic alteration is found in the wall rocks and consists mainly of clay minerals such as kaolinite, smectite and illite. Silica alteration is another dominant alteration style found at Gadir and is mainly observed in the central part of the deposit. Silicification of the volcanics (andesitic-dacitic in composition) is common and silica enrichment zones, sometimes several tens of metres thick, can be found at the top of volcanic sequences (further capped by volcano-sedimentary horizons). The 'Gadir Silica Sinter' was identified on surface around the 'Gedabek Hydrothermal Eruption Breccia pipes' (see Figure 1.2), the presence of which suggests the formation of a pathway to a deeper geothermal reservoir. This 'Sinter' is stratigraphically overlain by andesitic tuffs. This sequence pinpoints the time at which the transition occurred from submarine volcanism to sub-aerial volcanism. Mineralisation primarily exploited at Gadir is Au-Ag from a polymetallic ore, also containing base metals of Cu and Zn. The main ore minerals are sulphides, including pyrite, chalcopyrite, sphalerite and trace galena.

1.5. Drilling Techniques

AIMC supplied Datamine with the latest drillhole database (as of 20th August 2018) and digital files for the underground mine workings and mineralisation interpretations. A summary of the drillhole type and metres used as part of the Gadir Resource estimation is shown in Table 1.1 below.

Table 1.1 - A summary of the type and metres of drilling used for the Gadir Resource Block Model and Estimation

Purpose	Drillhole Type	Number of Holes	Total Length (m)
Surface	DD	60	22,458
Underground	DD	342	15,512
	CH	-	8,645
TOTAL DRILLING		**402**	**46,615**

Extensive drilling has been carried out since the discovery of the Gadir orebody – to date, around 400 holes have been completed. The majority of the geological information for Gadir was obtained via diamond drill ("DD") methods (around 80%). Both surface (60 holes) and underground (342 holes) drilling platforms were used. In addition, 8,786 channel ("CH") samples were analysed with a total length of 8,645 m.

Currently AIMC uses one contracted drilling company for underground and two for surface diamond drilling. AIMC also own an underground drill rig utilised at Gadir. DD utilised various core tube sizes, dictated by the platform location and the depth of the hole. Surface DD holes were typically HQ (generating core 63.5 mm in diameter) or NQ (core diameter 47.6 mm) in size. Where necessary, the barrel size was reduced down from HQ to NQ.

Underground DD holes were almost exclusively used to outline Mineral Resources and infill areas targeted by wide-spaced surface DD holes. Underground holes were NQ or BQ (36.5 mm core diameter) in size.

Drillhole collars were surveyed for collar position, azimuth and dip by the AIMC Survey Department, using ground-based total surveying (utilising the LEICA TS02) equipment. All location data were collected in UTM 84 WGS Zone 38T (Azerbaijan). Downhole surveying was carried out on HQ and NQ drillholes utilising a Reflex EZ-TRAC magnetic and gravimetric multi-shot instrument, at a downhole interval of 9 m (after an initial shot at 3 m). Downhole surveying was not carried out on BQ holes due to their shallow depths.

Core recovery for mineralised sections was generally very good (in excess of 95%) and over the length of the hole was typically > 90%. Recovery measurements were poorer in fractured and faulted rocks, weathered zones or dyke contacts – in these zones average recovery was 85%.

1.6. Sampling and Sub-Sampling Techniques

Handheld XRF (model THERMO Niton XL3t) was used to assist with mineral identification during field mapping and logging of the material acquired via DD-CH methods. Sampling via all methods was systematic and unbiased. The sampling techniques applied are industry standard.

1.6.1. Diamond Core

Full core was split longitudinally in half by using a diamond-blade core saw. Samples of one half of the core were taken, typically at 1 metre intervals, whilst the other half was retained as reference core in the tray, prior to storage. If geological features or contacts warranted adjustment of the interval, then the intersection sampled was reduced to confine these features. Geologists carried out logging and sample mark-up, as well as geotechnical data collection. The drill core was rotated prior to cutting to maximise structure to axis of the cut core – cut lines were drawn on during metre-marking.

1.6.2. Channel Samples

All underground faces were marked-up by the supervising underground geologist, constrained within geological and mineralised boundaries. Subsequent sample acquisition was carried out with a rock hammer (either hand-held or Bosch power tool) and grinding machines. Samples were collected in pre-numbered calico bags as per AIMC's face sampling procedure. Typical sample masses range between 10-20 kg.

The procedure involves cutting a linear channel across the vein or orebody in order to obtain the most representative sample possible for the designated interval. Sample intervals were 1-1.5 m, 10 cm in width and 5 cm deep. A face sheet with sketch, sample width, sample number(s) and locality were generated for each sampled face.

Underground CH samples have been used in the Mineral Resource estimate. Chip samples have not been used in the Mineral Resource estimate and are primarily used to provide guidance for mine-mill reconciliations.

1.7. Laboratory Sample Preparation and Analysis Method

Crushing and grinding of samples were carried out at the onsite laboratory sample preparation facility (attached to the assaying facilities). This site is routinely managed for contamination and cleanliness control. Samples underwent crushing (three-stage) pulverised down to -75 µm prior to delivery to the assaying facility. Routine Atomic Absorption Analysis and check Fire Assay was carried out on 50 g charges of the pulverised material (surface DD only). Charges for underground DD and CH assays weighed 25 g whilst 10 g charges were used for Ag, Cu and Zn analysis.

1.7.1. Procedural Quality Assurance/Quality Control

Quality control procedures are in place and implemented at the laboratory and were used for all sub-sampling preparation. This included geological control during DD core cutting and sampling to ensure representativeness of the geological interval. Sample sizes were considered appropriate to the grain size of the material and style of mineralisation of the rock. Reviews of sampling and assaying techniques were conducted for all data internally and externally as part of the resource estimation validation procedure. No concerns were raised as to the data, procedures conducted, or the results. All procedures were considered industry standard and adhered to.

1.8. Estimation Methodology

Datamine were contracted as independent consultants throughout the creation and compilation of the Gadir Resource Estimation. All data requested were made available to them by AAM and AIMC, after consultation with the Competent Person ("CP"). Datamine consultants carried out periodic database validation during geological data collection, as well as on completion of the database prior to resource modelling. All data were imported to Datamine Studio RM® software and further validation processes completed. At this stage, any errors found were corrected.

The geology guided the resource estimation, especially the structural control, for example where faulting defined 'hard' boundaries to mineralisation. The structural orientation of the deposit was used to control the orientation of the drilling grid and the resource estimation search ellipse orientation. Grade and geological continuity were established by extensive 3D data collection. The deposit continuity is well understood, especially in relation to structural effects, due to the mining activity that has occurred at the deposit.

Au, Ag, Cu and Zn grades were estimated into three-dimensional mineralisation domains using an ordinary kriging ("OK") as the main method of estimation. Inverse power distance ("IPD") estimation was performed as well in order to verify both methods of estimation.

A three-pass search scheme was invoked, whereby any block that remained unestimated after the first run was then subject to estimation using a second (and if necessary, a third) search pass with larger search volumes. Search ellipses were aligned along the dip/dip-direction orientations of the mineralisation domains.

The model was validated by visual comparison with drillhole grades versus ore zones and by average drillhole grades versus average block model grades. A series of swath plots were also created and analysed. The model was adjusted for topography, geometry of the orebody, ore drive development and for mined-out voids.

1.9. Classification Criteria

The Gadir Mineral Resource was classified on the basis of confidence in the continuity of mineralised zones. Measured, Indicated and Inferred Resources were defined based upon data density, data quality and geological and/or grade continuity, after detailed consideration of the JORC criteria and consultation with AIMC staff (Figures 1.3 and 1.4). Additional 'Exploration Potential', that fall outside Inferred parameters, have also been considered.

The parameters used for classifying the Resource Model are presented below:

Measured:

> Blocks estimated in search volume 1 with a minimum 16 samples (maximum of 32) and maximum of 5 per drillhole within 25 m of workings.

Indicated:

> Blocks estimated in search volume 2 with a minimum 10 samples (maximum of 32) and maximum of 5 per drillhole within 25 m of workings.

Figure 1.3 – Gadir Underground Mine Classified Resource Model (NW-SE cross-section)

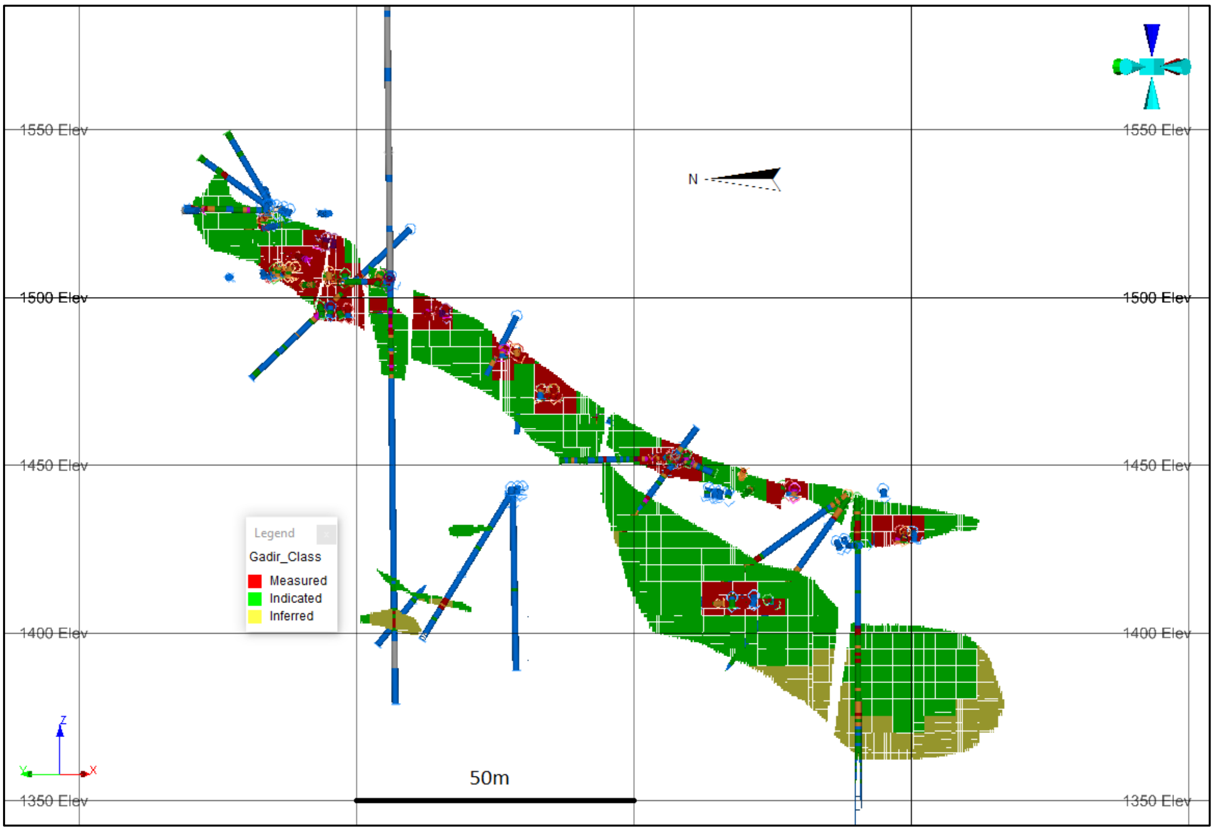
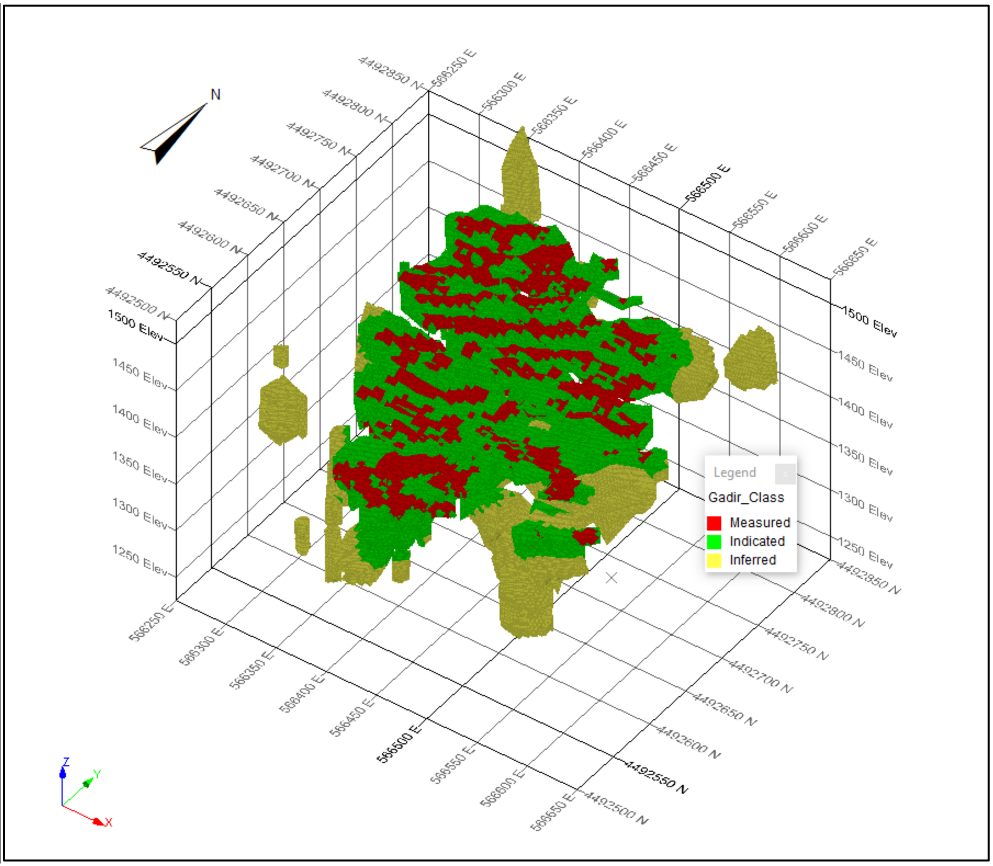


Figure 1.4 - Gadir Underground Mine Classified Resource Model (oblique view, looking NW)



Inferred:

- Blocks estimated in search volume 2 with a minimum 10 samples (maximum of 32) and maximum of 5 per drillhole outside of 25 m of workings or,
- Blocks estimated in search volume 3 with a minimum 5 samples (maximum of 20) and maximum of 5 per drillhole outside of 25 m of workings.

Exploration Potential:

- Blocks estimated in search volume 3 with a minimum 3 samples (maximum of 20) and all the blocks estimated less than 5 samples or,
- All other material not classified within the Resource Categories and parameters above.

It is anticipated that material classified as 'Inferred' or 'Exploration Potential' may be upgraded with further drilling and sampling.

1.9.1. Cut-Off Grade

The cut-off grade ("COG") was determined by assessing the block model. Incremental intervals of 0.1 g/t Au were applied to all estimated blocks and the tonnages subsequently calculated. From this, the COG was determined at 0.5 g/t Au.

1.10. Resources Summary

The Gadir Mineral Resource estimation is based on a robust geological model that benefits from information gathered during mining of the deposit, exploration and grade control drilling. Independent consultants Datamine carried out the resource estimation of the Gadir deposit in accordance with JORC guidelines.

The Mineral Resource estimate (with a COG of 0.5 g/t Au), depleted for mining development and production to the end of August 2018, for Gadir is detailed in Table 1.2 below.

Table 1.2 – Gadir Mineral Resources Summary

MINERAL RESOURCES	**Tonnage**	**Gold**		**Silver**		**Copper**		**Zinc**	
(Cut-off grade 0.5 g/t Au)	kt	g/t	koz	g/t	koz	%	t	%	t
Measured	540	3.70	64.2	17.49	303.6	0.29	1,566	1.01	5,454
Indicated	1,235	2.04	81.0	10.89	432.4	0.14	1,729	0.73	9,016
Measured + Indicated	**1,775**	**2.54**	**145.2**	**12.90**	**736.1**	**0.21**	**3,295**	**0.84**	**14,470**
Inferred	571	1.48	27.2	5.68	104.4	0.10	571	0.52	2,972
Total	**2,347**	**2.29**	**172.4**	**11.14**	**840.4**	**0.19**	**3,866**	**0.78**	**17,442**
Exploration	5	1.37	0.2	5.94	0.9	0.09	2,470	0.60	7,620

Note that due to rounding, numbers presented may not add up precisely to totals.

1.10.1. Mineral Resources Statement

For the Gadir deposit, it has been determined the Measured plus Indicated Mineral Resource is:

> 1,775 kt at a grade of 2.54 g/t Au containing 145.2 koz of Au and 736.1 kt of Ag. In addition, an Inferred Mineral Resource of 571 kt at a grade of 1.48 g/t Au containing 27.2 koz of Au was determined (at a cut-off grade of 0.5 g/t).

1.11. Conclusions

It was concluded that the Gadir Resource Block Model is appropriate to be utilised for Ore Reserve estimation to determine the mineable potential of the deposit. The Mineral Resources are reported according to the terms and guidelines of the JORC Code [2]. Given that Datamine has been closely associated with the exploration of the deposit and the resources estimation, Datamine carried out the Gadir Ore Reserve Estimate under the supervision of the CP.

1.12. Recommendations

Further exploration and grade control drilling is planned at the Gadir deposit. The targets for this drilling include:

- down-dip extension drilling of the mineralisation
- additional drilling chasing mineralisation along-strike
- exploration drilling between Gadir and Gedabek

No diagrams to show possible extensions are presented in this report as this information is commercially sensitive.

Planned works to continually improve efficiency are currently focused on upgrading and modernising laboratory and assay/analysis management processes. This includes the implementation of a laboratory information management system ("LIMS") so that sample and assay data handling can be managed more effectively. A project is underway to upgrade the geological database management system that will minimise manual data entry and handling through digital importing and automating protocols such as QA/QC checks and data management permissions.

It is recommended that the grade control data produced during mining should be validated against this Resource Model to check for consistency or variation. Any discrepancies that appear during this reconciliation process should be investigated to ascertain the source and be considered during future resource updates.

1.13. Competent Person Statement – Gedabek Mineral Resource

The CP, Dr. Stephen Westhead is an employee of the Company and as such has been in a consistent position to be fully aware of all stages of the exploration and project development. The CP worked very closely with the independent resource and reserve estimation staff of Datamine, both on site and remotely, to ensure knowledge transfer of the geological situation and to lend geological credibility to the modelling process. The information in this report has been compiled by Dr. Stephen Westhead, who is a full-time employee of Azerbaijan International Mining Company with the position of Director of Geology & Mining. Stephen Westhead has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves' [2] and as defined by the AIM rules. Stephen Westhead has reviewed the resources included in this report. Dr. Stephen Westhead is a Chartered Geologist (CGeol), a Fellow of the Geological Society (FGS), a Professional Member of the Institute of Materials, Minerals and Mining (MIMMM), a Fellow of the Society of

Economic Geologists (FSEG) and Member of the Institute of Directors (MIoD). Stephen Westhead consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

1.14. About AAM

Anglo Asian Mining PLC (AIM: AAZ) is a gold, copper and silver producer in Central Asia with a broad portfolio of production and exploration assets in Azerbaijan. The Company has a 1,962 km^2 portfolio, assembled from analysis of historic Soviet geological data and held under a PSA modelled on the Azeri oil industry.

The Company's main operating location is the Gedabek Contract Area ("Gedabek") which is a 300 km^2 area in the Lesser Caucasus mountain range in western Azerbaijan. The Company developed Azerbaijan's first operating Au-Cu-Ag mine at Gedabek which commenced gold production in May 2009. Mining at Gedabek was initially from its main open pit which is an open cast mine with a series of interconnected pits. The Company also operates the high grade Gadir underground mine which is co-located at the Gedabek site. In September 2017, production commenced at the Ugur open pit mine, a recently discovered Au ore deposit at Gedabek. The Company has a second underground mine, Gosha, which is 50 km from Gedabek. Ore mined at Gosha is processed at AAM's Gedabek plant.

The Company produced 83,736 gold equivalent ounces ('GEOs') for the year ended 31 December 2018. Gedabek is a polymetallic ore deposit that has gold together with significant concentrations of Cu in the main open pit mine, and an oxide Au-rich zone at Ugur. The Company therefore employs a series of flexible processing routes to optimise metal recoveries and efficiencies. The Company produces Au doré through agitation and heap leaching operations, Cu concentrate from its Sulphidisation, Acidification, Recycling, and Thickening (SART) plant and also a Cu and precious metal concentrate from its flotation plant. A second dedicated crusher line has been commissioned and is now in operation for the flotation plant to enable it to operate independently of the agitation leaching plant.

Anglo Asian is also actively seeking to exploit its first mover advantage in Azerbaijan to identify additional projects, as well as looking for other properties in order to fulfil its expansion ambitions and become a mid-tier gold and copper metal production company.

Contents

List of Figures

List of Tables

Glossary of Terms and Abbreviations

Company and Governmental Details	
AAM	Anglo Asian Mining PLC.; the AIM-listed company with a portfolio of gold, copper and silver production and exploration assets in Azerbaijan
AAZ	ticker for Anglo Asian Mining PLC., as listed on the AIM trading index
AIMC	Azerbaijan International Mining Company Limited; a subsidiary of AAM, in charge of overseeing the mining operations
CQA	CQA International Limited; a consultancy tasked with conducting site-related environmental engineering
Datamine	Datamine International Limited; the contractor tasked with creating and validating the 2018 Gadir Mineral Resource Block Model and Estimation
MENR	Azerbaijan Ministry of Ecology and Natural Resources
OREAS	Ore Research and Exploration Pty. Ltd. Assay Standards
PSA	Production Sharing Agreement; the binding legal document with the Azeri government, under which AAM operates the Gadir underground mine and other assets within the Gedabek Contract Area.

Drilling Methods			
CH	Underground Channel Sampling	DD	Diamond Drilling

Rock Forms Codes
See Appendix A

Other	
AAS	atomic absorption spectroscopy; an analytical technique that measures the concentration of elements of interest in a material
Act	a procedure put in place by AAM in order to track samples from acquisition to storage and ensure accountability; sign-off is required at each stage of the process
COG	cut-off grade
CP	Competent Person; as defined in [2]
CRM	certified reference material; small packets of material (typically 50 g) used as control standards during FA whose grade is known

FA	fire assay; an analytical technique used to determine the precious metal content of interest of a sample		
g/t	grams per tonne		
HS	high-sulphidation; a classification of epithermal system that describes Gedabek		
IPD	inverse power distance; samples close to the point of consideration are given a higher weighting than those further away		
LOM	life-of-mine		
LS	low-sulphidation; a classification of epithermal system that describes Gadir		
OK	ordinary kriging; a method of estimation that minimises the error variance		
QA/QC	quality assurance/quality control; an intensive procedure designed to analyse assay results for reliability and accuracy. This can be carried out by a number of methods (e.g. insertion of CRM packets into sample sequence).		
RQD	rock quality designation; a measure of core quality		
Ag	chemical symbol for silver	Cu	chemical symbol for copper
Au	chemical symbol for gold	Zn	chemical symbol for zinc

Lead Competent Person and Technical Specialists Declaration

Lead Competent Person

Name	Job Title	RPO	Qualification	Signed
Stephen Westhead	Director of Geology & Mining	MIMMM	B.Sc. M.Sc. Ph.D.	
		Geological Society	MIMMM, CGeol, FGS	

Stephen Westhead has a minimum of 5 years relevant experience to the type and style of mineral deposit under consideration and to the activity which is being undertaken to qualify as a Competent Person ("CP") as defined in the JORC Code [2]. Stephen Westhead consents to the inclusion in the Report of the matters based on this information in the form and context in which it appears.

I am not aware of any material fact or material change with respect to the subject matter of the Report, which is not reflected in the Report, the omission of which would make the report misleading. At the time this Report was written and signed off, to the best of my knowledge, information and belief, the Report contains all scientific and technical information that is required to be disclosed to make the Report not misleading.

Technical Specialists

The following Technical Specialists were involved in the preparation of the Mineral Resource and have the appropriate experience in their field of expertise to the activity that they are undertaking and consent to the inclusion in the Report of the matters based on their technical information in the form and context in which it appears.

Name	**Job Title**	**Responsibility**	**Signed**
Anar Valiyev	Exploration Manager	Exploration and Exploration Drilling	
Vitaly Khorst	Underground Mine Geology Manager	Geological Modelling	
Yerzhan Uzakbayev	Datamine Consultant	Mineral Resource Modelling and Compilation	
Rashad Aliyev	QA/QC Supervisor	Quality Control	
Andrew Hall	CQA Director (Azerbaijan)	Geotechnical Assessment	
Katherine Matthews	Project Geologist	Report Compilation and Review	
Stephen Westhead	Director of Geology and Mining	Management	

The Mineral Resources presented in the Report have been estimated by independent consultants and their work has been reviewed and has been accepted as a true reflection of the Mineral Resources of the Gadir gold-silver-copper-zinc deposit as on date of this report.

2. Introduction

Datamine was requested by AAM to carry out a Maiden Resource Estimation of the Gadir mineral deposit, located in the Republic of Azerbaijan. The estimation was completed in accordance with the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 [2]. The accompanying JORC Table 1 is provided in Appendix I. This study is considered to be a new geological model and Resource Estimate – Gadir resources have previously been reported as part of the Gedabek deposit [1] but have now been separated.

The Gadir Au-Ag-Cu-Zn deposit is located in the Gedabek Ore District of the Lesser Caucasus in northwestern Azerbaijan, adjacent to the city of Gedabay and 48 kilometres west of the city of Ganja. The Gadir underground deposit is located within the locally-defined Gedabek Contract Area. The Gadir deposit was developed into an underground operation by AAM in 2015, adding to the Company's operating asset portfolio. The Gedabek (open pit) and Ugur (open pit) deposits are other mines in the region, owned by AAM and operated by AIMC within the Gedabek Contract Area.

Extensive drilling has been carried out since the discovery of the Gadir orebody – to date, around 400 holes have been completed (Table 2.1). The majority of the geological information for Gadir was obtained via diamond drill ("DD") methods (around 80%). Both surface (60 holes) and underground (342 holes) drilling platforms were used. In addition, 8,786 channel ("CH") samples were analysed with a total length of 8,645 m.

Table 2.1 - A summary of the type and metres of drilling used for the Gadir Resource Block Model and estimation

Purpose	Drillhole Type	Number of Holes	Total Length (m)
Surface	DD	60	22,458
Underground	DD	342	15,512
	CH	-	8,645
TOTAL DRILLING		**402**	**46,615**

This document consists of information relating to exploration and production drilling activities, resource modelling and estimation methodology and results, mineral resource classification as well as a summary of planned further work relating to the Gadir underground mine.

2.1. Qualifications of Consultant

Yerzhan Uzakbayev is a Senior Resource Geologist and a CP (in accordance with JORC [2]) with 13 years' experience. During this time he has gained experience across a diverse portfolio including international exploration, production and mining projects at various stages of development. Yerzhan has had exposure from grassroots exploration through to feasibility resource estimation and mine development using commercial exploration and mining software packages (Datamine (Studio RM®, Sirovision®, Fusion®, Strat 3D®, Discover®), Isatis®, Surpac®, MapInfo® and Micromine®).

Yerzhan graduated from Karaganda State Technical University in 2006, obtaining a master's degree, specialising in Mine Geology. After graduation, Yerzhan started to work in oil and gas industry as an exploration geologist for Gazprom; here, he was involved in various active projects and prospective areas across Central Asia and the Caspian Sea region. Yerzhan moved to the mining industry in 2008 and began work as an exploration geologist for Kazakhmys PLC in one of the biggest porphyry copper deposits in Asia; he experienced working in VMS, IOCG, skarn and stratiform-type deposits. During 2010 -2011, he worked as a mine geologist in one of Kazakhmys copper-gold mines. Whilst based at operations with Kazakhmys, Yerzhan gained experience with greenfield and brownfield exploration programmes, geological and geotechnical drill campaigns, grade control, QA/QC implementation and creating technical reports in accordance to JORC [2].

In 2011, Yerzhan was promoted to Senior Resource Geologist at the resource evaluation department, based at the head office of Kazakhmys. During this period he was involved with more than 30 projects across Central Asia and Europe; half of these were operating underground and open pit mines exploiting a range of commodities (mostly base metals). After three years, he was further promoted to Head of Resource Evaluation and his responsible areas included implementing and managing the corporate geological database system, managing 19 geological and specialist staff, executive consulting, professional mentoring, resource evaluation, risk analysis and public reporting to both JORC and NI 43-101.

His current role is Senior Geology Consultant for Datamine International (UK). Yerzhan joined the company in 2015 and has been involved with numerous international projects in various commodities, including the USA, Saudi Arabia, Poland, Spain, Canada, Turkey and Iran. His work predominantly centres on geological modelling, geostatistical analysis, resource and reserve evaluation, database administration and validation, as well as implementation of software in mining activities. Additionally, Yerzhan is a member of Australian Institute of Geoscientists (MAIG).

2.2. Qualifications of Competent Person

Stephen Westhead is a geologist who earned an extractive industries Doctorate (PhD) in “Structural Controls on Mineralisation”, a Master’s degree (MSc) in “Mineral Exploration and Mining Geology”, a European Union Certificate in “Environmental Technology” and an Honours Bachelor degree (BSc) in “Applied Geology”.

In 1989, Stephen started his career in the mining sector as a Geologist with Anglesey Mining, working at the Parys Mountain property in Wales. Following completion of a PhD in 1993, he worked in India for five years as a Consultant Geologist focusing on the cement and base metals sectors. During his final year in India Stephen was a founder member of Fluor Daniel India (Pvt) Limited, working in resource analysis for the group mining and metals division, in addition to infrastructure and project development.

In 1997, Stephen moved to work in Central Asia for a period of ten years, gaining experience in Tajikistan, Uzbekistan, Kyrgyzstan and Kazakhstan. The positions held included Project Geologist, Country Chief Geologist, subsidiary mining company Director, Group Chief Geologist and General Director. The focus of this period was gold, silver and base metals projects, including resources and reserves management, project development and production. In 2006, Stephen worked in Ukraine, Eastern Europe, and Kazakhstan as Group Chief Geologist and Project Manager, again focusing on gold and silver commodities. In 2009, Stephen joined the Polyus Gold Group as Group Project Manager and subsequently as Technical Adviser to the Managing Director of the group’s largest business production unit, covering exploration and mining geology, mining, material handling and processing.

In April 2016, Stephen consulted to AIMC and joined the group in May 2016 as Director of Geology. Subsequently in January 2017, he became Director of Geology and Mining (current position). Stephen has expertise heading project management from exploration stages through to construction and mine production. He has been part of teams that have taken projects through feasibility study, raised finance, constructed mines/plants and brought these into production. Professional accreditations include being a Chartered Geologist (CGeol), a Fellow of The Geological Society (FGS), a Professional Member of the Institution of Materials, Minerals and Mining (MIMMM), a Fellow of the Society of Economic Geologists (FSEG) and a Member of the Institute of Directors (MIoD). Stephen was recently awarded the Institute of Directors Certificate in Company Direction (August 2017), with awards in 'The Role of the Director and the Board', 'Finance for Non-Financial Directors', 'The Director's Role in Strategy and Marketing' and 'Leadership for Directors'.

2.3. Site Visits

Datamine consultants developed and audited the Gadir Mineral Resource Block Model for the Gadir underground mine. Two Datamine engineers worked on the resources and reserves (one assigned to each project) and were able to verify work practice and procedures. The first stage of the project was to carry out a preliminary data review (data provided by the Company to Datamine).

During this secondment to the resource estimation, Yerzhan visited the site on one occasion that comprised of 9 days onsite. Whilst onsite he undertook validation of the supplied mineralisation strings and wireframes, working with an AIMC geologist knowledgeable of the Gadir deposit to clarify and correct where necessary. Visits to the Gadir mining operation, onsite laboratory, core yard and the Gedabek open pit (also within the Gedabek Contract Area) were also completed. The purpose of the site visit was to verify the practices being implemented and deposit familiarisation so that a reliable estimation could be conducted.

Datamine consultants have been involved with other mining projects owned by the Company within the same contract area as the Gadir underground mine and as such are familiar with the processing methods available, value chain of the mining and cost structure. The data used as part of this project was audited, validated and considered adequate for Mineral Resource estimates - all aspects of the data collection and management were observed and evaluated. Internal company and external reviews of the Mineral Resources yield estimates that are consistent with the Mineral Resource results. The methods used to build the Resource comprised of three-dimensional estimation, utilising both ordinary kriging and IPD methodologies. All results showed good correlation.

The CP, Dr. Stephen Westhead is an employee of the Company and as such has been in a consistent position to be fully aware of all stages of the exploration and project development. The CP worked very closely with the independent resource and reserve estimation staff of Datamine, both on site and remotely, to ensure knowledge transfer of the geological situation and to lend geological credibility to the modelling process.

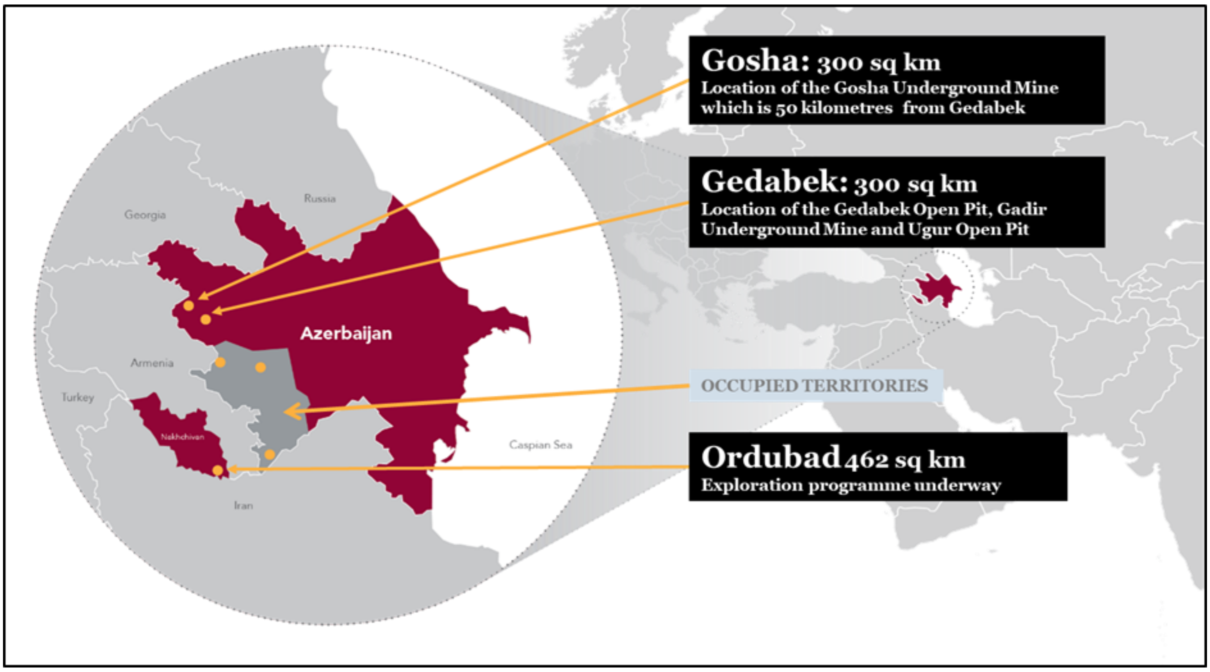
3. Property Description and Location

3.1. Introduction

The Gadir Au-Ag-Cu-Zn deposit is located in the Gedabek Ore District of the Lesser Caucasus mountain range in north-western Azerbaijan, 48 kilometres west of the city of Ganja; Figure 3.1 shows the location of the Contract Area. The Contract Area in which the Gadir underground mine is situated is approximately 300 km^2 in size and is one of six contract areas held by AAM, as described in the Production Sharing Agreement (described below; herein “PSA”). The AAM Contract Areas are located on the Tethyan Tectonic Belt, one of the world’s significant Cu-/Au-bearing belts.

Azerbaijan is situated in the South Caucasus region of Eurasia, bordering the Caspian Sea between Iran and Russia; the country also borders Armenia, Georgia and Turkey. Azerbaijan is split into two parts – the smaller, south-western portion is called Nakhchivan (an exclave of Azerbaijan). Azerbaijan has an established democratic government, which is fully supportive of international investment initiatives. Infrastructure is reasonably extensive and low-cost labour is also available. The climate is semi-arid, with cold winters and hot summers.

Figure 3.1 - Location of the Gedabek Contract Area



Gosha: 300 sq km
Location of the Gosha Underground Mine which is 50 kilometres from Gedabek

Gedabek: 300 sq km
Location of the Gedabek Open Pit, Gadir Underground Mine and Ugur Open Pit

OCCUPIED TERRITORIES

Ordubad 462 sq km
Exploration programme underway

3.2. Mineral Tenement and Land Tenure Status

The Gadir underground project is located within a licence area ("Contract Area") that is governed under a PSA, as managed by the Azerbaijan Ministry of Ecology and Natural Resources (herein "MENR").

The PSA grants AAM a number of 'time periods' to exploit defined Contract Areas, as agreed upon during the initial signing. The period of time allowed for early-stage exploration of the Contract Areas to assess prospectivity can be extended if required.

A 'development and production period' commences on the date that the Company holding the PSA issues a notice of discovery that runs for fifteen years, with two extensions of five years each at the option of the company. Full management control of mining within the Contract Areas rests with AIMC. The Gedabek Contract Area, incorporating the Gadir underground mine and the Gedabek and Ugur open pits, currently operates under this title.

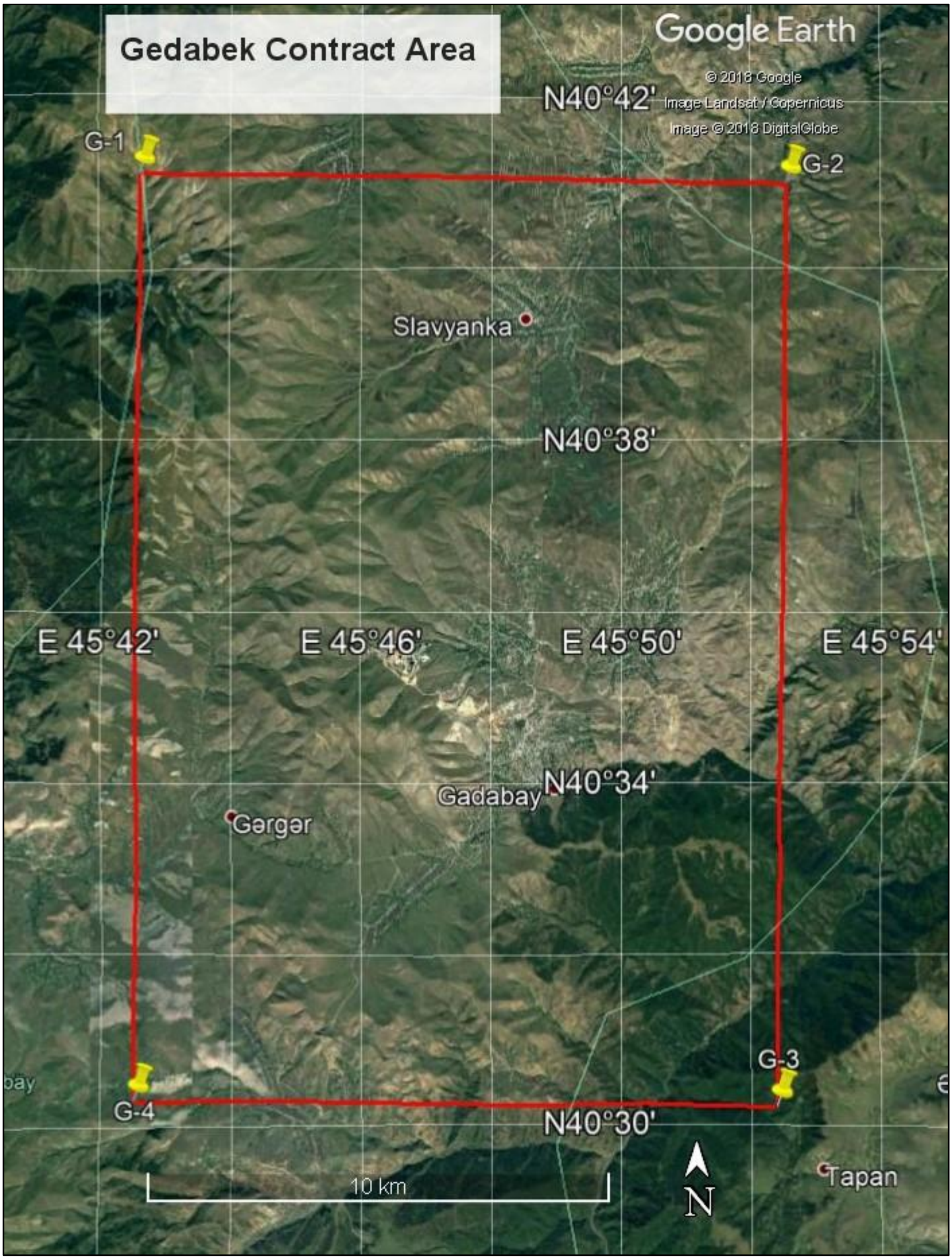
Under the PSA, AAM is not subject to currency exchange restrictions and all imports and exports are free of tax or other restriction. In addition, MENR is to use its best endeavours to make available all necessary land, its own facilities and equipment and to assist with infrastructure.

The deposit is not located in any national park and at the time of reporting, no known impediments to obtaining a licence to operate in the area exist – the PSA covering the Gedabek Contract Area is in good standing.

A map showing the extent of the Gedabek Contract Area is shown below in Figure 3.2 as defined by the following coordinates:

Point	**Gauss-Kruger projection Zone D-2**	
	Northing (Y)	Easting (X)
G-1	4504000	8560000
G-2	4504000	8574000
G-3	4484000	8560000
G-4	4484000	8574000

Figure 3.2 - A map showing the boundary of the Gedabek Contract Area



(Image from Google Earth [5])

4. Project Exploration History

4.1. Overview

Mining activity around Gedabek is reported to have started as far back as 2,000 years ago; old workings, adits and even pre-historic burial grounds can still be identified in the region to this day. More recent documented mining activity began around 1849 when the Mekhor Brothers, followed by the German Siemens Brothers Company in 1864, developed and operated the Gedabek copper mine under an arrangement with Czarist Russian authorities. At least five large (>100,000 t) and numerous smaller sulphide lenses were mined during the period between 1849 and 1917. Various base and precious metals were extracted from the region including gold and silver.

Mining activity ceased in 1917 during the onset of the Russian Revolution – the reader is referred to [3] for further information regarding the history of the area, with specifics relating to the Gedabek open pit covered.

4.2. Gadir Underground Project History

Whilst carrying out geological exploration in 2012, AIMC geologists discovered an outcrop of subvolcanic rhyolite displaying silica and potassic alteration (showing close similarities with the rhyolites found at the nearby open pit) on the northwest flank of the Gedabek operation. Samples were subsequently taken and assayed – anomalous results were returned, justifying follow-up. An exploration hole was drilled in October 2012, confirming potentially economic mineralisation at depth (24 m at 2.9 g/t Au [downhole] was intersected). A surface drill campaign was completed in 2013-14 along with an extensive soil geochemistry study (2014) and detailed geological and structural mapping (2012-2015), with the aim of determining the extent of the potentially economic mineralisation. The drilling identified a series of vertically stacked, shallow-dipping mineralised lenses within an area of approximately 50 x 100 metres over about 150 m height.

The Gadir underground deposit was thus identified, preliminarily evaluated and deemed economical. A pilot block model was constructed based on the initial drilling, allowing a resource estimate of 797,000 tonnes at 4.08 g/t Au (Inferred) to be calculated by CAE [4]. The surface drilling provided sufficient information to allow for the decision to be made to access the mineralisation by adit tunnel development. This was especially the case when comparing the cost of accessing the mineralisation by tunnel as compared to further deep drilling from surface. The initial objective of this was to carry out bulk sampling and assess the ground conditions for underground extraction potential.

The drilling results and subsequent unclassified internal resource estimate were encouraging and constrained sufficiently to warrant underground mining of the deposit. Work commenced to bring it into production with a 650 m decline access that was developed during March-May 2015. Based on this strategy, underground exploration work was simultaneous with mining, and only short-term planning was possible.

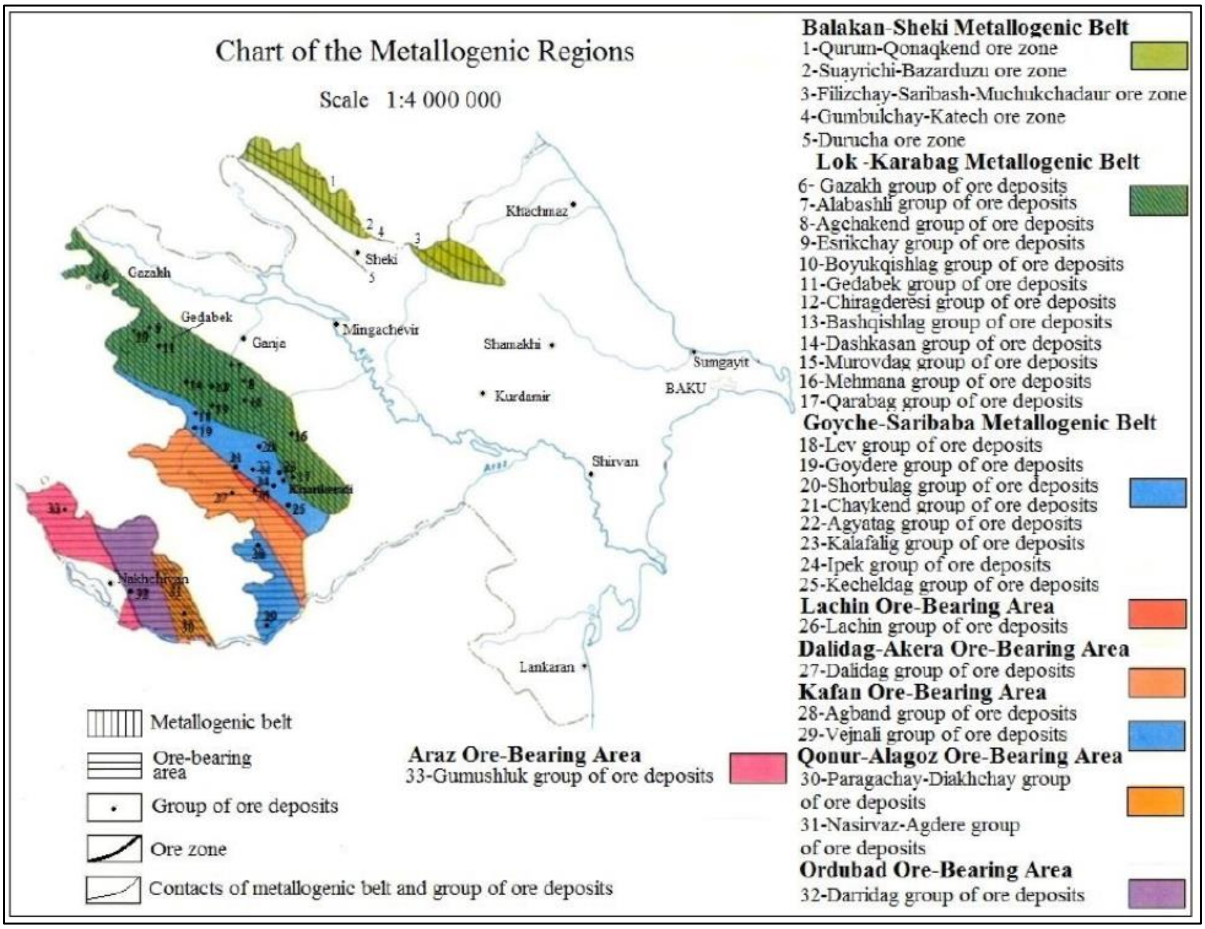
Development of ore drives commenced at Gadir in May 2015 and stope production began in September 2015. Since start-up, the deposit has been exploited for Au-Ag-Cu. With the development of the mine at depth, zinc content is increasing and studies are currently underway to establish the potential for processing Zn as a concentrate.

5. Deposit Geology

5.1. Regional Geology and Structural Setting

The Gedabek ore district is extensive and includes numerous mineral occurrences and prospects (as well as operating mines), the majority of which fall within the designated Gedabek Contract Area. The region lies within the Shamkir uplift of the Lok-Karabakh volcanic arc (in the Lesser Caucasus Mega-Anticlinorium). This province has been deformed by several major magmatic and tectonic events, resulting in compartmentalised stratigraphic blocks (Figure 5.1). Furthermore, Gadir is located in the central part of the world-class Tethyan metallogenic ore belt.

Figure 5.1 - Location map of the Gedabek ore district in relation to major metallogenic belts in Azerbaijan

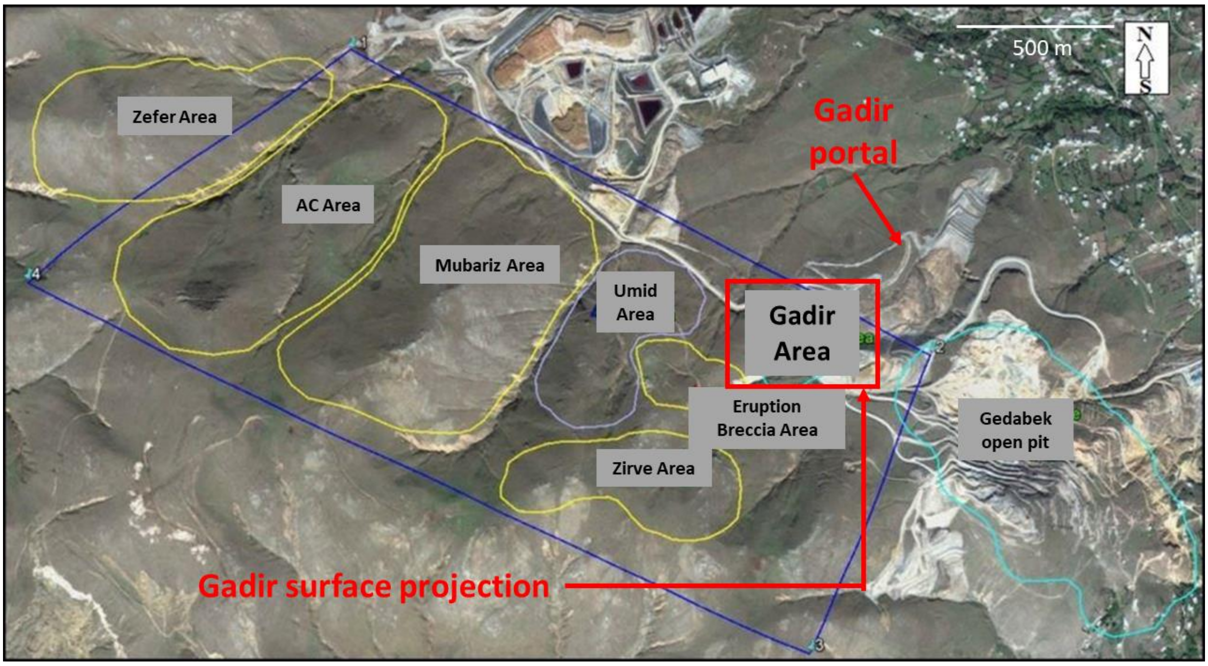


Source: Universal Journal of Geoscience 6(3): 78-101, 2018

5.2. Deposit Geology

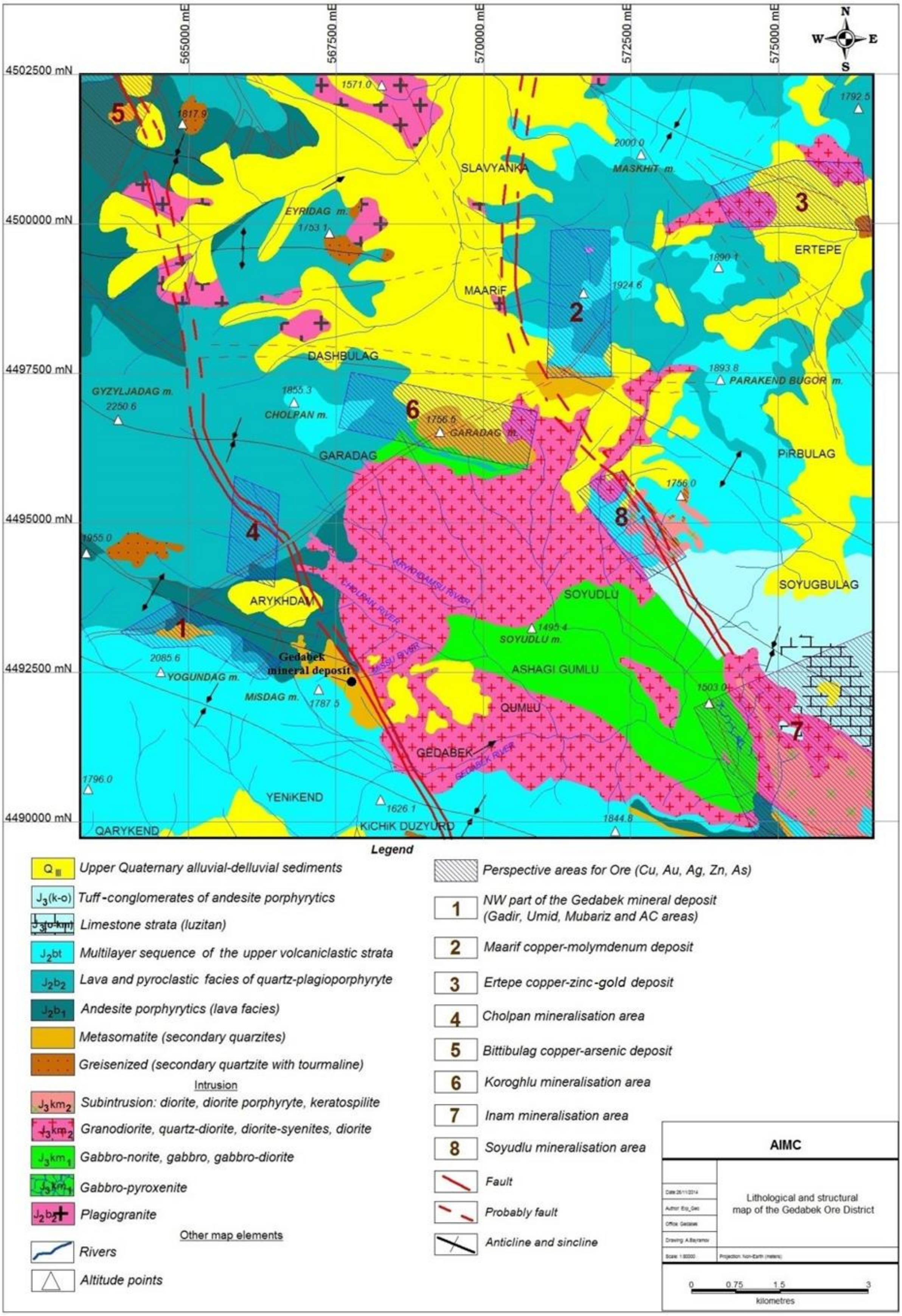
The portal to Gadir was independently located on Google Earth at latitude 40°58'59.21"N and longitude 45°79'03.54"E (tunnelled into the flanks of Yogundag Mountain). The Gadir ore deposit is located within the large Gedabek-Garadag volcanic-plutonic system. This system is characterised by a complex internal structure indicative of repeated tectonic movement and multi-cyclic magmatic activity, leading to various stages of mineralisation emplacement. Yogundag Mountain is a porphyry-epithermal zone, with known deposits in the area (e.g. Gadir, Gedabek, Umid and Zefer) believed to represent the upper portion of the mineralising system (Figures 5.2 and 5.3).

Figure 5.2 - Location of ore prospects in relation to the Gadir deposit



In recent years geological exploration and scientific studies around the Gedabek region confirm that the Gedabek deposit is part of an epithermal system (high-sulphidation type) with Au-Cu-Ag ore mineralisation. The discovery of Gadir and it being classified as LS-type, in addition to the other known mineral occurrences and deposits of varying mineral content in the Gedabek Contract Area (Figure 5.3), lends support to the existence of a large regional mineral-forming system.

Figure 5.3 - A lithological-structural map of the Gedabek Ore District



Epithermal-hosted Au deposits occur largely in volcanic arcs (both island arcs and continental arcs), with ages similar to the volcanism. The Gadir and Gedabek deposits are located on one such arc, exhibiting a complex geological situation. This type of deposit generally forms at shallow depths, around 1.5 km, and are hosted mainly by volcanic rocks. The two deposit styles (HS and LS) form from fluids of distinctly different chemical composition and origin in a contrasting volcanic environment.

The Gadir orebody has a complicated geological structure and hosts intrusive rocks of different ages and compositions. Three sets of regional fault zones controlling mineralisation have been identified and are characterised on the basis of strike direction and morphological characteristics:

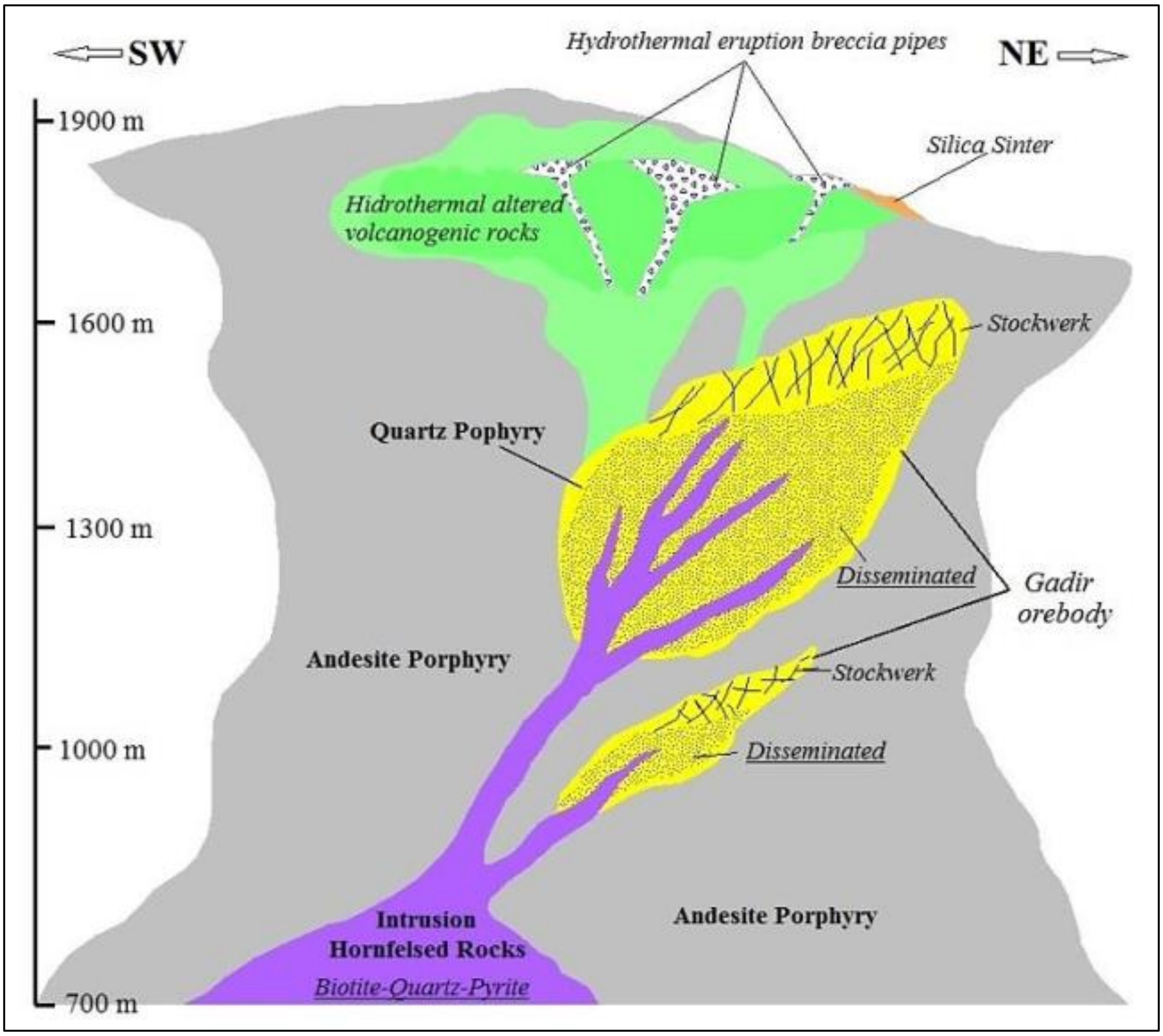
- NW-SE striking faults (e.g. Gedabek-Bittibulag Deep Fault, Misdag Fault)
- NE-trending faults (e.g. Gedabek-Ertepe Fault, Gerger-Arykhdam Fault, Gadir ore-controlling faults)
- Local transverse faults

As can be observed in Figure 5.3, the large Gedabek-Bittibulag Deep Fault runs through Gadir, having a local strike between 270-310° and a steep dip of 80-85° to the south (large fault shown on the western side). Fault zone thickness does not exceed 50 m and the rocks found within and alongside these faults are brecciated, slightly schistose and kaolinised. Fault displacement generally exhibits vertical downthrow of the northern side by 60-75 m. This faulting compartmentalises the mineralisation into blocks. Also several parallel faults (Gatyrbulagy, Umid, Mubariz and Zefer) to the Gedabek-Bittibulag Deep Fault illustrate similar offsets. An example of a local fault intersected underground at Gadir, displaying brecciation and exhibiting pervasive chloritic alteration is shown in Figure 5.4 below (hard hat for scale). Note the distinctive geological contact between the quartz porphyry unit and adjacent volcanic rocks that can be treated as a marker horizon to assist with geological mapping.

Figure 5.4 – An image of a fault intersected underground at Gadir

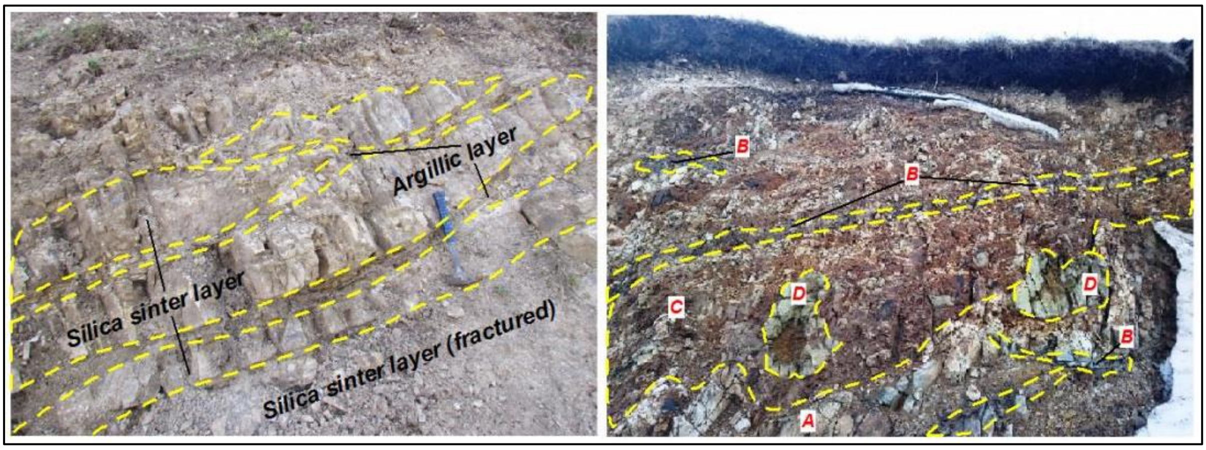
As previously mentioned, Gadir is characterised as a LS-epithermal ore system (Figure 5.5). Various forms of hydrothermal alteration are found to occur at Gadir. Propylitic alteration is mostly developed around the north/northwestern area of Gadir and is observed in the andesitic tuff formation. This alteration appears to be predominantly controlled by the permeability of these tuff layers. Chlorite and epidote are most commonly found associated with this alteration style. Argillic alteration is found in the wall rocks and consists mainly of clay minerals such as kaolinite, smectite and illite. Silica alteration is another dominant alteration style found at Gadir and is mainly observed in the central part of the deposit. Silicifcation of the volcanics (andesitic-dacitic in composition) is common and silica enrichment zones, sometimes several tens of metres thick, can be found at the top of volcanic sequences (further capped by volcano-sedimentary horizons). The 'Gadir Silica Sinter' was identified on surface around the 'Gedabek Hydrothermal Eruption Breccia pipes' (see Figure 5.6), the presence of which suggests the formation of a pathway to a deeper geothermal reservoir. This 'Sinter' is stratigraphically overlain by andesitic tuffs. This sequence pinpoints the time at which the transition occurred from submarine volcanism to sub-aerial volcanism.

Figure 5.5 – Idealised cross-section of the geological model through the Gadir deposit



Source: Universal Journal of Geoscience 6(3): 78-101, 2018

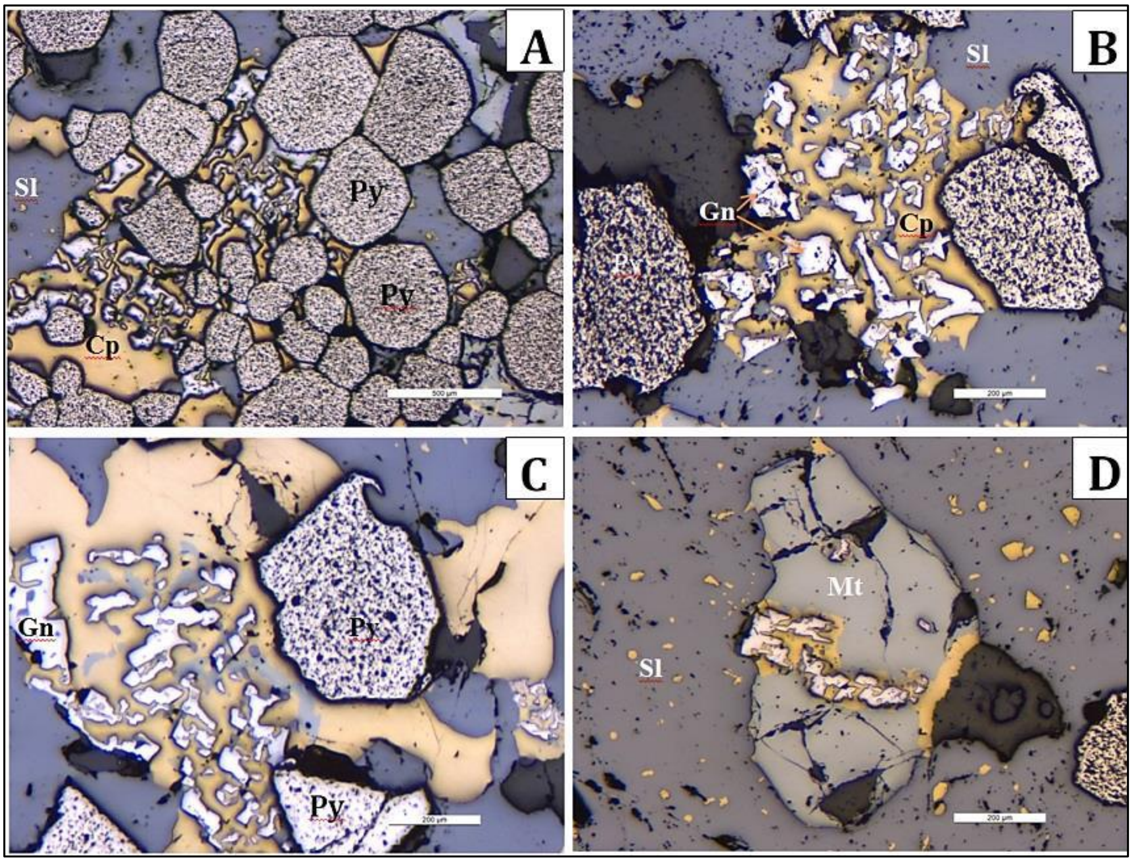
Figure 5.6 – *Left*: 'Gadir Silica Sinter' layer. *Right*: Lacustrine siliceous deposit with fragments of 'Eruption Breccia'. 'A' - 'Silica Sinter' layer. 'B' - hornfelsed andesitic tuff sedimentary layer. 'C' - 'Silica Sinter' layer filled by iron oxide minerals. 'D' - propylitic-altered breccia.



The presence of Au, Ag, Cu and Zn hosted predominately in vein systems, supports the characterisation by AIMC geologists of Gadir as being a LS-type epithermal deposit.

Mineralisation primarily exploited at Gadir is Au-Ag from a polymetallic ore, also containing base metals, Cu and Zn. The main ore minerals are sulphides, including pyrite, chalcopyrite, sphalerite and trace galena (Figure 5.7). Mineralisation is hosted between two distinct lithological units; the upper zone of the orebody exhibits a flat contact with Bajocian-Bathonian andesitic tuffs whilst it sits above a diorite intrusion of Kimmeridgian age. The mineralisation is deeper that currently exploited in the Gedabek open pit.

Figure 5.7 – Reflected light and SEM imagery of mineralization typically found at Gadir. *Slide A*: Cubic pyrite crystals exhibiting granular textures (scale 500 µm). *Slides B and C*: Highly reflective galena crystals, only found as inclusions within chalcopyrite (both scales 200 µm). *Slide D*: Magnetite replacing chalcopyrite (scale 200 µm). Gangue material is predominantly quartz (Sl).



6. Sampling and Exploration

6.1. Drilling Techniques

Extensive drilling has been carried out since the discovery of the Gadir orebody – to date, around 400 holes have been completed. The majority of the geological information for Gadir was obtained via DD methods (around 80%). Both surface (60 holes) and underground (342 holes) drilling platforms were used. In addition, 8,786 CH samples have been analysed with a total length of 8,645 m.

Currently AIMC uses one contracted drilling company for underground and two for surface diamond drilling. AIMC also own an underground drill rig used at Gadir.

DD utilised various core tube sizes, dictated by the platform location and the depth of the hole. Surface DD holes were typically HQ (generating core 63.5 mm in diameter) or NQ (core diameter 47.6 mm) in size. Where necessary, the barrel size was reduced down from HQ to NQ. The drill core was not orientated due to technological limitations of drill contractors in-country. Discussions are underway with regards to possible future use of orientated core.

Underground DD holes were almost exclusively used to outline Mineral Resources and infill areas targeted by wide-spaced surface DD holes. Underground holes were NQ or BQ (36.5 mm core diameter) in size.

Downhole surveying was carried out on HQ and NQ drillholes utilising a Reflex EZ-TRAC magnetic and gravimetric multi-shot instrument, at a downhole interval of 9 m (after an initial shot at 3 m). Downhole surveying was not carried out on BQ holes due to their shallow depths.

6.2. Sampling Techniques

Handheld XRF (model THERMO Niton XL3t) was used to assist with mineral identification during field mapping and logging of the material acquired via DD-RC-CH methods.

6.2.1. Diamond Core

DD rigs were used to recover a continuous core sample of bedrock at depth for geological data collection - this included structural, lithological and mineralogical data. HQ and NQ full core was split longitudinally in half by using a diamond-blade core saw. The core saw is a 'CM501' manufactured by Norton Clipper and the blades from the 'GSW' series manufactured by Lissmac. Full core of BQ size is sampled and as such, only coarse reject and pulp rejects are retained.

Samples of one half of the core were taken, typically at 1 metre intervals, whilst the other half was retained as reference core in the tray prior to storage. If geological features or contacts warranted adjustment of the interval, then the intersection sampled was reduced to confine these features. The drill core was rotated prior to cutting to maximise structure to axis of the cut core – cut lines were drawn on during metre-marking.

To ensure representative sampling, DD core was logged and marked considering mineralisation and alteration intensity, after ensuring correct core run marking with regards to recovery. Sampling of the drillcore was systematic and unbiased – surface drillcore samples were sent to the on-site laboratory for preparation and pulverised down to 50 g charges, ready for routine Atomic Absorption Analysis ("AAS") and check Fire Assay ("FA"). Charges for underground drillcore Au assaying weigh 25 g whilst 10 g charges are used for Ag, Cu and Zn analysis.

6.2.2. Channel Sampling

All underground faces were marked-up by the supervising underground geologist, constrained within geological and mineralised boundaries. Subsequent sample acquisition was carried out with a rock hammer (either hand-held or Bosch power tool) and grinding machines. Samples were collected in calico bags as per AIMC’s face sampling procedure. Typical sample masses range between 10-20 kg.

The procedure involves cutting a linear channel across the vein or orebody in order to obtain the most representative sample possible for the designated interval. Channel samples were collected from the floors of the underground workings. When chip channel sampling is conducted along a rock face, a plastic sheeting is laid out for the material to fall on so as to avoid contamination. Sample intervals are 1-1.5 m, 10 cm in width and 5 cm deep. A face sheet with sketch, sample width, sample number(s) and locality was generated for each sampled face.

Samples were bagged with pre-numbered sample tickets and submitted with a sample submission form to the onsite laboratory. Underground CH samples have been used in the

Mineral Resource estimate. Chip samples have not been used in the Mineral Resource estimate and are primarily used to provide guidance for mine-mill reconciliations.

CH sampling was systematic and unbiased. Samples were sent to the on-site laboratory for preparation and pulverised ready for routine AAS and check FA. Charges for Au assaying weigh 25 g whilst 10 g charges are used for Ag, Cu and Zn analysis.

6.3. Drill Sample Recovery

Core recovery was recorded at the drill site, verified at the core yard and subsequently entered into the database. Recovery for mineralised sections was generally very good (in excess of 95%) and over the length of the hole was typically > 90%. Recovery measurements were poorer in fractured and faulted rocks, weathered zones or dyke contacts – in these zones average recovery was 85%.

Geological information was passed to the drilling crews to make the operators aware of zones of geological complexity - the aim was to maximise sample recovery through technical management of the drilling (via downward pressures, rotation speeds, hole flushing with water, use of clays etc.).

From visual inspection of the data, the consultant deemed the core recovery to be good and thus to not have introduced bias into the subsequent sampling.

Work to date has not identified a relationship between grade and sample or core recovery; however in core drilling, losses of fines are believed to result in lower gold grades due to washout in fracture zones. This effect is likely to result in an underestimation of grade, which will be checked during production.

6.4. Geological Logging

Drill core was logged in detail for lithology, alteration, mineralisation, geological structure and oxidation state by AIMC geologists, utilising logging codes and data sheets and supervised by the CP (see Appendix A for unit codes and descriptions). Logging was considered detailed enough to confidently interpret the orebody geology, to further support Mineral Resource estimation, mining and metallurgical studies for the Gadir deposit. Logging was both qualitative and quantitative in nature.

All core was photographed in the core boxes to show tray number, core run markers and a scale. All CH faces were sketched prior to sample collection.

6.4.1. Geotechnical Studies

Rock quality designation (herein "RQD") logs were produced for geotechnical purposes for all core drilling. Fracture intensity, style, fracture-fill and fragmentation proportion data were also collected for geotechnical analysis.

An independent geotechnical assessment was completed by the environmental engineering company CQA International Limited ("CQA"), to support operations and to provide supplementary information for this resource evaluation. CQA's geotechnical assessment of the Gadir mine involved carrying out a desk study, completing fieldwork (e.g. assessing tunnel morphology and existing ground support, estimating water inflows) and then interpreting the data. The results of this study and a copy of the report can be found in [6].

6.5. Sample Preparation

Sample preparation prior to laboratory submission is described for each method in Section '6.2. Sampling Techniques'. Both DD and CH samples were prepared according to best practice, and this was considered appropriate for this Mineral Resource Estimation, with initial geological control of the core or face samples. This was followed by crushing and grinding at the onsite laboratory sample preparation facility (attached to the assaying facilities). This site is routinely managed for contamination and cleanliness control.

Sample preparation at the laboratory is conducted according to the following process procedure:

- After receiving samples from the geology department, cross-referencing occurs against the sample order list provided. Any errors/omissions are followed up and rectified.
- All samples undergo oven drying between 105-110°C to drive off moisture and volatiles. Samples are then passed to crushing.
- Crushing – first stage – to -25 mm size.
    - Crushing – second stage – to -10 mm size.
        - Crushing – third stage – to -3 mm size.

- After crushing the samples are split and 150-250 g of material is taken for assay preparation (depending upon the drillhole type). The remainder is retained for reference.
- The material to be assayed is first pulverised to -75 µm prior to delivery to the assaying facility.

Quality control procedures are in place at the laboratory for all sub-sampling preparation. This included geological control during DD core cutting and sampling to ensure representativeness of the geological interval.

Petrographic studies have identified the average Au particle size as being in the order of 5 µm. Sample sizes are therefore deemed appropriate.

6.6. Quality Assurance/Quality Control Procedures

Laboratory procedures, quality assurance/quality control ("QA/QC") assaying and analysis methods employed are industry standard. They are enforced and supervised by a dedicated laboratory team. AAS and FA techniques were utilised and as such, both partial and total analytical techniques were conducted.

All data related to these drillings are located in the relevant drillhole database. Material drillholes include only those completed by DD or CH methods as these impacted on the interpretation of the overall geometry of the resource. Chip samples were not considered material as these were predominantly used for mine-mill reconciliation purposes. The quality of the QA/QC carried out for Gadir was considered to be appropriate for resource and reserve estimation purposes by Datamine.

QA/QC procedures included the use of pulp duplicates of DD core samples, blanks, certified standards or certified reference material ("CRM"), obtained from Ore Research and Exploration Pty. Ltd. Assay Standards (an Australia-based CRM supplier; "OREAS"). In addition, laboratory control comprised of pulp duplicate, check sample and replicate sample acquisition and analysis. This QA/QC system allowed for the monitoring of precision and accuracy of assaying for the Gadir deposit.

A total of 101 pulp duplicates were assayed at varying grade ranges (Table 6.1). Fifteen pulp duplicates were assayed for CH samples and 86 for DD samples.

Table 6.1 - Au grade ranges as assigned to the Gadir deposit

Ore Grade Designation	Au (from)	Au (to)
	g/t	g/t
Very Low (VL)	0.00	0.30
Low	0.30	1.00
Medium (MED)	1.00	2.00
High	2.00	5.00
Very High (V HIGH)	5.00	+

Summary results from the pulp duplicates obtained are provided in Table 6.2. It should be noted that any standard deviations of zero indicate that all results assayed at below detection limit (notable in the case for blanks).

Production reconciliation between mined grades and assays correlate well and have been used as an additional resource to validate metal content. The quality of the QA/QC was considered adequate for resource estimation purposes.

The CRMs entered into the sample sequence for QA/QC control are summarised in Table 6.3 below. Note that values provided in brackets represent AIMC assay results where OREAS have not provided a grade for that standard and element (denoted in the relevant OREAS column by '-'). Where a grade of 0.00 is displayed in an OREAS cell, it means that the published assay grade exists to a higher precision than 2 decimal places. Any '-' assignments in the standard deviation column indicate that only one CRM of that designation was used in the Gadir database at the time of issuing the information to Datamine. The grouping of ore grades, into categories as described in Table 6.1, only apply to Au values.

Table 6.2 - Pulp duplicate grades against original grades for Gadir

Pulp Duplicate (PD) Original Drill Method	Count	Original Sample Grades								PD Sample Grades							
		Mean				Standard Dev.				Mean				Standard Dev.			
		Au	Ag	Cu	Zn	Au	Ag	Cu	Zn	Au	Ag	Cu	Zn	Au	Ag	Cu	Zn
		g/t	g/t	%	%	g/t	g/t	%	%	g/t	g/t	%	%	g/t	g/t	%	%
PD_Blank	38	0.03	5.00	0.03	0.02	0.00	0.00	0.03	0.04	0.03	0.08	0.02	0.14	0.00	0.66	0.03	0.13
PD_V LOW	34	0.07	5.00	0.04	0.05	0.06	0.00	0.06	0.04	0.12	1.30	0.03	0.15	0.22	1.38	0.08	0.11
PD_LOW	9	0.64	8.22	0.08	0.90	0.22	9.67	0.14	2.33	0.62	4.21	0.08	1.01	0.27	5.71	0.17	2.55
PD_MED	5	1.31	14.00	0.22	1.50	0.65	20.12	0.16	3.30	1.64	10.02	0.20	1.65	0.99	12.75	0.18	3.40
PD_HIGH	12	3.25	21.83	0.08	0.29	0.82	34.47	0.16	0.59	3.32	18.46	0.07	0.32	0.99	30.72	0.15	0.58
PD_V HIGH	3	164.92	7.67	0.25	0.01	252.35	4.62	0.40	0.01	181.48	17.80	0.28	0.18	283.22	9.12	0.46	0.27

Table 6.3 – CRMs used for QA/QC control purposes as part of this resource run

Ore Grade Designation	CRM Description				
	Name	Au target grade	Ag target grade	Cu target grade	Zn target grade
		g/t	g/t	%	%
Very Low	CRM 22_OREAS 501	0.21	0.44	0.28	0.01
	CRM 30_OREAS 600	0.19	24.31	0.05	0.06
Low	CRM 32_OREAS 905	0.40	0.52	0.16	0.01
	CRM 23_OREAS 502c	0.48	0.80	0.78	0.01
	CRM 17_OREAS 502b	0.49	2.01	0.76	0.01
	CRM 20_OREAS 620	0.67	38.40	0.18	3.12
	CRM 2_OREAS 503b	0.69	1.46	0.52	0.01
	CRM 31_OREAS 601	0.77	49.41	0.10	0.13
	CRM 16_OREAS 623	0.80	20.40	1.72	1.01
	CRM 12_OREAS 59d	0.80	-	1.47	-
Medium	CRM 15_OREAS 701	1.07	1.11	0.48	0.03
	CRM 27_OREAS 253	1.22	0.25	0.01	-
	CRM 19_OREAS 621	1.23	68.00	0.37	5.17
	CRM 13_OREAS 604	1.43	492.00	2.16	0.25
	CRM 7_OREAS 504b	1.56	2.98	1.10	0.01
	CRM 3_OREAS 16a	1.81	-	-	-
	CRM 11_OREAS 602	1.95	114.88	0.52	0.41
High	CRM 24_OREAS 60d	2.43	4.45	0.01	0.00
	CRM 4_OREAS 60c	2.45	4.81	0.01	0.01
	CRM 28_OREAS 254	2.50	0.40	0.01	-
	CRM 9_OREAS 214	2.92	-	-	-
	CRM 10_OREAS 17c	3.04	-	-	-
	CRM 6_OREAS 61e	4.51	5.37	0.01	0.00
	CRM 25_OREAS 61f	4.53	3.61	0.00	-
Very High	CRM 14_OREAS 603	5.08	292.92	1.01	0.91
	CRM 5_OREAS 62c	9.37	9.86	-	-
	CRM 29_OREAS 257	13.96	2.17	0.01	-

For each element assayed, the data was separated and analysed. Comparison of average Au grades between the onsite laboratory and the OREAS CRMs (Table 6.4) showed a general bias towards the onsite laboratory underestimating the grade, notably for 'Very High' material; however, overall the bias fell just outside of 0.1 g/t and so is reasonable.

Silver assays showed a similar bias however the standard deviations vary significantly (Table 6.5). The same exercise was carried out for both Cu (Table 6.6) and Zn (Table 6.7) assays. For Cu assays > 0.50%, the AIMC laboratory generally underestimated grade when compared with published OREAS values (where available). This also appears to have occurred for Zn assays (> 2.90%) however this data may be considered less reliable due to the lack of published grades from OREAS.

Table 6.4 – A summary of CRM published Au grades versus average assayed Au grades

Ore Grade Designation	Name	CRM Au Result	AIMC Au Result	STDEV	CRM Au Result	AIMC Au Result	STDEV
		g/t	g/t	g/t	g/t	g/t	g/t
Very Low	CRM 22_OREAS 501	0.21	0.24	0.05	0.20	0.22	0.04
	CRM 30_OREAS 600	0.19	0.21	0.04			
Low	CRM 32_OREAS 905	0.40	0.42	-	0.68	0.69	0.14
	CRM 23_OREAS 502c	0.48	0.49	0.04			
	CRM 17_OREAS 502b	0.49	0.53	-			
	CRM 20_OREAS 620	0.67	0.70	0.04			
	CRM 2_OREAS 503b	0.69	0.61	-			
	CRM 31_OREAS 601	0.77	0.74	0.07			
	CRM 16_OREAS 623	0.80	0.75	0.06			
	CRM 12_OREAS 59d	0.80	0.85	0.06			
Medium	CRM 15_OREAS 701	1.07	1.02	0.08	1.57	1.38	0.42
	CRM 27_OREAS 253	1.22	1.24	0.06			
	CRM 19_OREAS 621	1.23	1.26	0.09			
	CRM 13_OREAS 604	1.43	1.35	0.16			
	CRM 7_OREAS 504b	1.56	0.99	0.81			
	CRM 3_OREAS 16a	1.81	1.28	0.35			
	CRM 11_OREAS 602	1.95	1.90	0.19			
High	CRM 24_OREAS 60d	2.43	2.23	0.24	3.28	3.29	1.08
	CRM 4_OREAS 60c	2.45	2.43	0.31			
	CRM 28_OREAS 254	2.50	2.36	-			
	CRM 9_OREAS 214	2.92	2.97	0.14			
	CRM 10_OREAS 17c	3.04	2.74	0.05			
	CRM 6_OREAS 61e	4.51	4.53	0.37			
	CRM 25_OREAS 61f	4.53	4.89	0.58			
Very High	CRM 14_OREAS 603	5.08	4.95	0.44	7.10	6.80	3.15
	CRM 5_OREAS 62c	9.37	8.83	0.13			
	CRM 29_OREAS 257	13.96	13.04	0.74			

Table 6.5 – A summary of CRM published Ag grades versus average assayed Ag grades

Ore Grade Designation	Name	CRM Ag Result	AIMC Ag Result	STDEV
		g/t	g/t	g/t
Very Low	CRM 22_OREAS 501	0.44	0.84	0.63
	CRM 30_OREAS 600	24.31	22.07	4.00
Low	CRM 32_OREAS 905	0.52	0.38	-
	CRM 23_OREAS 502c	0.80	1.69	2.29
	CRM 17_OREAS 502b	2.01	2.15	-
	CRM 20_OREAS 620	38.40	36.89	1.63
	CRM 2_OREAS 503b	1.46	2.81	-
	CRM 31_OREAS 601	49.41	46.13	2.25
	CRM 16_OREAS 623	20.40	26.23	6.31
	CRM 12_OREAS 59d	-	(1.85)	(1.19)
Medium	CRM 15_OREAS 701	1.11	0.78	0.57
	CRM 27_OREAS 253	0.25	0.38	0.00
	CRM 19_OREAS 621	68.00	61.38	8.90
	CRM 13_OREAS 604	492.00	457.15	32.58
	CRM 7_OREAS 504b	2.98	5.75	3.85
	CRM 3_OREAS 16a	-	(1.26)	(1.86)
	CRM 11_OREAS 602	114.88	113.55	7.84
High	CRM 24_OREAS 60d	4.45	4.61	0.76
	CRM 4_OREAS 60c	4.81	5.25	3.62
	CRM 28_OREAS 254	0.40	0.38	-
	CRM 9_OREAS 214	-	(1.26)	(0.73)
	CRM 10_OREAS 17c	-	(1.17)	(1.12)
	CRM 6_OREAS 61e	5.37	4.82	0.79
	CRM 25_OREAS 61f	3.61	3.37	1.66
Very High	CRM 14_OREAS 603	292.92	246.44	58.02
	CRM 5_OREAS 62c	9.86	8.53	0.54
	CRM 29_OREAS 257	2.17	1.75	0.36

Table 6.6 – A summary of CRM published Cu grades versus average assayed Cu grades

Ore Grade Designation	Name	CRM Cu Result	AIMC Cu Result	STDEV
		g/t	g/t	g/t
Very Low	CRM 22_OREAS 501	0.28	0.25	0.00
	CRM 30_OREAS 600	0.05	0.05	0.01
Low	CRM 32_OREAS 905	0.16	0.15	-
	CRM 23_OREAS 502c	0.78	0.73	0.08
	CRM 17_OREAS 502b	0.76	0.76	-
	CRM 20_OREAS 620	0.18	0.16	0.01
	CRM 2_OREAS 503b	0.52	0.48	-
	CRM 31_OREAS 601	0.10	0.09	0.01
	CRM 16_OREAS 623	1.72	1.50	0.03
	CRM 12_OREAS 59d	1.47	0.88	0.29
Medium	CRM 15_OREAS 701	0.48	0.29	0.13
	CRM 27_OREAS 253	0.01	0.00	0.01
	CRM 19_OREAS 621	0.37	0.34	0.04
	CRM 13_OREAS 604	2.16	1.98	0.18
	CRM 7_OREAS 504b	1.10	0.97	0.12
	CRM 3_OREAS 16a	-	(0.03)	(0.02)
	CRM 11_OREAS 602	0.52	0.48	0.05
High	CRM 24_OREAS 60d	0.01	0.01	0.00
	CRM 4_OREAS 60c	0.01	0.01	0.00
	CRM 28_OREAS 254	0.01	0.00	-
	CRM 9_OREAS 214	-	(0.01)	(0.00)
	CRM 10_OREAS 17c	-	(0.01)	(0.00)
	CRM 6_OREAS 61e	0.01	0.01	0.00
	CRM 25_OREAS 61f	0.00	0.01	0.01
Very High	CRM 14_OREAS 603	1.01	1.31	1.42
	CRM 5_OREAS 62c	-	(0.04)	(0.05)
	CRM 29_OREAS 257	0.01	0.01	0.00

Table 6.7 – A summary of CRM published Zn grades versus average assayed Zn grades

Ore Grade Designation	Name	CRM Zn Result	AIMC Zn Result	STDEV
		g/t	g/t	g/t
Very Low	CRM 22_OREAS 501	0.01	0.03	0.02
	CRM 30_OREAS 600	0.06	0.09	0.06
Low	CRM 32_OREAS 905	0.01	0.00	-
	CRM 23_OREAS 502c	0.01	0.04	0.03
	CRM 17_OREAS 502b	0.01	0.08	-
	CRM 20_OREAS 620	3.12	2.93	0.19
	CRM 2_OREAS 503b	0.01	0.00	-
	CRM 31_OREAS 601	0.13	0.11	0.07
	CRM 16_OREAS 623	1.01	1.06	0.04
	CRM 12_OREAS 59d	-	(0.09)	(0.03)
Medium	CRM 15_OREAS 701	0.03	0.08	0.02
	CRM 27_OREAS 253	-	(0.00)	(0.01)
	CRM 19_OREAS 621	5.17	4.98	0.80
	CRM 13_OREAS 604	0.25	0.32	0.04
	CRM 7_OREAS 504b	0.01	0.07	0.06
	CRM 3_OREAS 16a	-	(0.08)	(0.08)
	CRM 11_OREAS 602	0.41	0.45	0.09
High	CRM 24_OREAS 60d	0.00	0.19	0.03
	CRM 4_OREAS 60c	0.01	0.02	0.02
	CRM 28_OREAS 254	-	(0.00)	-
	CRM 9_OREAS 214	-	(0.07)	(0.06)
	CRM 10_OREAS 17c	-	(0.10)	(0.06)
	CRM 6_OREAS 61e	0.00	0.02	0.01
	CRM 25_OREAS 61f	-	(0.06)	(0.04)
Very High	CRM 14_OREAS 603	0.91	1.15	1.13
	CRM 5_OREAS 62c	-	(0.03)	(0.05)
	CRM 29_OREAS 257	-	(0.05)	(0.02)

There has been a drive to improve QA/QC control and execution of procedures; this and various steps have been taken, including increasing QA/QC sample submission and enrolling dedicated laboratory staff on courses so that methodologies and purposes can be understood. From this, procedures have been enhanced and training of new staff to this level is carried out to ensure this high standard is maintained across the board. A new QA/QC system will be put in place to ensure more robust reliability of sample assay and analysis data going forward. This will form part of the new sample preparation and laboratory facility, introduction of a laboratory information management system (“LIMS”) and geological database management system that will have QA/QC protocols and reporting included.

6.7. Verification of Sampling and Assaying

Significant intersections were verified internally by a number of company personnel within the management structure of the Exploration and Underground Mining Departments of AIMC. Intersections were defined by the geologists and subsequently reviewed and verified by the Exploration Manager. Further independent verification was carried out as part of the due diligence for resource estimation by Datamine personnel. Assay intersections were cross-validated with visual drillcore intersections (i.e. photographs).

No twinning of drillholes has been carried out at Gadir; however, there is extensive underground mining development which has confirmed the overall grade and geological interpretation based on the drillholes.

Data entry is supervised by a data manager. Verification and checking procedures are in place. The format of the data is appropriate for direct import into Datamine® software. All data are stored in electronic databases within the geology department and backed up to the secure company electronic server that has restricted access. Four main files are created per hole, relating to its ‘collar’ details, ‘survey’ data, ‘assay’ results and logged ‘geology’. Laboratory data is loaded electronically by the laboratory department and validated by the geology department. Any outliers or anomalous assays are resubmitted.

Prior to commencement of mining at Gadir, all samples from the surface exploration campaign that intersected mineralisation were sent for external assay at ALS-OMAC in Ireland. This laboratory is still the preferred company to carry out external assaying for AIMC today.

Independent validation of the database was carried out as part of the resource model generation process, where all data were checked for errors, missing data, misspelling, interval validation and management of zero versus 'no data' entries.

All databases were considered accurate for use as part of this Mineral Resource Estimate. No adjustments were made to the assay data. The quality of the QA/QC is considered adequate for resource estimation purposes.

6.8. Survey Positions and Topographic Control

The surface mine area was recently (2017) surveyed by a high-resolution drone. Five topographic base stations were installed and accurately surveyed using high precision GPS that was subsequently tied into the local mine grid using ground-based total surveying (utilising the LEICA TS02 equipment). All drillhole collars were then surveyed using the Leica apparatus. In 2018, new surveying equipment was purchased for precision surveying of drillhole collars, trenches and workings. This apparatus comprises of two Trimble R10s, Model 60 and accessories.

Equipment used for underground surveying comprises of a Leica TCR407 7" Total Station and a newly acquired GeoSLAM GS-610090.

The grid system used for the site is Universal Transverse Mercator 84 WGS Zone 38T (Azerbaijan). The level of topographic control is adequate for the purposes of resource modelling by Datamine, having been validated by both aerial and ground-based survey techniques and having a contour interval of 2 metres in the vertical.

6.9. Drillhole Information

A summary of the type and metres of drilling completed is shown in Table 6.1.

Table 6.8 – A summary of the type and metres of drilling completed as part of this estimation run

Purpose	Drillhole Type	Number of Holes	Total Length (m)
Surface	DD	60	22,458
Underground	DD	342	15,512
	CH	-	8,645
TOTAL DRILLING		**402**	**46,615**

6.9.1. Drill Spacing

Drillhole spacing from both surface and underground averaged 20 m over the main mineralised zone and extended to 50 m on the periphery of the resource. Development along the orebody confirmed that the existing drillhole spacing was sufficient to establish grade and geological continuity appropriate for the Mineral Resource estimation procedure and classification applied. The depth and spacing was considered appropriate for defining geological and grade continuity as required for a JORC Mineral Resource estimate.

6.9.2. Drill Collar

All drillholes were surveyed for collar position, azimuth and dip by the AIMC Survey Department, relative to the grid system. Equipment used was detailed in Section '6.8. Survey Positions and Topographic Control'.

Drillhole collar details are presented in Appendix B.

6.9.3. Downhole Survey

Downhole surveying was carried utilising Reflex EZ-TRAC equipment at a downhole interval of every 9 metres from the collar (after an initial 3 m collar shot). Over 90% of HQ and NQ holes were surveyed, however BQ holes were not due to the hole diameter.

6.9.4. Drilling Diameter

Drilling diameters were discussed in '6.1 Drilling Techniques'.

6.9.5. Assay

Drill sample intervals are based on a 1 m sample interval, unless stated otherwise. Sampling methodology has been explained in previous sections. Drilling results were reported using intersection intervals based on an Au grade > 0.3 g/t and internal waste ≥ 1 m thickness. Grades of both Au and Ag within the intersections were stated and the results presented to 2 decimal places. No data aggregation or sample compositing was performed during reporting of results.

No metal equivalent values have been reported and all intercepts are reported as down-hole lengths.

6.10. Orientation of Data in Relation to Geological Structure

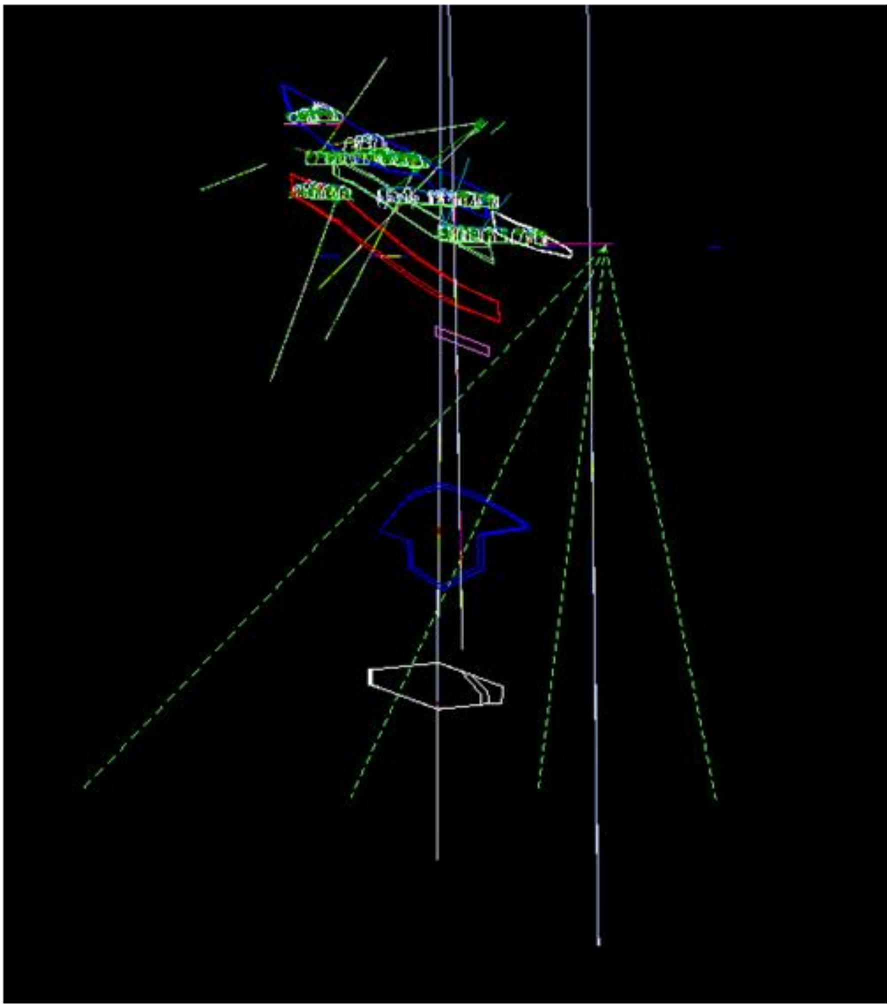
Overall orientation of drilling and sampling is as perpendicular to the orebody as is practicable.

Given the geological understanding and the application of the drilling grid orientation and grid spacing, along with underground development, no orientation-based sample bias was identified in the data, which resulted in unbiased sampling of structures considering the deposit type.

Drillholes at various angles were planned on longitudinal lines with the azimuth to the NE or NW. Drill programs were spaced between 10 to 25 m depending on the target and programme purpose. Grade control drilling was generally from closely spaced fans, with an occasional longer drill hole testing satellite structures. This pattern was intended to assist with establishing geological continuity, provide sufficient mineralisation intersections to mitigate lack of understanding for Au grade variability, as well as satisfying classification criteria for the Gadir Mineral Resource.

Grade control drilling was balanced with exploratory and target-testing programmes. These holes are normally longer drill holes with wider-spaced collars. An example of a planned exploration programme at Gadir is provided in Figure 6.1 below – designed strings are dashed.

Figure 6.1 – An example of a planned exploration programme



6.11. Sample Security

Drill sites were supervised by a geologist. Upon completion of a run, the drilled core was placed into wooden or plastic core boxes appropriate to the core diameter. Once a tray was full, a lid was fixed to avoid spillage or significant movement within the box. Drillhole I.D., tray number and from/to depths were written on both the box and the lid. The core was transported to the core storage area and logging facility, where it was received and logged into a data sheet. All samples received at the core facility were logged in and registered with the completion of an "act". The act is a means of tracking the progress of each sample and was signed by the drilling team supervisor and core facility supervisor (responsible persons). After photographing the core, it was geotechnically and geologically logged and underwent bulk density analysis. The core samples were selected and marked-up prior to cutting and sample preparation.

Core logging, cutting and sampling took place at the secure core management area. The core samples were bagged with labels both inside and attached onto the calico bag and data recorded on a sample sheet. The samples were transferred to the laboratory, where they were registered as received, for sample preparation works and assaying. Hence, a chain of custody procedure was followed for every sample from core collection through to assaying and storage of any remaining reference material.

All samples were weighed daily and a laboratory order prepared, which was signed by the core facility supervisor prior to release to the laboratory. On receipt at the laboratory, the responsible person countersigned the order.

After assaying all reject duplicate samples were sent from the laboratory back to core facility (again, recorded on the act). All reject samples were placed into boxes referencing the sample identification and stored in the core facility.

Drill core is stored in a secure facility. The core farm is proximal to a security check point where in-coming and out-going individuals and vehicles are screened. After the drill hole has been logged and sampled, drill core is stacked on wooden pallets and moved to an outdoor storage area. This is well-organised and deemed by a Datamine consultant to be internationally acceptable. It is the intention of AIMC to construct a covered core storage building, as currently the stacked wooden pallets are covered only with tarpaulin.

In the event of external assaying, AIMC utilised ALS-OMAC in Ireland. Samples selected for external assay were recorded on a data sheet and sealed in appropriate boxes for shipping by air freight. Communication between the geological department of AIMC and ALS was carried out through monitoring of the shipment, customs clearance and receipt of samples. Results were sent electronically by ALS and loaded to the Company database for approval and study. This laboratory is still currently the preferred company to carry out external assaying for AIMC.

6.12. Audits of Sampling and Assaying Techniques

Reviews of sampling and assaying techniques were conducted for all data internally and externally as part of the resource estimation validation procedure. No concerns were raised as to the data, procedures conducted or the results. All procedures were considered industry standard and adhered to.

Reporting of mineral intervals has been previously reported by AAM via regulated news service (RNS) announcements of the London Stock Exchange (AIM) or on the Company website.

No third party audits or reviews, other than this study reported here, have been conducted on the Gadir deposit since its development. Datamine identified no material issues that would prevent AAM from reporting Measured, Indicated and Inferred Mineral Resources for the Gadir mine.

6.13. Reporting of Results

Previous AAM announcements and reports on the company website that contain exploration and production data for the Gadir deposit include:

- AAM Interim and Annual Reports
- Exploration updates via RNS announcements

Additional information including photographs of Gadir and the surrounding Gedabek Contract Area can be viewed on the AAM website (www.angloasianmining.com).

A report from CQA summarising the geotechnical aspects of Gadir can be found in Appendix A of [6].

7. Modelling and Resource Estimation

7.1. Introduction

Datamine were contracted as independent consultants throughout the creation and compilation of the resource estimation of the Gadir deposit. All data requested was made available to them by AAM and AIMC, after consultation with the CP. The sections described below detail the steps carried out to prepare the geological model and Gadir Resource Estimation.

Datamine stated *"The drill hole and sampling data has been accepted as is; no audit of the supplied data has been possible at this time. It is unknown if the data has been manipulated or altered from the original values. However, it is not believed, at this stage, that material issues are present."* It is confirmed by AIMC that the data provided were not altered in any way from their original values.

7.2. Database

The data used for the Gadir Resource Estimation were compiled from two different databases, hosted in Microsoft Access® software. The databases contain information related to geological work up until 20th August 2018. These two databases are:

- the 'Exploration Database' – surface DD holes
- the 'UG database' – underground CH samples and DD holes

A dedicated database manager has been assigned to monitor all databases. Tasks include checking the data entered against the laboratory report and survey data. Geological data are entered by a geologist to ensure there is no confusion over terminology, whilst laboratory assay data are entered by the data entry staff. A variety of checks are in place to ensure against human error during data entry. Rock type groups have been simplified by site geologists based on the broad lithological characteristics (see Appendix A for unit codes and descriptions).

All original geological logs, survey data and laboratory results sheets are retained in a secure location in hard and soft copy format.

Datamine consultants carry out periodic database validation during geological data collection, as well as on completion of the database (hence all data that were to be used as part of the estimation process had been transferred to a single file, separate from the two databases). All data were imported to Datamine Studio RM® software and further validation processes completed. At this stage, any errors found were corrected. The validation procedures used include random checking of data as compared to the original data sheet, validation of the position of drillholes in 3D models and targeting of results deemed "anomalous" following statistical analysis.

The final file used in Studio RM® before modelling comprised the following data:

- Collar (e.g. x, y, z co-ordinates, hole start/end dates)
- Survey (e.g. dip, azimuth, depth)
- Geology (e.g. depth from/to, lithology, alteration style, alteration intensity)
- Assays (e.g. sample ID, depth from/to, Au grade)
- Density (e.g. hole ID, depth from/to, bulk density measurement)
- Major faults and topographic features (imported as wireframes).

Table 7.1 and Table 7.2 show the number of records and total lengths of samples in the resultant database tables. Note the discrepancies between the drilling totals. This is due to various reasons such as core losses or sample lengths not submitted for assay (e.g. lengths in known unmineralised zones that did not exhibit any geologically-interesting characteristics to warrant sampling and assaying).

Table 7.1 - Number of records in tables/files

Database	Assay	Geology	Collar	Survey
UDD	15,256	3,296	342	1,436
DD_Surface	7,445	2,305	60	1,321
Channel	8,588	8,486	2,851	8,526
Total	**31,289**	**14,087**	**3,255**	**11,283**

Table 7.2 - Length of samples in tables/files

Database	**Assay**	**Geology**
	m	m
UDD	15,389.45	15,016.20
DD_Surface	9,019.25	16,672.85
Channel	8,596.54	8,542.25
Total	**33,005.24**	**40,231.30**

Collars, downhole survey, assay and geology data were imported into Datamine Studio RM® and re-validated during import for overlaps, duplication and interval reversals. Collars were coded with drillhole type. All surveys with vertical orientations had their bearings reset to zero. DDs with no survey at the collar had the nearest downhole survey point of that DD copied to the collar. Lead assays were provided to Datamine from AIMC however lead assays were not used in this Resource run due to the very rare occurrence of lead-bearing minerals (e.g. galena).

7.2.1. Database Validation

It was noted by Datamine that the supplied Gadir database was not subjected to a full independent database audit prior to estimation as it was understood that the data was audited during upload. Prior to loading data into the relevant database, the following checks are carried out:

- Drillhole depths for the geology, survey and assay logs do not exceed the recorded drilled depth
- Dates are in the required format and are correct
- Set limits (e.g. for northing, easting, assay values) are not exceeded
- Valid geology codes (e.g. lithology, alteration etc.) have been used
- Sampling intervals are checked for gaps and overlaps

After the data have been loaded into the database, the following checks are carried out:

- Visual checks that collar locations are correct and compared with existing information (e.g. development wireframes)
- Visual checks of drillhole traces for unusual traces and comparing the actual drillhole strings against the planned strings

This final point was also checked by Datamine prior to modelling.

7.2.2. Data Preparation

All correct coordinate values (e.g. collar, downhole survey) were retained at their full value and modelling was conducted using double precision in Studio RM®.

DD and CH assay intervals were flagged for geology, mining and ore zones. These were then coded with relevant attributes using the interpreted mineralisation and mining excavation wireframes, along with the topographic surface.

Absent assay values, identified in the primary Gadir data as "0" values, were reassigned a grade of "absent". Such intervals were, in general, not assayed because they occurred in known unmineralised zones and did not exhibit any geologically-interesting characteristics to warrant sampling and assaying.

Assays returned with values below the element's detection limit were assigned a grade equivalent to half the assumed detection limit. In most cases, a value of 0.001%/0.001 g/t was applied. Any negative values were assumed to indicate assays below detection and were consequently assigned default values of 0.001%/0.001 g/t.

7.2.3. Desurveyed Drillhole Generation

Two separate drillhole files were generated. One file was for assay values only to be used as a source for domaining, compositing and estimation (*gad_ds.dm*) and the second contained all imported assay and lithological fields for use in domain creation and geological interpretation (*gad_dsl.dm*).

7.3. Raw Statistics

The assay drillhole file (*gad_ds.dm*) was intersected against the geology, mineralisation and mining wireframes. Codes for geology, mineralisation and mined volumes ("GEOL", "ZONE" and "MINED" respectively) were applied to the drillhole data (see Section '7.11.2. Estimation' for final block model attributes).

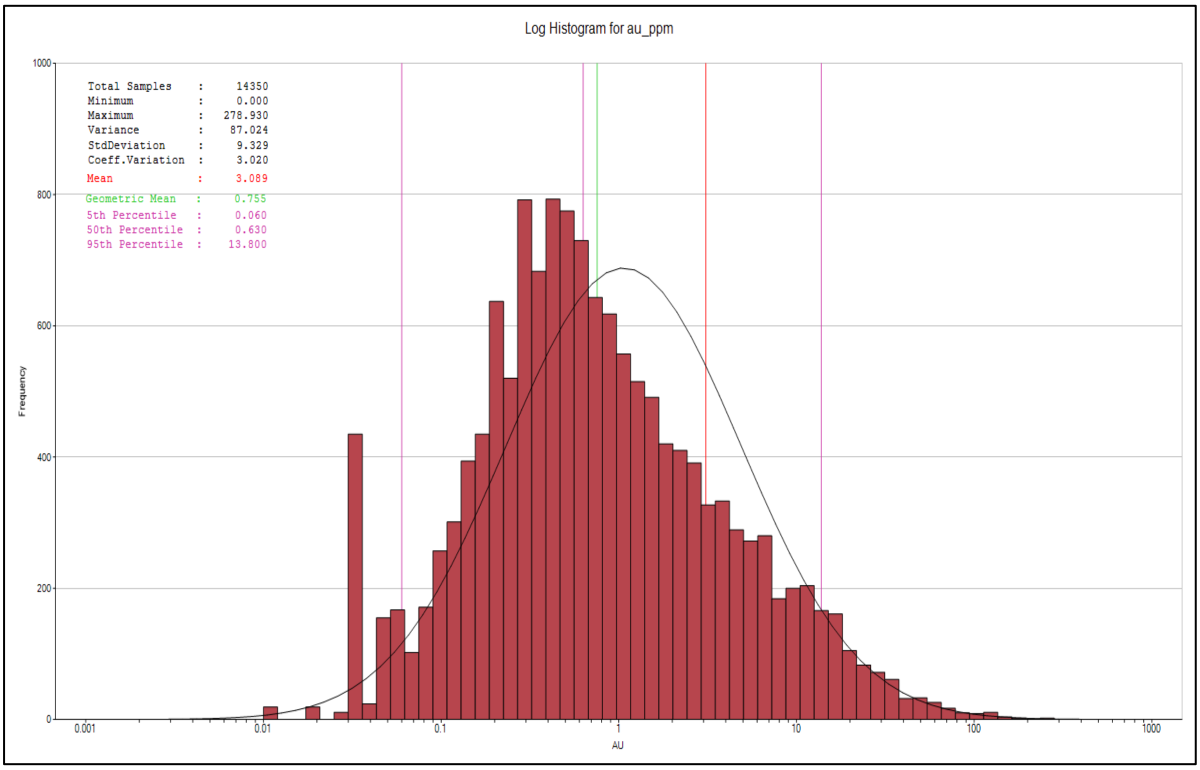
Summary statistics for all raw assays (*mhd1_ds.dm*) within mineralised zones are shown in Table 7.3 below. The raw statistics for all assay data are shown in Appendix C.

Table 7.3 – Summary statistics for raw (mineralisation) assay data for Gadir

Metal	Number Samples	Minimum Grade		Maximum Grade		Mean Grade		Variance	Std. Dev.	C.V.
		g/t	%	g/t	%	g/t	%			
Au	14,350	0.00		278.93		3.09		87.02	9.33	3.02
Ag	14,350	0.01		1,141.40		15.03		1,641.41	40.51	2.70
Cu	14,122		0.00		24.18		0.23	0.65	0.80	3.56
Zn	9,102		0.00		48.80		0.98	9.06	3.01	3.06

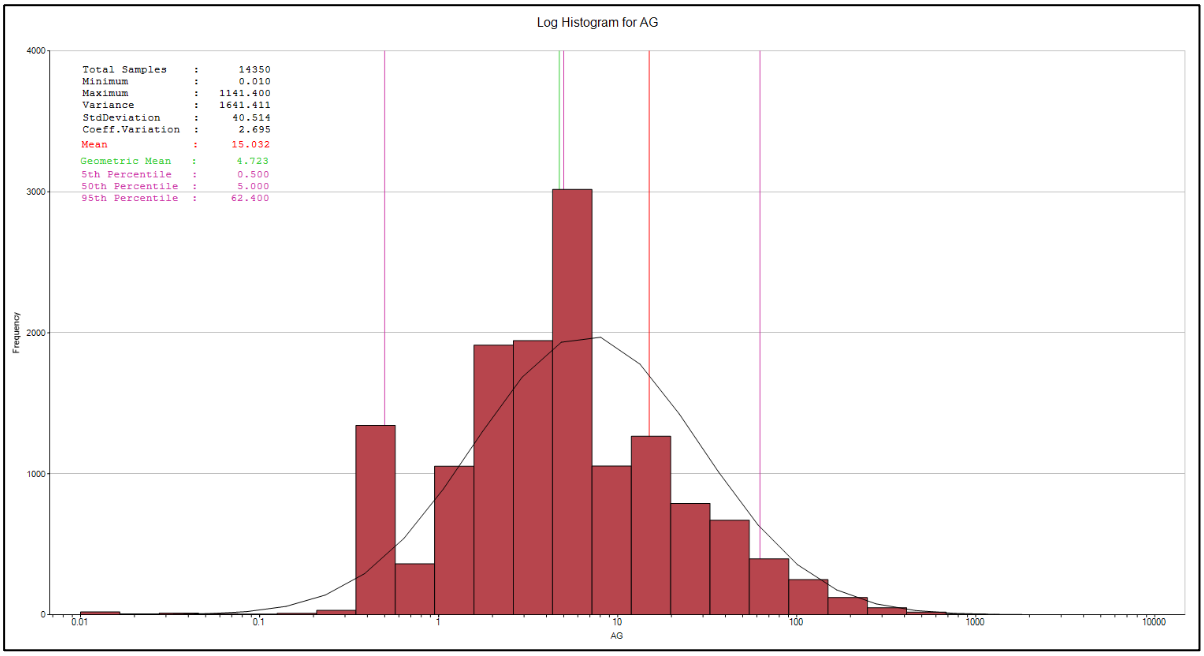
The raw Au assays captured within the mineralisation wireframes (Figure 7.1) exhibit a near log-normal distribution, with a mean of around 3.09 g/t Au.

Figure 7.1 – Raw Au (all mineralisation) histogram



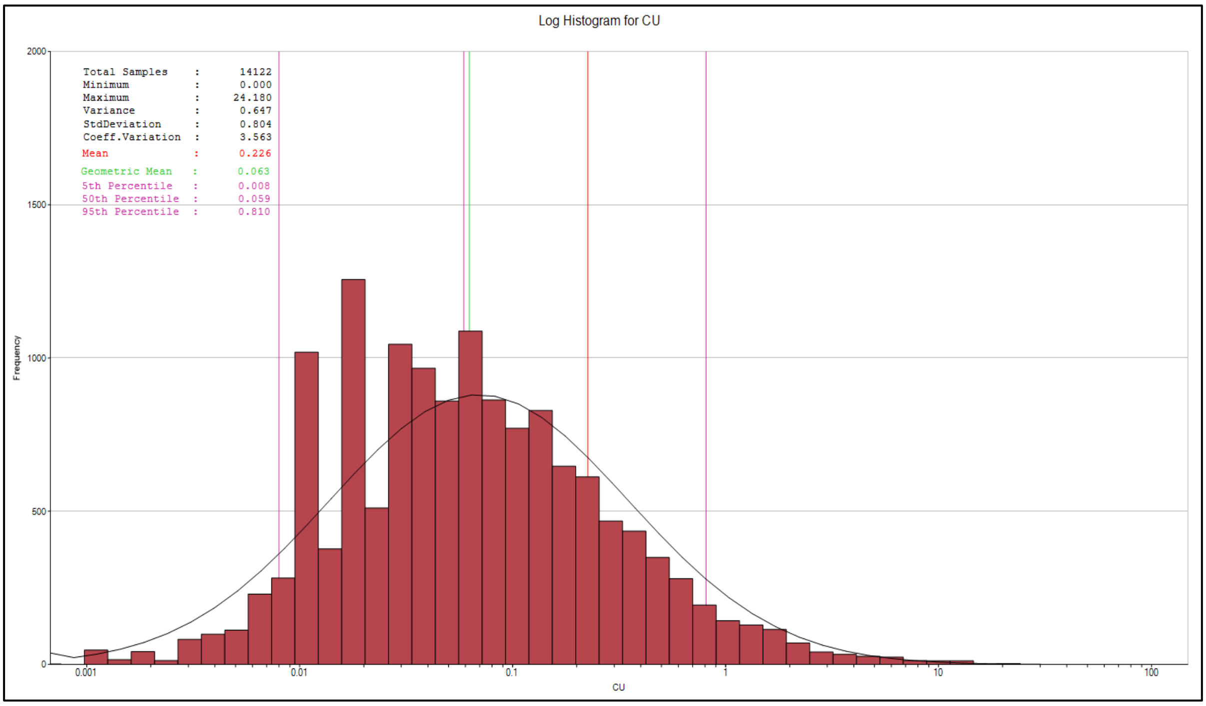
The raw Ag assays captured within the mineralisation wireframes (Figure 7.2) exhibit a near log-normal distribution, with a mean of around 15.03 g/t Ag. It could be interpreted that a bimodal distribution may exist around 7 g/t and 10 g/t, suggesting potential multiple phases of mineralisation emplacement or distinct population distributions related to mining area (e.g. level). Further study needs to be carried out to investigate this. The Ag variance is larger than the maximum Ag grade. Variance essentially represents how similar grades are to each other – as the Ag grades vary substantially around the mean grade and between the minimum/maximum grades, the Ag variance is significantly elevated. This is the case for Ag throughout the statistical analytical processes carried out here.

Figure 7.2 – Raw Ag (all mineralisation) histogram



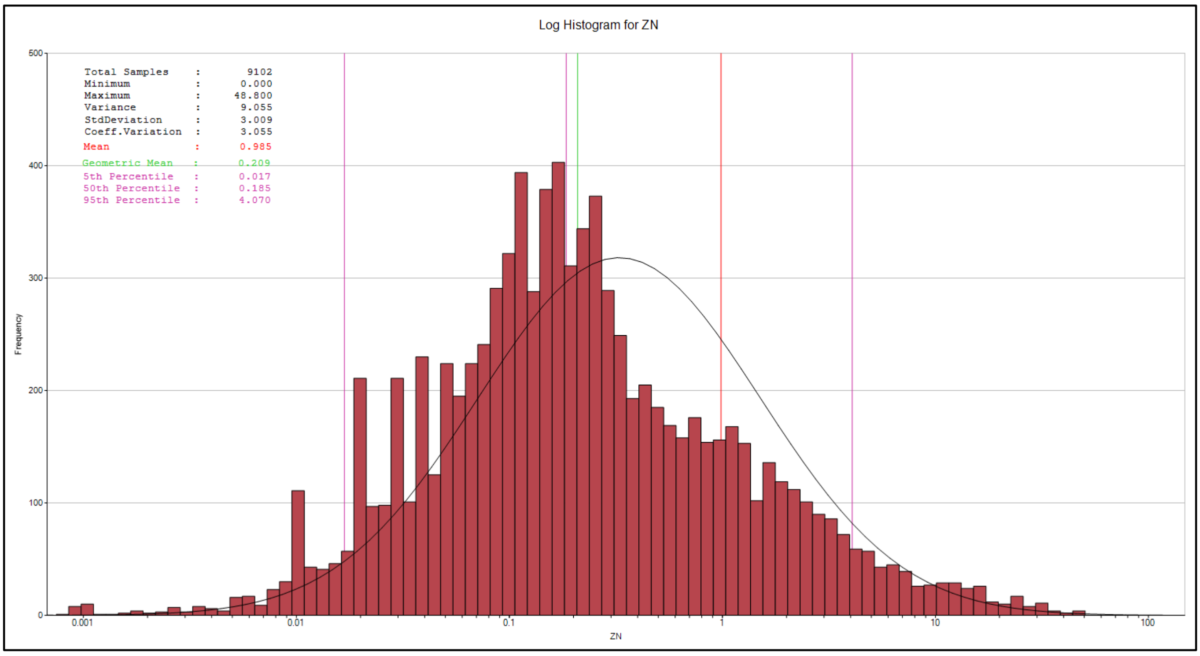
The raw Cu assays captured within the mineralisation wireframes (Figure 7.3) exhibit a near log-normal distribution, with a mean of around 0.22% Cu.

Figure 7.3 – Raw Cu (all mineralisation) histogram



The raw Zn assays captured within the mineralisation wireframes (Figure 7.4) exhibit a near log-normal distribution, with a mean of around 0.98% Zn.

Figure 7.4 – Raw Zn (all mineralisation) histogram



The good shapes of the distributions for all elements suggest that overall, the assay samples have been well-constrained within the interpretation wireframes without excess or significant high- or low-grade outliers. Datamine ascertains that the lower grade spikes are due to rounding errors in the data – in the database there were some grades with very small values relating to the detection limit. Converting grades from ppm to g/t caused some of these spikes. Plotting the data on a log-scale also causes any small differences in lower values to be exacerbated.

7.4. Geological Interpretation and Modelling

Geological interpretations of Gadir (e.g. in the form of wireframes) were provided to Datamine – principal lithological units had been wireframed; however, Datamine believes that formations can be further constrained to improve interpretation. Structural wireframes were evaluated, but were not used in the modelling process, except for where they were used to influence the supplied mineralisation interpretations (e.g. used as 'hard' boundaries).

The area of the footprint encompasses Datamine's Resource/Reserve Management Solution that provides:

- Criteria and parameters for estimation – no hard boundaries for the grade mineralisation domains were developed. All the mineralisation was estimated in an unconstrained mode, restricted within the various orebodies
- Topography – the supplied surface topographic wireframe (*wf_current_topo_tr/pt.dm*) was generated from digital terrain models (DTMs) supplied by AIMC geologists

7.5. Mineral Zone Coding

Mineralisation was coded into the block model using the wireframes listed in Table 7.4 below, with the default density and domain ZONE codes shown. This coding structure was identical to that applied to the drillhole assay data.

Table 7.4 – Gadir block model mineralisation model construction order and codes

Wireframe	Orientation	OXIDN	MIN	Default SG
Topo_mod_tr	below	-	-	2.5
Final_wfs_all_tr	inside	-	1	2.8
Ug_dvp_tr	inside	-	1	2.8

Datamine have recommended steps to improve mineralisation wireframes, including removing consideration given to mining widths and minimum grades. This will lead to interpretations for entire mineralised veins as opposed to discrete veins, simplifying naming conventions, interpretations and resulting in quicker and more efficient project updates.

7.6. Compositing

Compositing is a practical step required to equalise the support on which estimates are to be made. It is important to choose an appropriate compositing method and to check that no errors or biases are introduced by this process (hence the number of validation checks carried out, as described later).

The standard convention is to composite-up rather than composite to smaller lengths. The composite length should ideally be a multiple of the modal sample length so as to avoid splitting as many samples as possible, thereby reducing the variance of the sample data.

For Gadir, the average sample length of the dataset was 0.96 m and the median was 0.90 m. If compositing to 0.5 m was applied, 95% of the samples would have been split which was deemed an unacceptable reduction in the variance of the data.

The data captured within the geology/mineralisation wireframes was composited to a regular 1 m downhole composite length (Figures 7.5 and 7.6) as around 50% of raw samples lengths were >1 m, compared to an expected parent block height of 5 m. Residual intervals <1 m were merged with the preceding composite to retain metal content in the mineralisation domains.

Figure 7.5 – Mineralisation sample lengths before compositing

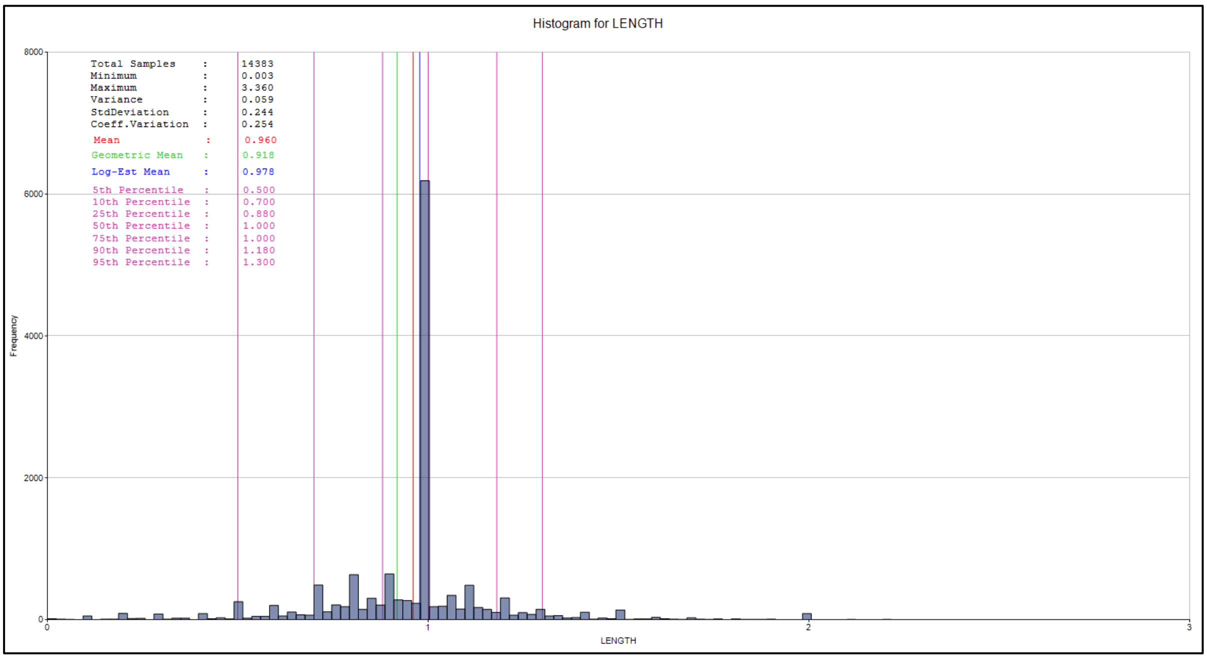
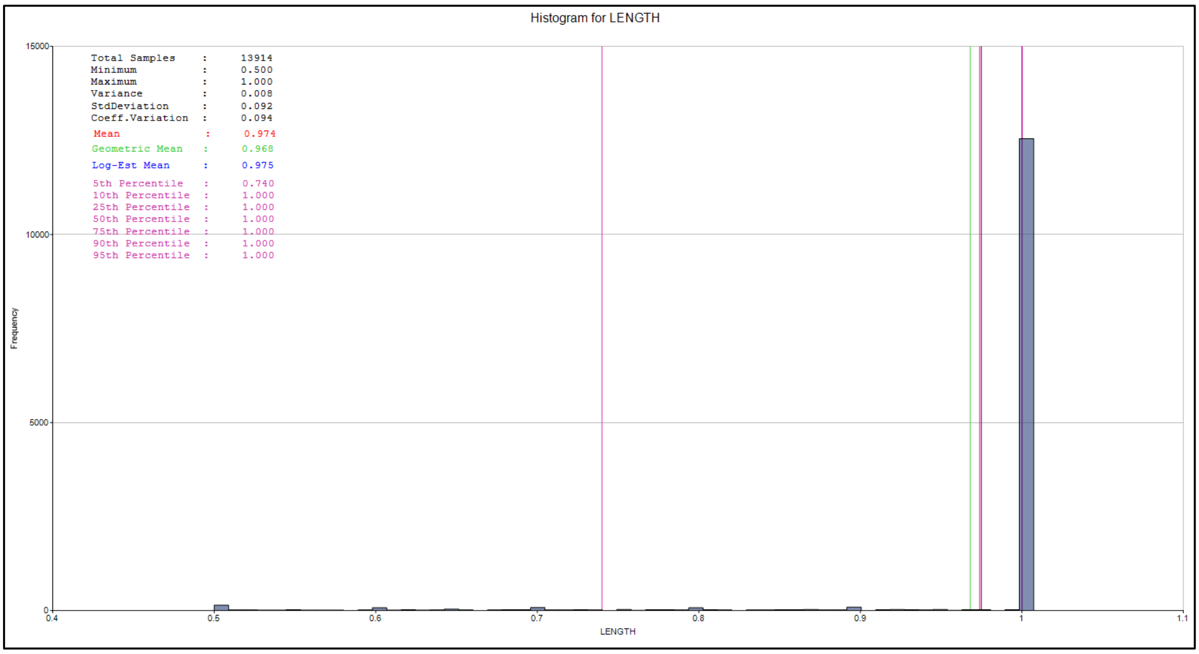


Figure 7.6 – Mineralisation sample lengths after compositing



Summary statistics for the 1m Au-Ag-Cu-Zn composites are shown in Table 7.5 below whilst more detail can be found in Appendix D.

Table 7.5 – Summary statistics for Au-Ag-Cu-Zn composites

Metal	Number Samples	Minimum Grade		Maximum Grade		Mean Grade		Variance	Standard Deviation	CV
		g/t	%	g/t	%	g/t	%			
Gold	13,869	0.01		269.24		2.97		75.09	8.67	2.92
Silver	13,869	0.01		1,103.82		14.69		1,433.59	37.86	2.57
Copper	13,645		0.001		22.63		0.22	0.58	0.76	3.47
Zinc	8,830		0.001		47.84		0.96	7.25	2.69	2.8

7.7. Top Caps

Top-capping is a means of controlling a small number of high-grade outliers that can have a disproportionally large effect on the estimated grade by skewing the data. Top-capping analysis is normally carried out by examining normal and log-normal histograms, probability plot, Sichel-mean convergence and rank-order population breaks for the ore zone mineralisation.

In grade distributions that are typically high-skewed (common in Au deposits) it is appropriate to try to reduce the coefficient of variation ("CV") of the data to below 2.5, ideally below 1.5, to minimise the impact upon the kriging processes.

In order to justify reasoning for top-capping after compositing, as opposed to before compositing, Datamine provided AIMC with the following statement:

"Note that the rationale for Top-capping for resource estimation is different to that for mine production reporting. Geological resources are based upon the entire mineralisation population, whereas the mining "resources" are based upon an economically defined higher-grade sub-population of the full resource. Note also that the economic parameters defining the mineable resources are variable from period to period.

For any meaningful statistics, you need to be working with data of the same support (i.e. composite length). If you sampled the same deposit with 0.5m samples or 1.0m samples, the average grade would be the same, but the maximums would be different - the smaller samples would have a higher variance. If you apply a top cut to the 0.5m samples you would likely choose a different grade cap than if you adopted the same technique to the 1.0m samples.

If you have mixed sampling ranging between 0.5m and 1.0, the variance of the different lengths will be different, so cutting on mixed length samples will penalise small sample intervals, often *the higher grade intervals, more than longer intervals. In some instances, where there is little support within an intersection for isolated high grade samples, then it may be appropriate to top-cap before compositing. However, if values are well supported within an intersection, as is commonly the case at Gadir, then capping after compositing is the more appropriate method.*

The general approach taken is:

- *Review of the 3D grade distribution*
- *Review of histogram and log-probability distributions, probability plot for significant breaks in populations and to identify possible outliers,*
- *Reviewing the convergence of the assay means with the Sichel Mean as successive Top-cappings are applied,*
- *Ranking of the individual composites and investigating the effect of the higher grades upon the standard deviation and the mean of the data population."*

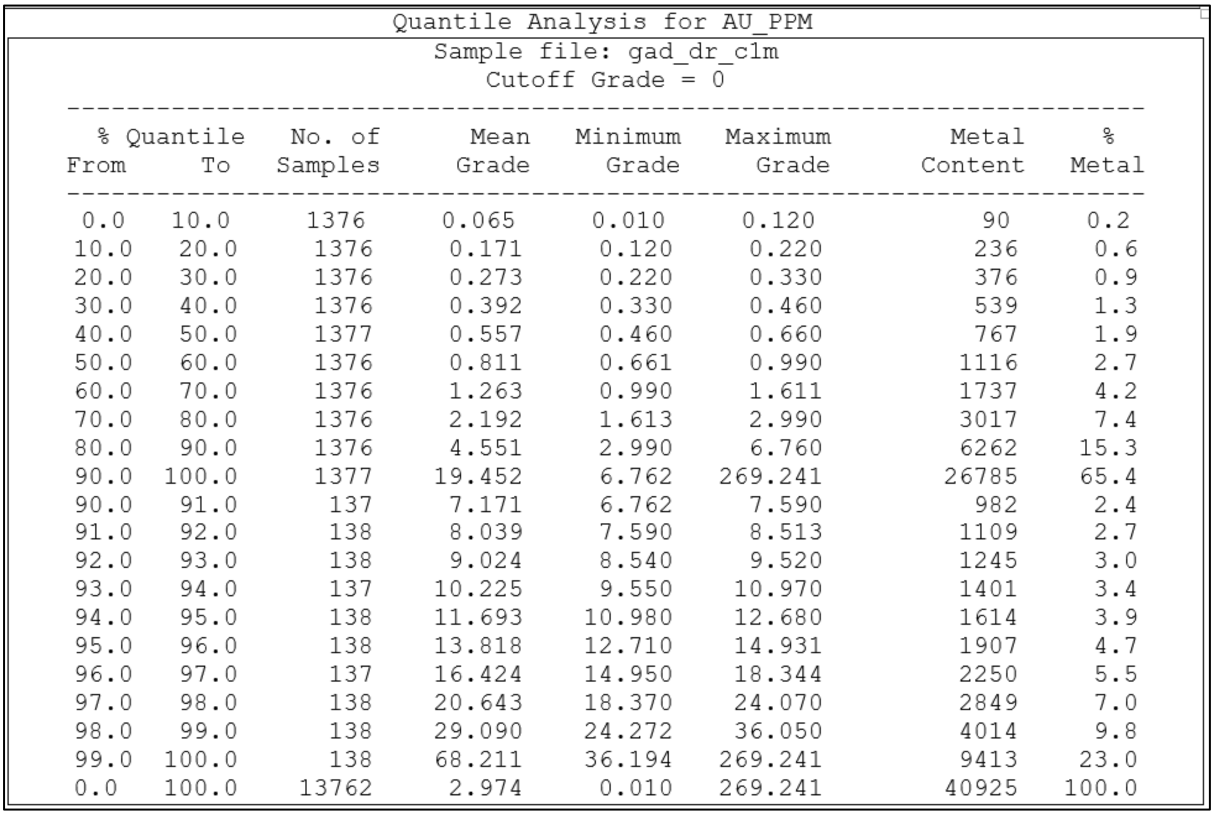
Top caps were applied to Au, Ag, Cu and Zn values of the composites to eliminate the influence of isolated high-grade assays and to reduce the variability to a manageable level for estimation. Datamine determined that the top caps presented in Table 7.6 be applied to the various composites. In most cases top-capping resulted in the reduction of only a small number of assays (about 1% for Au/Ag). Further statistics regarding top caps can be found in Appendix E.

Table 7.6 - Summary statistics for key elements after top-capping

Metal	**Number Samples**	**Maximum Grade**		**Mean Grade**		**Variance**	**Standard Deviation**	**CV**
		g/t	**%**	**g/t**	**%**			
Gold	13,869	269.24		2.97		75.09	8.67	2.92
Gold Capped	13,869	115.00		2.94		63.99	8	2.72
Silver	13,869	1,103.82		14.69		1,433.59	37.86	2.57
Silver Capped	13,869	480.00		14.52		1,218.10	34.9	2.4
Copper	13,645		22.63		0.22	0.58	0.76	3.47
Copper Capped	13,645		8.50		0.21	0.39	0.62	2.94
Zinc	8,830		47.84		0.96	7.25	2.69	2.8
Zinc Capped	8,830		22.00		0.93	5.89	2.43	2.59

Quantile Analysis is a process that splits a set of sample data into quantiles and calculates statistics for each quantile. A quantile is a subset of data calculated by sorting the total dataset into ascending order then dividing it into equal numbers of 'samples'. This was carried out and the results are presented below (Table 7.7). The analysis shows that outliers account for 1% of all Au samples.

Table 7.7 - Quantile Analysis for Au



```
                      Quantile Analysis for AU_PPM
                        Sample file: gad_dr_clm
                           Cutoff Grade = 0
 ------------------------------------------------------------------------
  % Quantile    No. of       Mean    Minimum    Maximum        Metal     %
 From      To   Samples     Grade      Grade      Grade      Content  Metal
 ------------------------------------------------------------------------
  0.0   10.0      1376     0.065      0.010      0.120          90    0.2
 10.0   20.0      1376      0.171      0.120      0.220         236    0.6
 20.0   30.0      1376      0.273      0.220      0.330         376    0.9
 30.0   40.0      1376      0.392      0.330      0.460         539    1.3
 40.0   50.0      1377      0.557      0.460      0.660         767    1.9
 50.0   60.0      1376      0.811      0.661      0.990        1116    2.7
 60.0   70.0      1376      1.263      0.990      1.611        1737    4.2
 70.0   80.0      1376      2.192      1.613      2.990        3017    7.4
 80.0   90.0      1376      4.551      2.990      6.760        6262   15.3
 90.0  100.0      1377     19.452      6.762    269.241       26785   65.4
 90.0   91.0       137      7.171      6.762      7.590         982    2.4
 91.0   92.0       138      8.039      7.590      8.513        1109    2.7
 92.0   93.0       138      9.024      8.540      9.520        1245    3.0
 93.0   94.0       137     10.225      9.550     10.970        1401    3.4
 94.0   95.0       138     11.693     10.980     12.680        1614    3.9
 95.0   96.0       138     13.818     12.710     14.931        1907    4.7
 96.0   97.0       137     16.424     14.950     18.344        2250    5.5
 97.0   98.0       138     20.643     18.370     24.070        2849    7.0
 98.0   99.0       138     29.090     24.272     36.050        4014    9.8
 99.0  100.0       138     68.211     36.194    269.241        9413   23.0
  0.0  100.0     13762      2.974      0.010    269.241       40925  100.0
```

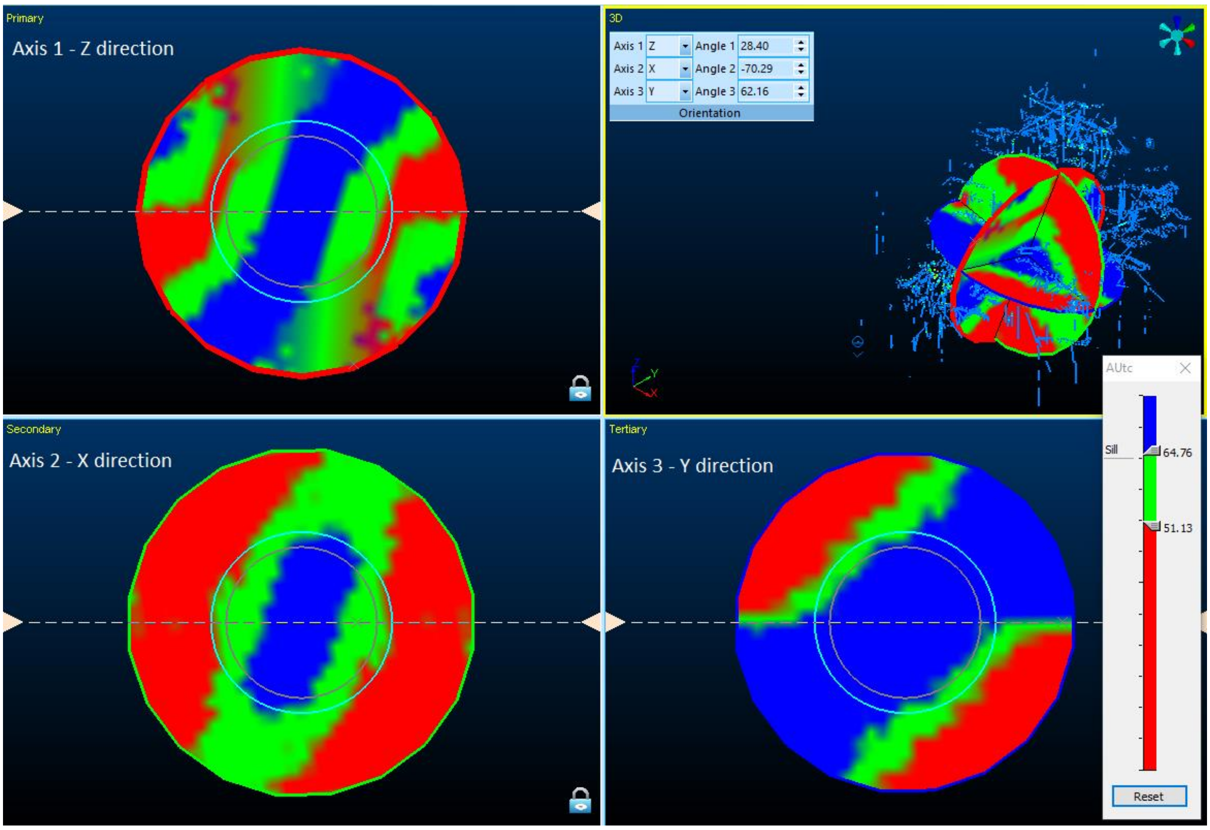
7.8. Geostatistical Analysis – Variography Suitability

Variography for Gadir was undertaken using Datamine Studio RM®, using the 1 m top-capped composites for each element within the mineralised domains. For each data set, the principal axes of any directional anisotropy were determined using 3D variogram mapping. Normal and transformed variograms were calculated and the 3D variogram parameters determined (Figure 7.7).

For the calculation of experimental variograms, the grade transformation was applied for all variables in order to transform them to a Gaussian distribution. This made construction of the variograms easier. Once the models were completed and analysed the data was transformed to its original distribution and applied for the estimation. Nugget values were calculated from downhole variograms and applied to each of the 3-axes in the 3D models.

Further details of parameters and variograms for this study can be found in Appendix G.

Figure 7.7 - An example of a 3D variogram map for Au data



Axis 1 Z Angle 1 28.40
Axis 2 X Angle 2 -70.29
Axis 3 Y Angle 3 62.16
Orientation

Summary variogram model details are provided in Tables 7.8-7.11 below for each key element.

Table 7.8 - Summary variogram model details for Au

Area	Gadir (Au g/t)
Nugget	5.68
Sill 1	41.78
Sill 2	24.45
Sill 3	-
Range (X, Y, Z) 1	3.27 - 4.0 - 2.91
Range (X, Y, Z) 2	11.18 - 12.32 – 11.79
Range (X, Y, Z) 3	-

Table 7.9 - Summary variogram model details for Ag

Area	Gadir (Ag g/t)
Nugget	364.7
Sill 1	586.79
Sill 2	444.87
Sill 3	-
Range (X, Y, Z) 1	5.18 – 4.54 – 8.8
Range (X, Y, Z) 2	21.44 – 15.56 – 21.16
Range (X, Y, Z) 3	-

Table 7.10 - Summary variogram model details for Cu

Area	Gadir (Cu %)
Nugget	0.1
Sill 1	0.27
Sill 2	0.19
Sill 3	-
Range (X, Y, Z) 1	2.85 – 2.23 – 2.39
Range (X, Y, Z) 2	14.24 – 13.97 – 17.32
Range (X, Y, Z) 3	-

Table 7.11 - Summary variogram model details for Zn

Area	Gadir (Zn %)
Nugget	1.46
Sill 1	2.66
Sill 2	2.84
Sill 3	-
Range (X, Y, Z) 1	4.41 – 4.82 – 4.66
Range (X, Y, Z) 2	12.7 – 13.44 – 11.66
Range (X, Y, Z) 3	-

7.9. Estimation Strategy

Grade estimation was by OK and IPD methods on Au, Ag, Cu and Zn assays. The main method of interpolation of grade was by OK into 5 m (Easting) by 5 m (Northing) by 5 m (Elevation) blocks using a minimum of 16 and a maximum of 32 samples with maximum number of samples 5 per drillhole. A three-pass search scheme was invoked, whereby any block that remained unestimated after the first run was then subject to estimation using a second (and if necessary a third) search pass with larger search volumes. Search ellipses were aligned along the dip-direction orientations of the mineralisation domains.

7.10. Interpolation Parameters

7.10.1. Interpolation Method

The resource block model was estimated using the OK method on the mineralisation block model (*gad_grade_mod.dm*), using the top-capped 1 m composite data (*gad_dr_tc.dm*). Grade estimation using OK of the composites was completed using hard boundaries, that is, only samples within mineralisation wireframes were used to estimate block grades.

The resource block model was also estimated using OK on the mineralisation block model using 1 m composite data without top caps applied. Additionally, the resource block model was estimated by IPD. Both these last two methods described were carried out for validation purposes and the results can be seen in Section '7.12.3. Validation Plots'. The OK and IPD estimations showed quite similar results globally however it can be seen that OK performed better locally.

7.10.2. Estimation Parameters

Full block estimation was performed, negative kriging weights were set to zero and estimation kriging variances greater than the respective variogram variance were reset to the variogram sill.

Initial search orientations (Table 7.12) were derived from the principal structural orientations of the mineralisation. The principal search ranges for Au were set at 7 x 8 x 7 m. Second and third passes with x2.5 and x3.5 multipliers for the search ranges were applied. Minimum and maximum samples per estimate were:

- Pass 1 – 16 minimum; 32 maximum
- Pass 2 – 10 minimum; 32 maximum
- Pass 3 – 3 minimum; 20 maximum

A block discretisation of 5 x 5 x 5 m (x,y,z) was applied. A limit of 5 assays per drillhole was also applied.

Table 7.12 – Sample search parameters for OK estimation

Metal	Pass No.	Initial Search Orientation			Search Radii			Number of Samples		
		Bearing	Dip	Plunge	Semi-Major Axis (Dip) (m)	Major Axis (strike) (m)	Minor Axis (across strike) (m)	Min	Max	Max / Hole
Gold	1	-35°	-30°	90°	7.2	8.16	7.35	16	32	5
	2				18	20.4	18.37	10	32	5
	3				25.2	28.56	25.72	3	20	5
Silver	1	-35°	-30°	90°	13.31	10.05	14.98	16	32	5
	2				30.61	23.11	34.45	10	32	5
	3				46.58	35.17	52.43	3	20	5
Copper	1	-35°	-30°	90°	8.54	8.1	9.8	16	32	5
	2				21.35	20.25	24.5	10	32	5
	3				29.89	28.35	34.3	3	20	5
Zinc	1	-35°	-30°	90°	8.55	9.13	8.16	16	32	5
	2				21.37	22.82	20.4	10	32	5
	3				29.92	31.95	28.56	3	20	5

7.11. Block Modelling and Estimation

7.11.1. Block Model Parameters

The block model was extended to allow sufficient coverage around the principal mineralisation extents and provide potential block coverage for underground mining studies. A parent block size of 5 x 5 x 5 m was previously used and this was retained for this study. Sub-blocking to 0.5 x 0.5 x 0.5 m was completed to ensure adequate volume representation. The model limits are summarised in Table 7.13. Waste blocking was also set to 5 x 5 x 5 m sizing.

Table 7.13 – Gadir Block Model limits summary

Type	X	Y	Z
Block Model Origin	566207	4491660	1200
# Blocks	381	289	127
Parent Block Size (m)	5	5	5
Minimum Block Size (m)	0.5	0.5	0.5
Rotation	0°	0°	0°

The attributes listed in Table 7.14 below were coded into the Gadir block model. Mineralisation does not include the assay variables. A visual review of the wireframe solids and the block model indicated robust flagging of the block model. Coding was completed on the basis of the block centroid wherein a centroid falling inside any wireframe was coded with the wireframe solid attribute.

Table 7.14 - Final Block Model attributes for Gadir

Attribute Name	Type	Decimals	Default	Description
RESCAT	Integer	-	4	Classification Flag: 1 = Measured
				2 = Indicated
				3 = Inferred
				4 = Exploration
DENSITY	Real	2	2.8	Assigned Default Density (overwritten by GEOL & ZONE densities)
ZONE	Integer	-	0	Zone Flag: 0 = waste blocks
				1 = ore blocks
				2 = mined UG Development
				3 = mined UG stopes
MIN	Integer	-	1	Mineralisation Flag: 1 = within mineralisation
				"-" = outside of mineralisation
MINED	Real	-	0	Mined Flag: 0 = not mined
				1 = mined UG Development and Stopes
AUtc_OK	Real	-	0.001	Au, from OK estimated Au with 1m Top-capping composites
AGtc_OK	Real	-	0.001	Ag, from OK estimated Ag with 1m Top-capping composites
CUtc_OK	Real	-	0.001	Cu, from OK estimated Cu with 1m Top-capping composites
ZNtc_OK	Real	-	0.001	Zn, from OK estimated Zn with 1m Top-capping composites

7.11.2. Estimation

Datamine Studio RM® software was used for running the estimation of Au, Ag, Cu and Zn in the block model by using the parameters previously discussed.

Volume comparisons between wireframes and the orebody block model generally shows variances of < 0.02%.

Each of the wireframes discussed in Section '7.5. Mineral Zone Coding' were used to create the final separate 3D mineralisation and block models. The same coding process was applied to the drillholes to ensure consistent correlation between drillholes and models. The final models created were:

- *GAD_grade_mod* – ore only with depletion
- *Gad_final_mod* – depleted ore and waste model

7.12. Block Model Validation

Validation checks were completed on the data prior to estimation to ensure that composite values and locations matches the original dataset. After the estimation was finalised, validation checks on the block model included:

- Checking that the majority of blocks had filled with grade

- Confirming that geological information (e.g. resource class, mineralisation zone, density, lithology etc.) had been assigned correctly
- Checking that all blocks were correctly filled by direct assignment. This involved filtering the model on various attributes and comparing the volume of the relevant wireframe against the volume of the filtered model (e.g. filtering on density, mineralisation and class)
- Verifying that volume comparisons between the mineralisation wireframes and mineralised units in the Block Model fell within acceptable limits

7.12.1. Visual Validation

Visual inspection is the most basic and easiest of validation methods where the estimated blocks are compared to the drillhole data with the occurrence of high or low grades observed in the drillhole. This was also carried out on the Gadir Resource Block Model, notably for composited data against the primary drillhole assays. Colour legends were applied to both the primary data and composites in Studio RM® and these broadly matched the blocks (also with the legend assigned). Examples are shown in Figures 7.8-7.10 below.

Figure 7.8 – An oblique section of Gadir showing Au block estimates when compared with Drillhole Au composites

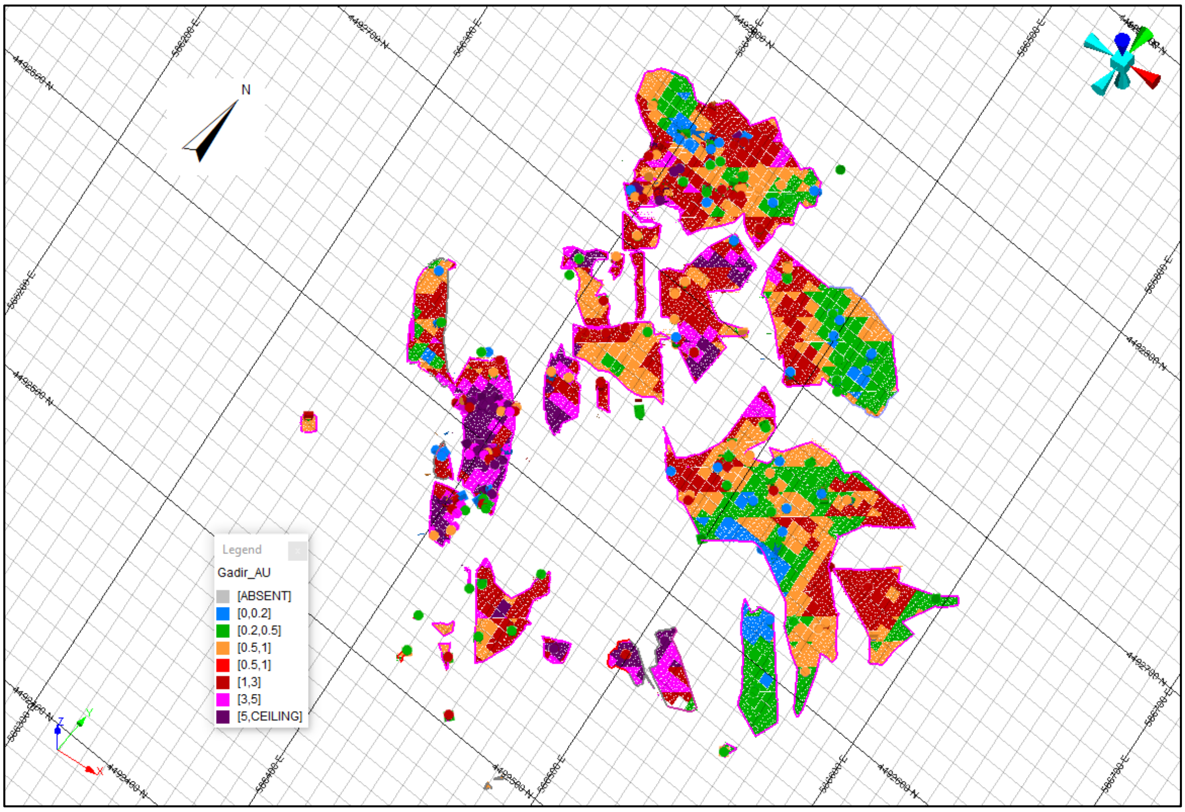


Figure 7.9 – A plan section of Gadir showing Au block estimates and Drillhole Au composites

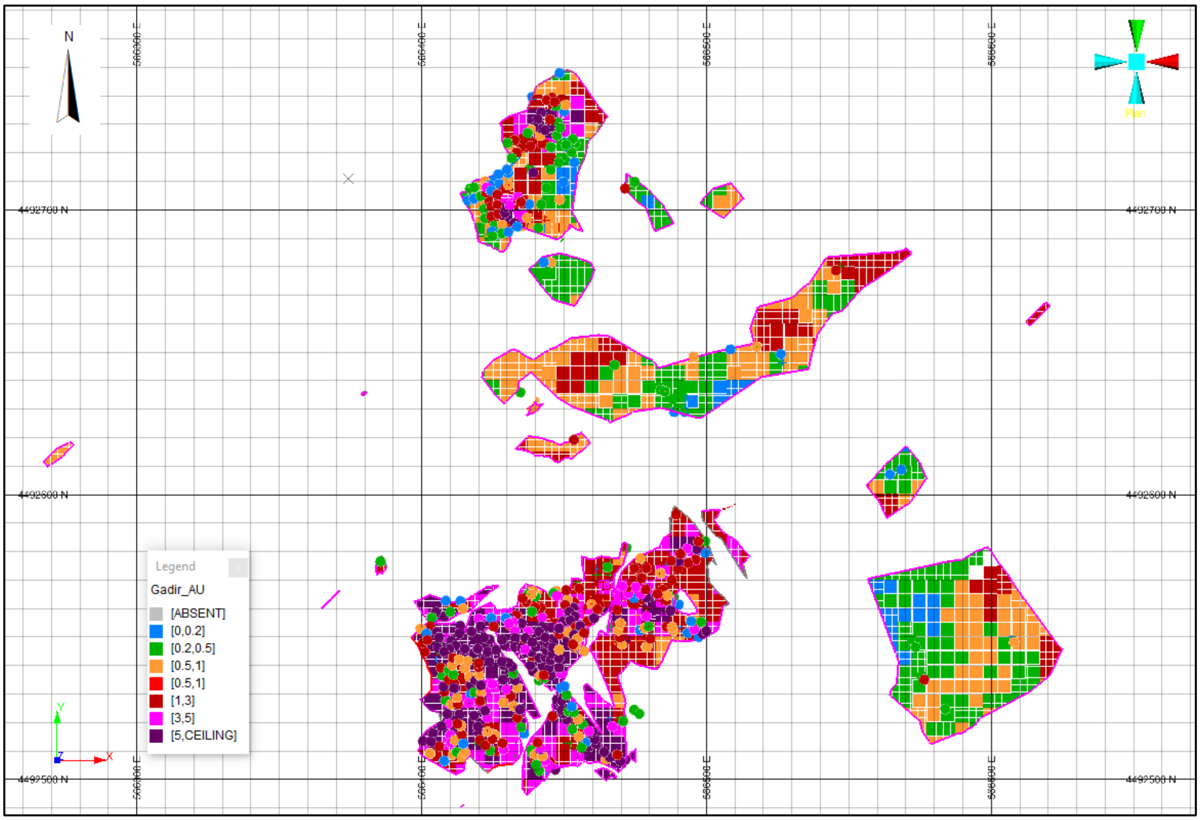
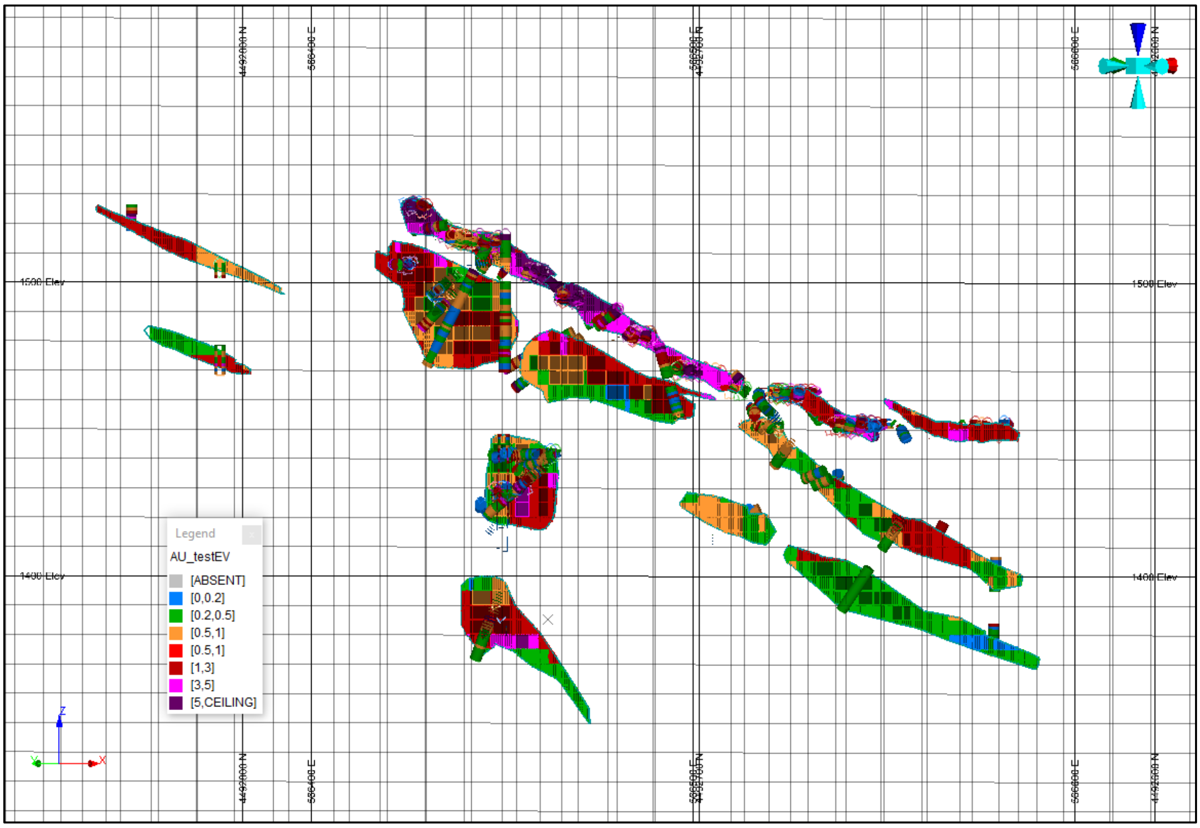


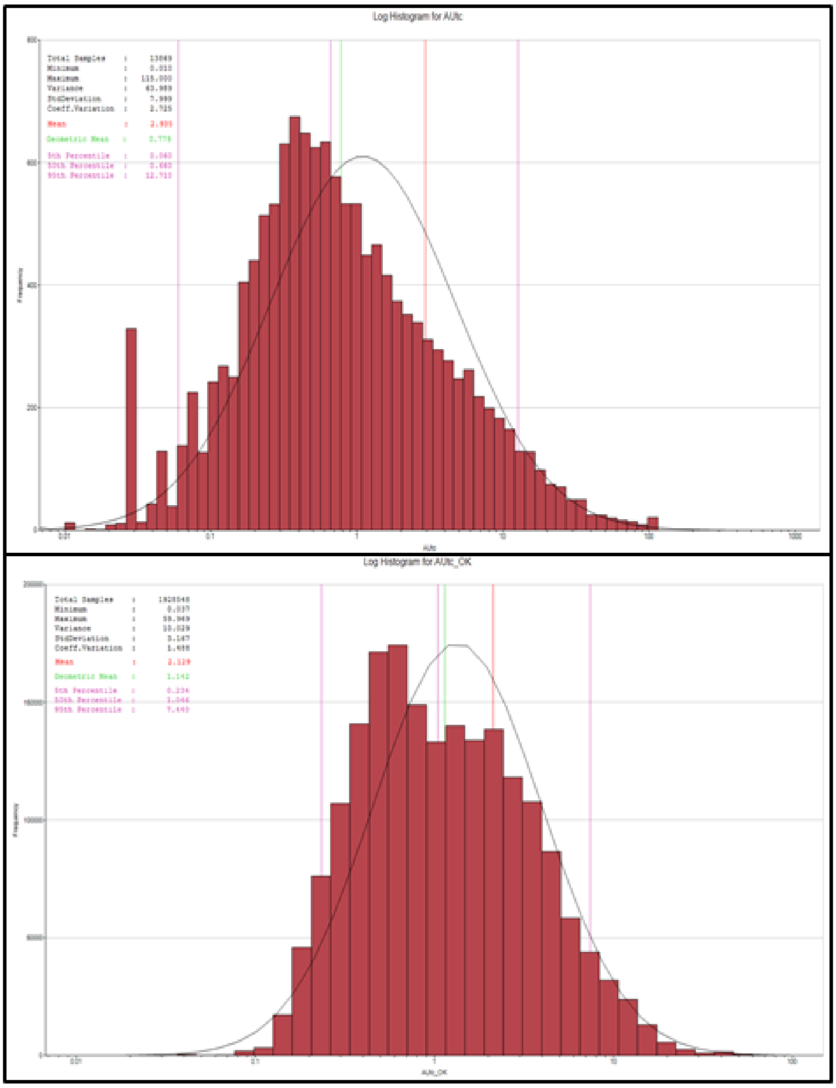
Figure 7.10 – A NW-SE section of Gadir showing Au block estimates and Drillhole Au composites



7.12.2. Statistics Verification

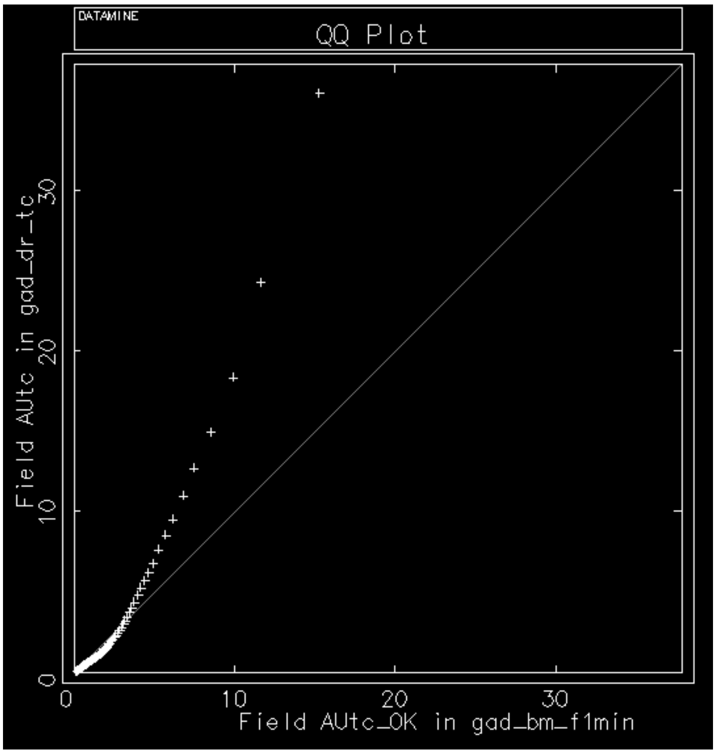
Statistical comparison of declustered composites and block model grades by mineralised zone was also carried out (Figure 7.11). It can be observed that the correlation between the declustered composites and declustered block grades is good. It should be noted that the high-grade limit in the distribution of the composites is due to top-capping of the grades.

Figure 7.11 – Comparison charts of Au block grades and declustered Au grades



Statistical comparisons of composited and top-capped samples were analysed against estimated block grades through creating quantile-quantile plots ("Q-Q" plots). An example showing a smooth correlation between the Au grades of samples (y-axis) and block model Au grades (x-axis) is shown in Figure 7.12 below.

Figure 7.12 – A Q-Q plot showing Au sample grades against Au block grades.



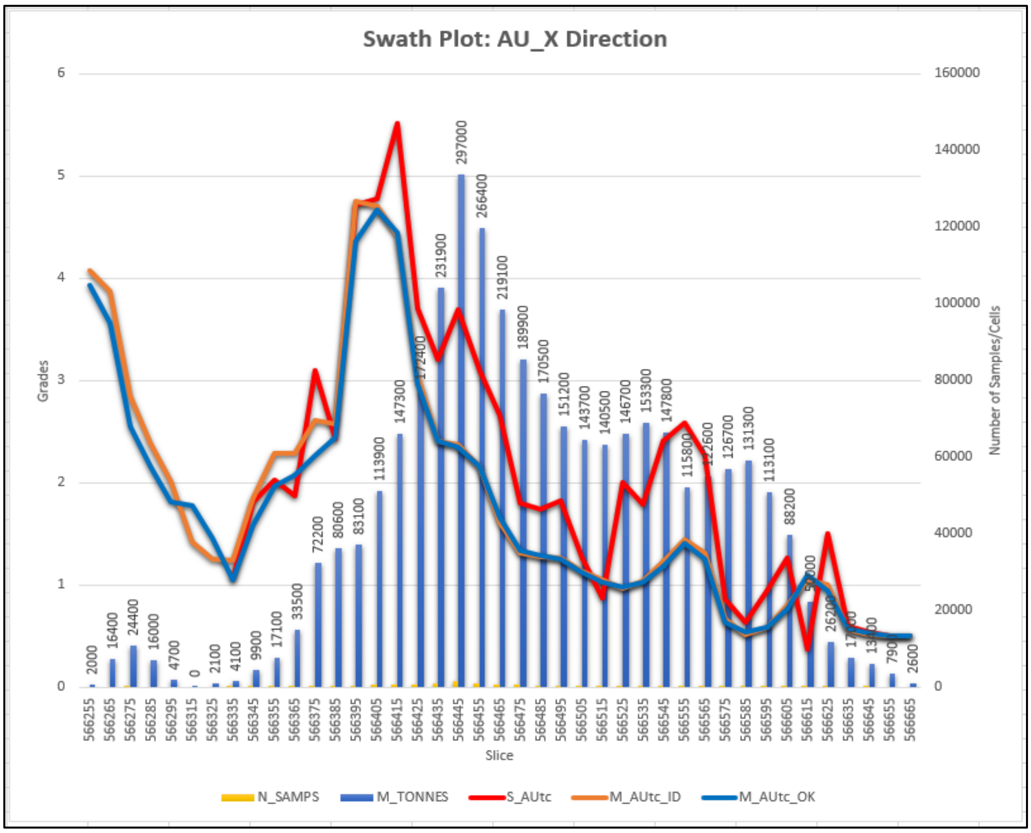
7.12.3. Validation Plots

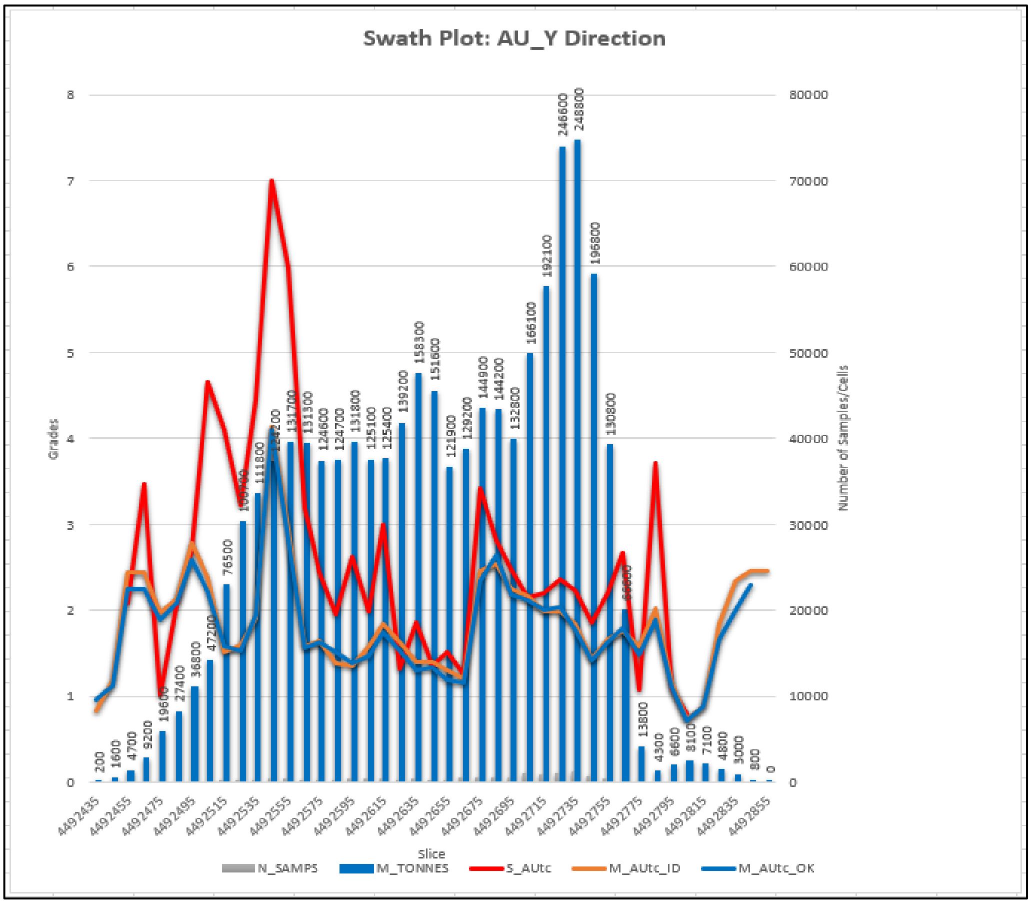
Comparison plots are an important validation tool for allowing relationships to be highlighted (should they exist) between sample points (either uncomposited or composited) and estimated values. Bias towards either under- or over-estimation can also be identified, along with any smoothing in the results. The effect of different estimation parameters and methods can also be compared. Results from the comparison study carried out on Au grades can be found in Appendix F.

A swath plot is a one-dimensional graph in a specific direction of interest. A swath is a sectional 'slice' through the block model at a predetermined thickness. The swath plots created as part of this study show the average grade of the blocks captured along the section, along with the averaged sample values. Figures 7.13-7.16 display swath profiles by mineralised zone.

Overall the comparisons between declustered composites (red lines) and declustered block estimates (blue lines) are very similar, indicated that resource estimation can be considered robust. In all cases, there was a good comparison between the composites and their corresponding estimated block values for all elements. This again indicates that resource estimation can be considered robust, as shown by the block estimate trends aligning close to or along the average trend of the declustered composites. Occasionally the block estimate trend falls slightly below the declustered composite trend, suggesting that some minor smoothing has occurred. This relationship demonstrates that the block model does not over-estimate when compared with the composite values.

Figure 7.13 – Example swath plot profiles for Au composites




Swath Plot: AU_Y Direction
Grades
Number of Samples/Cells
Slice
0
1
2
3
4
5
6
7
8
0
10000
20000
30000
40000
50000
60000
70000
80000
4492435
4492455
4492475
4492495
4492515
4492535
4492555
4492575
4492595
4492615
4492635
4492655
4492675
4492695
4492715
4492735
4492755
4492775
4492795
4492815
4492835
4492855
200
1600
4700
9200
19600
27400
36800
47200
76500
111800
134200
131700
131300
124600
124700
131800
125100
125400
139200
158300
151600
121900
129200
144900
144200
132800
166100
192100
246600
248800
196800
130800
13800
4300
6600
8100
7100
4800
3000
800
0
N_SAMPS
M_TONNES
S_AUtc
M_AUtc_ID
M_AUtc_OK

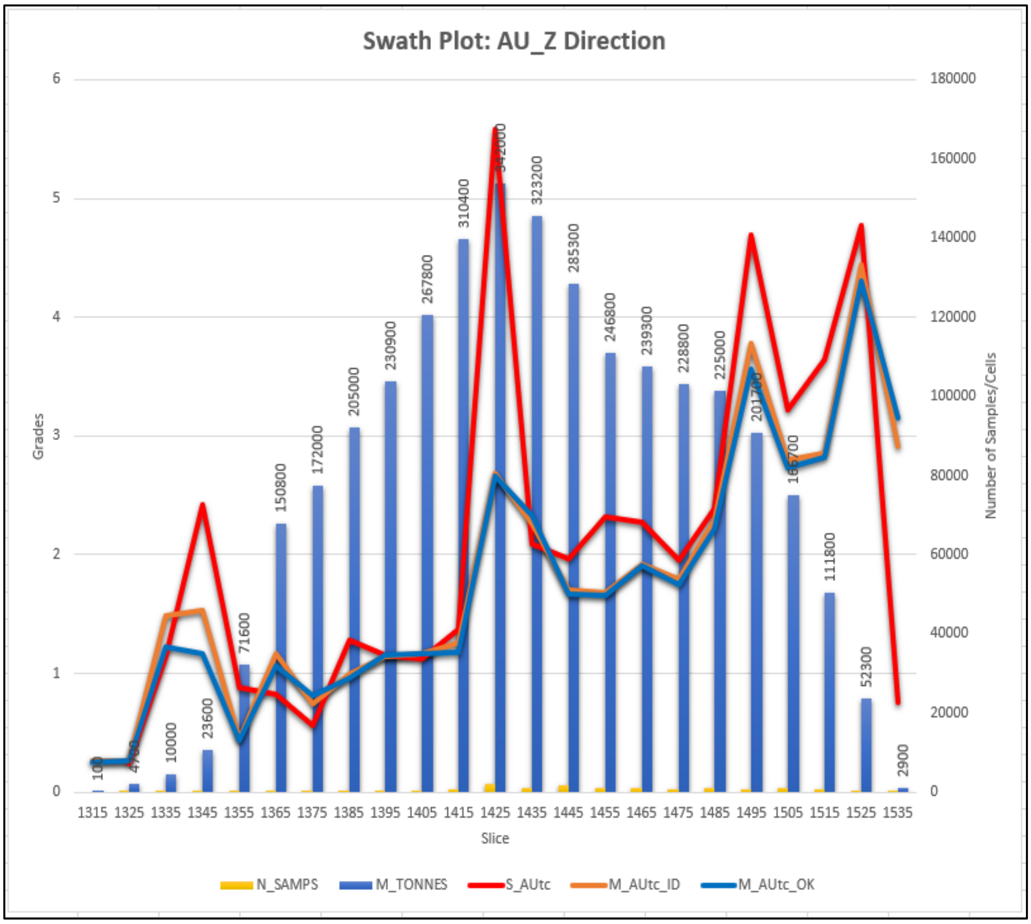
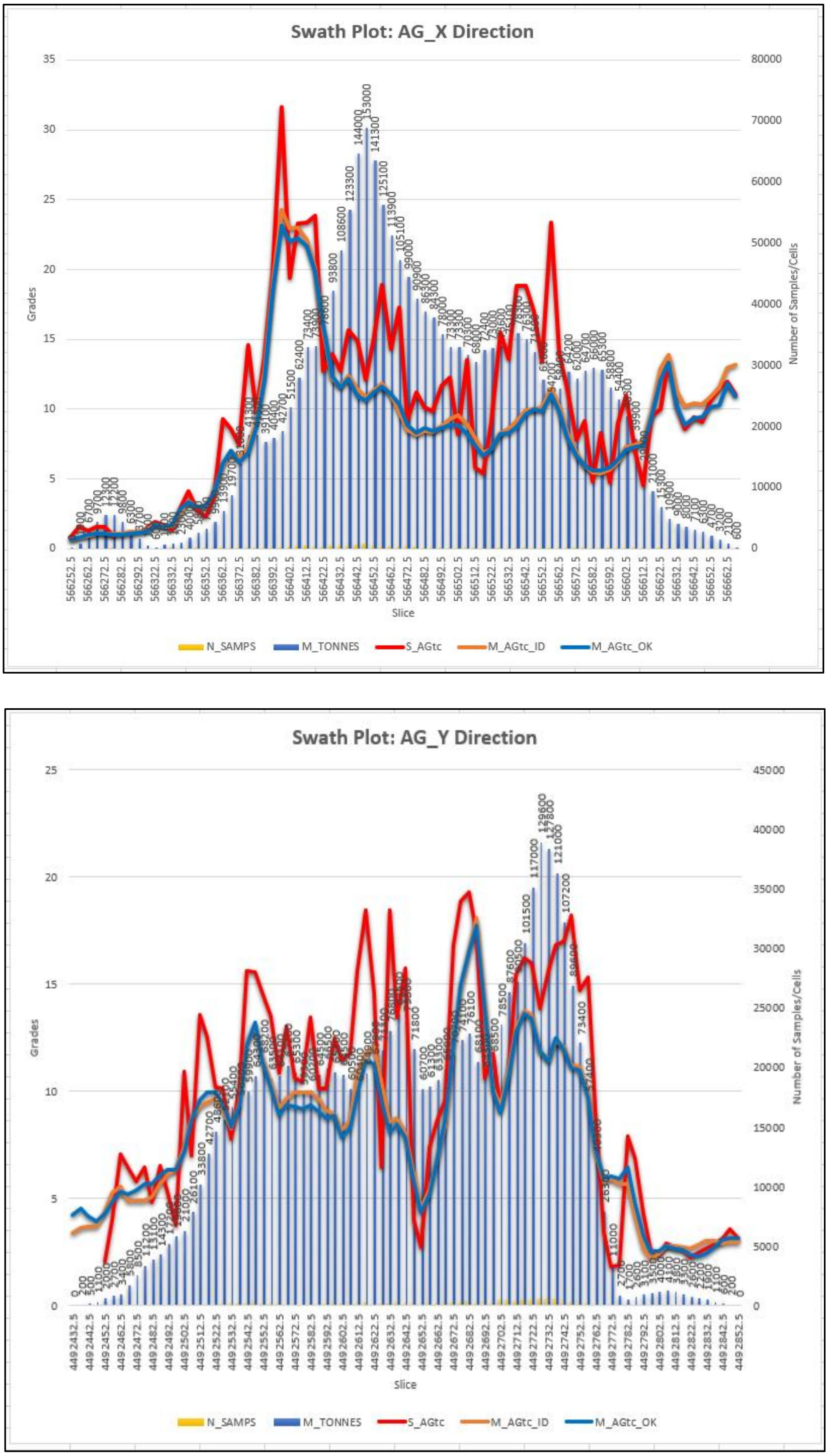

Swath Plot: AU_Z Direction
Grades
Number of Samples/Cells
Slice
0
1
2
3
4
5
6
0
20000
40000
60000
80000
100000
120000
140000
160000
180000
1315
1325
1335
1345
1355
1365
1375
1385
1395
1405
1415
1425
1435
1445
1455
1465
1475
1485
1495
1505
1515
1525
1535
100
10000
23600
71600
150800
172000
205000
230900
267800
310400
323200
285300
246800
239300
228800
225000
201700
111800
52300
2900
N_SAMPS
M_TONNES
S_AUtc
M_AUtc_ID
M_AUtc_OK

Figure 7.14 - Example swath plot profiles for Ag composites



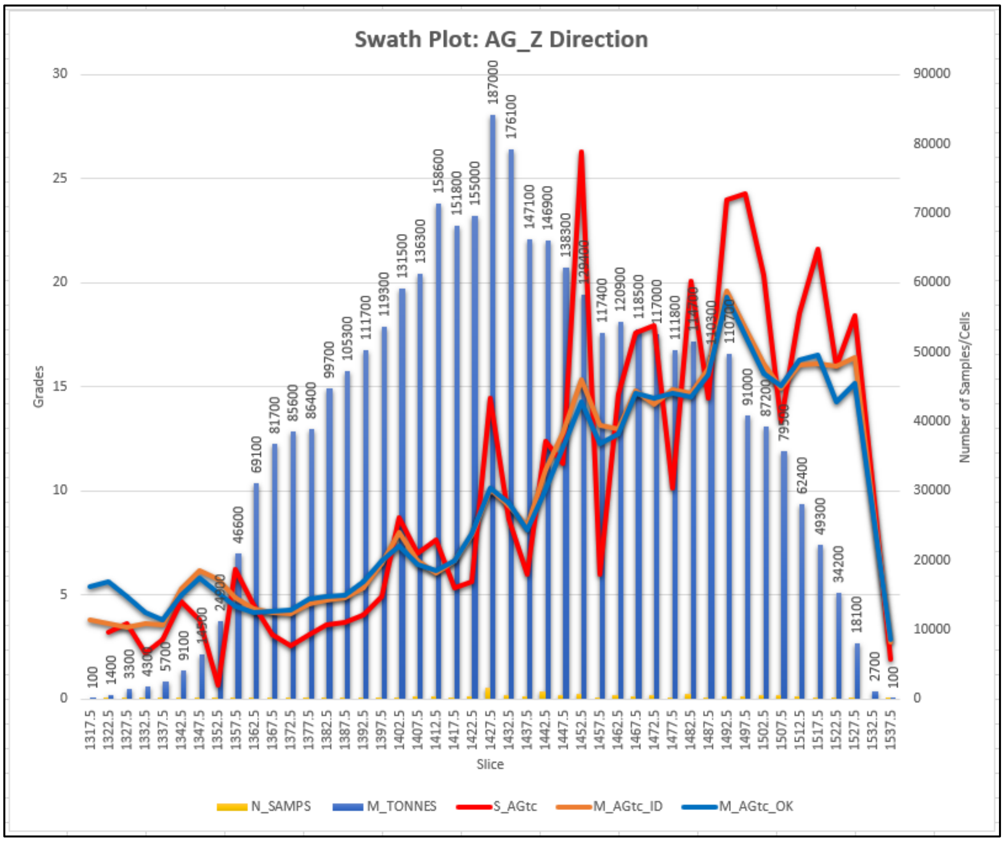
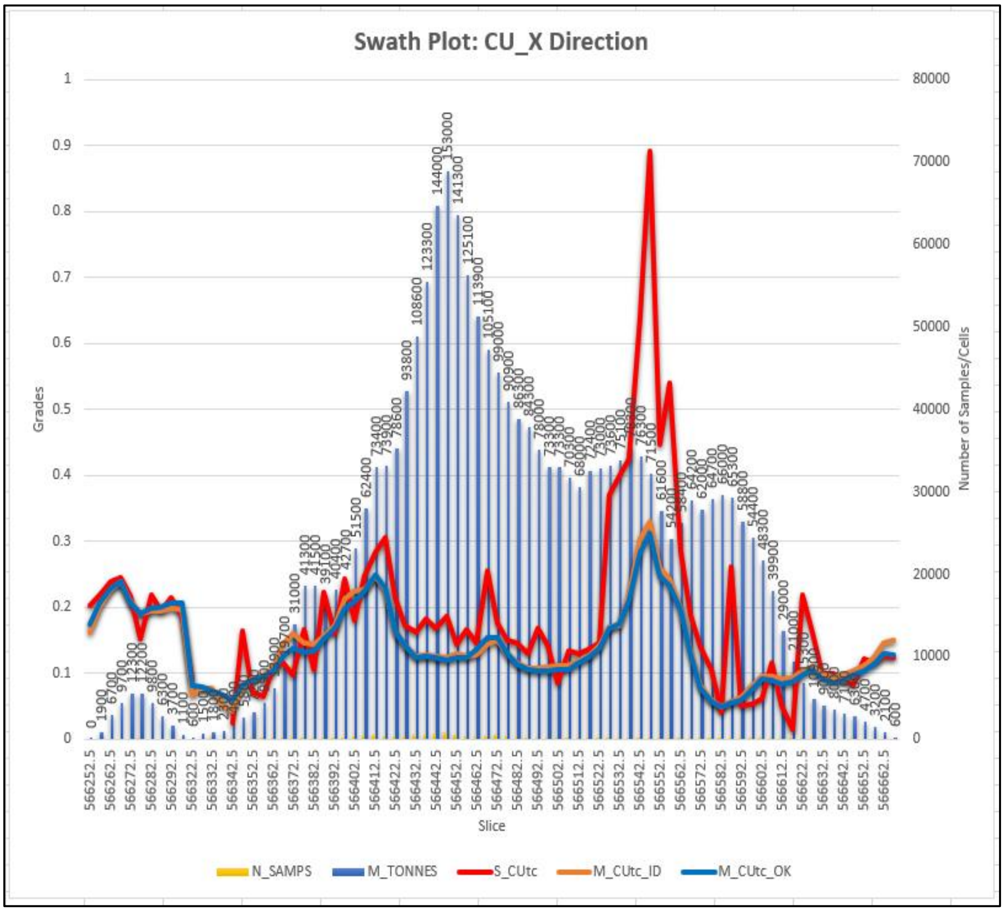
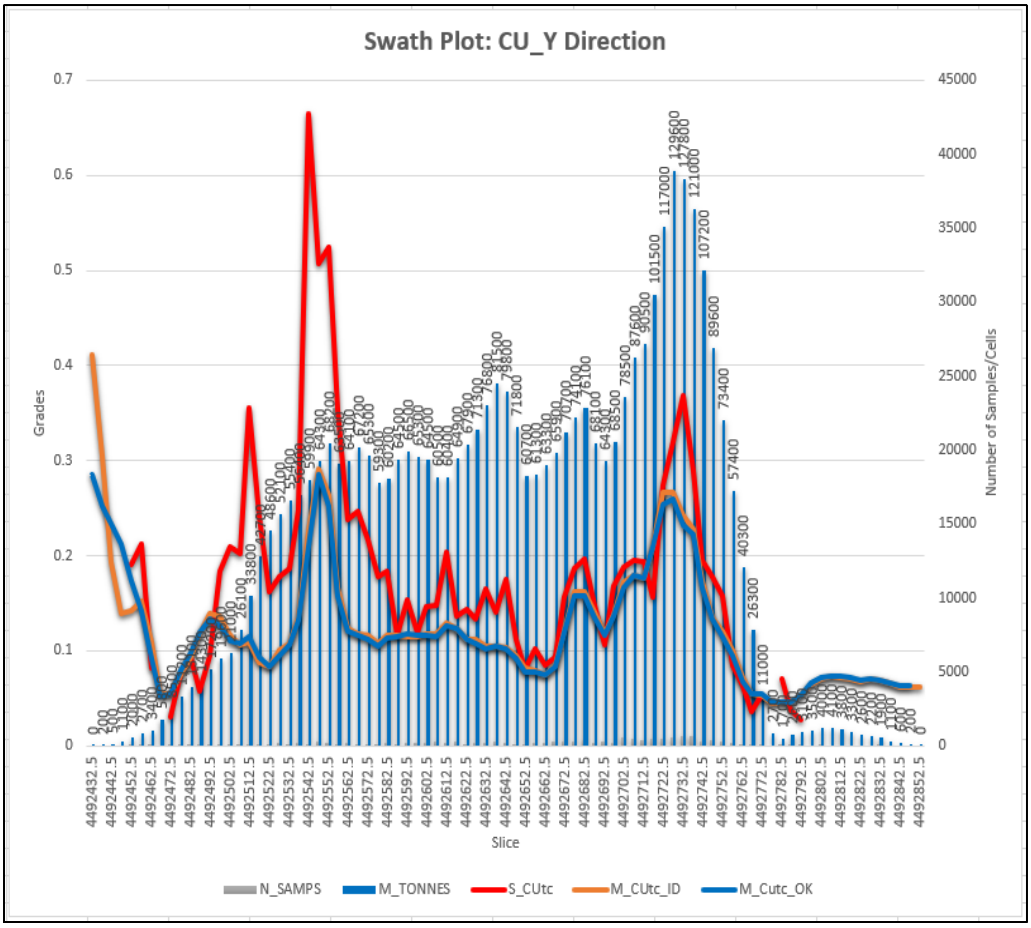


Figure 7.15 - Example swath plot profiles for Cu composites




Swath Plot: CU_Y Direction
Grades
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Number of Samples/Cells
45000
40000
35000
30000
25000
20000
15000
10000
5000
0
Slice
4492432.5
4492852.5
N_SAMPS
M_TONNES
S_CUtc
M_CUtc_ID
M_Cutc_OK

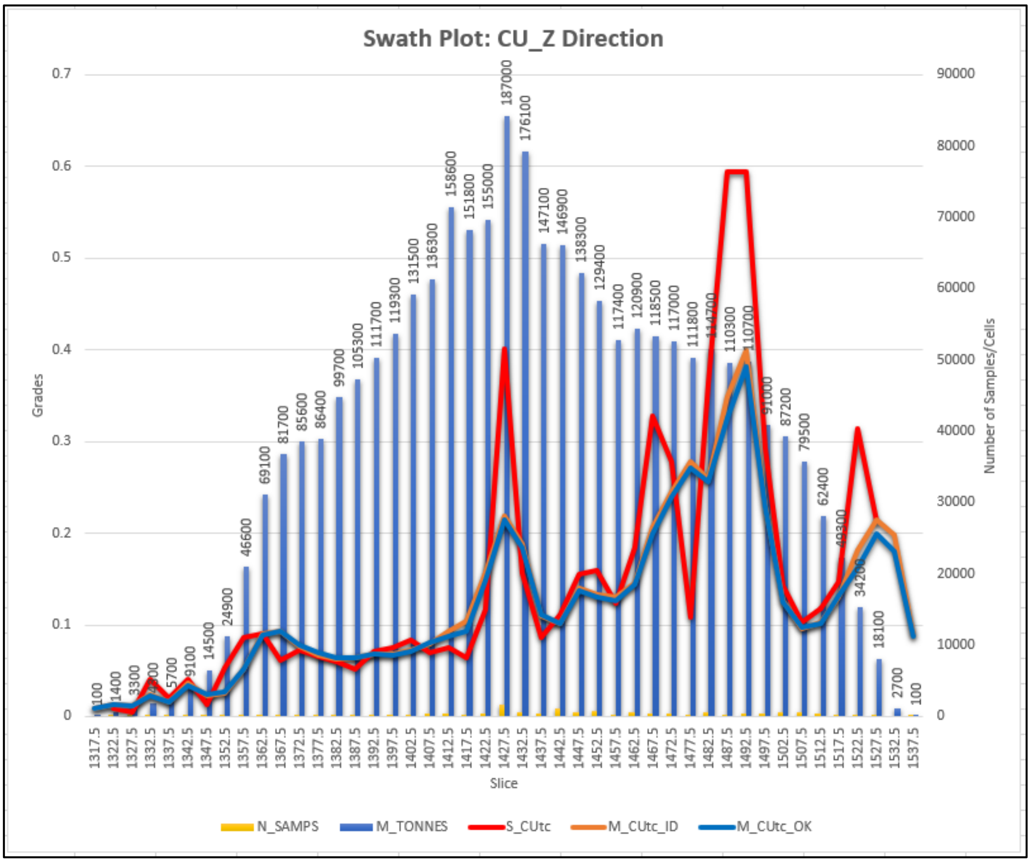
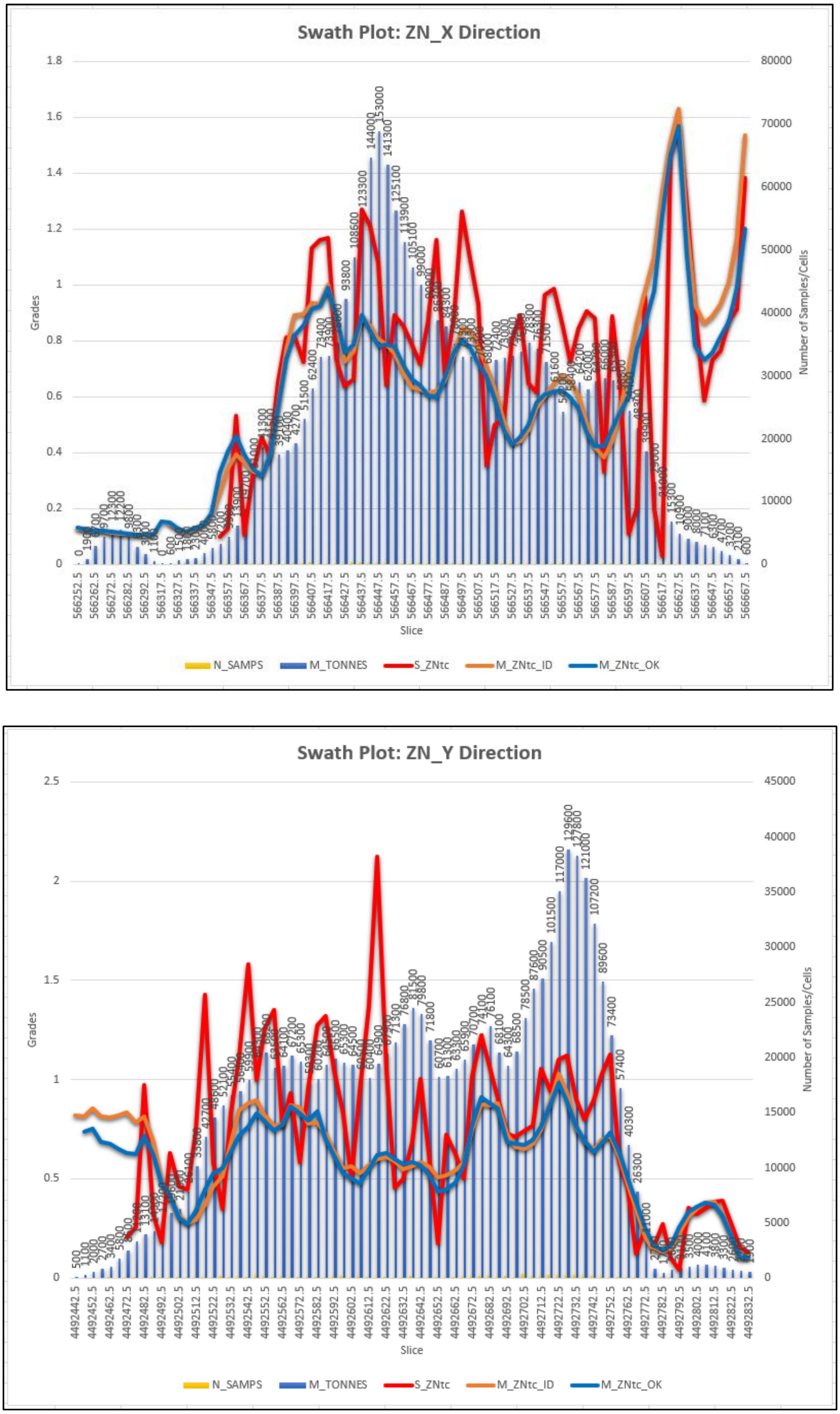
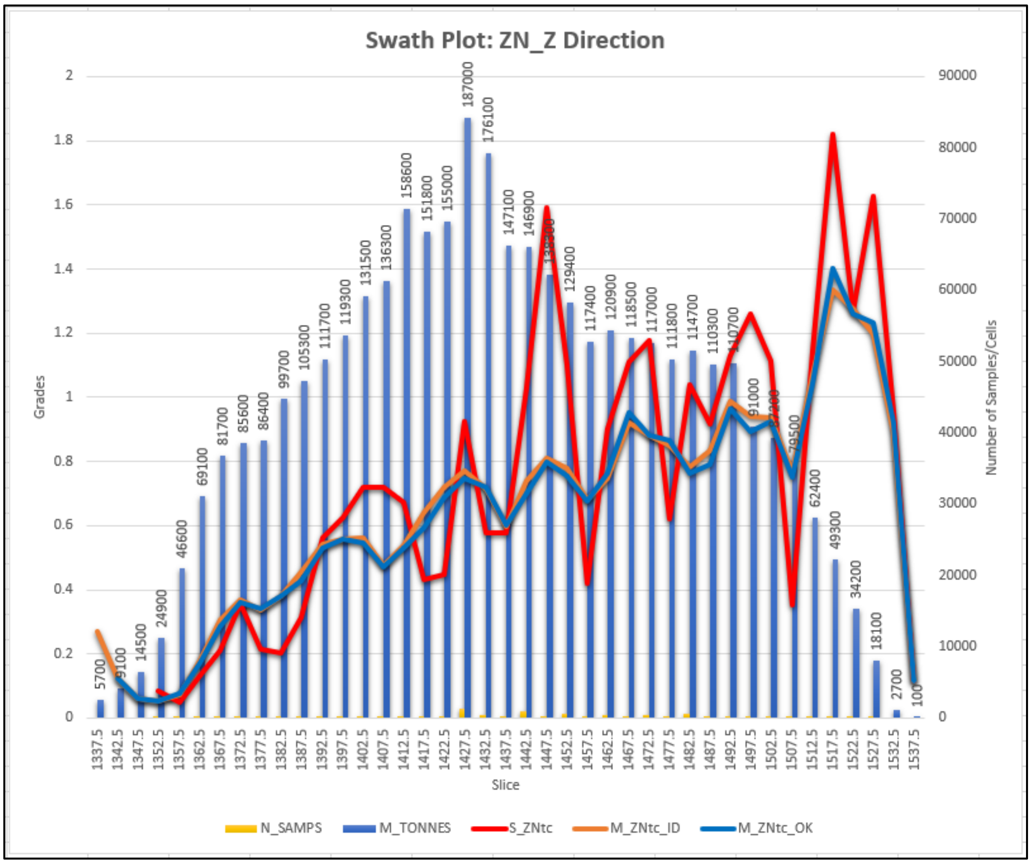

Swath Plot: CU_Z Direction
Grades
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0
Number of Samples/Cells
90000
80000
70000
60000
50000
40000
30000
20000
10000
0
Slice
1317.5
1537.5
N_SAMPS
M_TONNES
S_CUtc
M_CUtc_ID
M_CUtc_OK

Figure 7.16 - Example swath plot profiles for Zn composites





7.12.4. Model Depletion

The estimated block model (*Gad_Grade_Mod.dm*) was depleted using the wireframes of existing UG development and stopes using the field “MINED”.

At the request of AIMC, Datamine completed further depletion of the estimated resources using the wireframe listed in Table 7.15. This encompassed areas of mineralisation that are currently in situ but are considered by the Company to be non-recoverable at this time due to proximity to existing workings and geotechnical hazards (e.g. fault zones). These areas will be subject to further physical investigation in the near future to assess the viability of extraction.

Table 7.15 – Gadir depletion code

Wireframe	MINED
Ug_dvp_tr/pt	1

7.13. Bulk Density

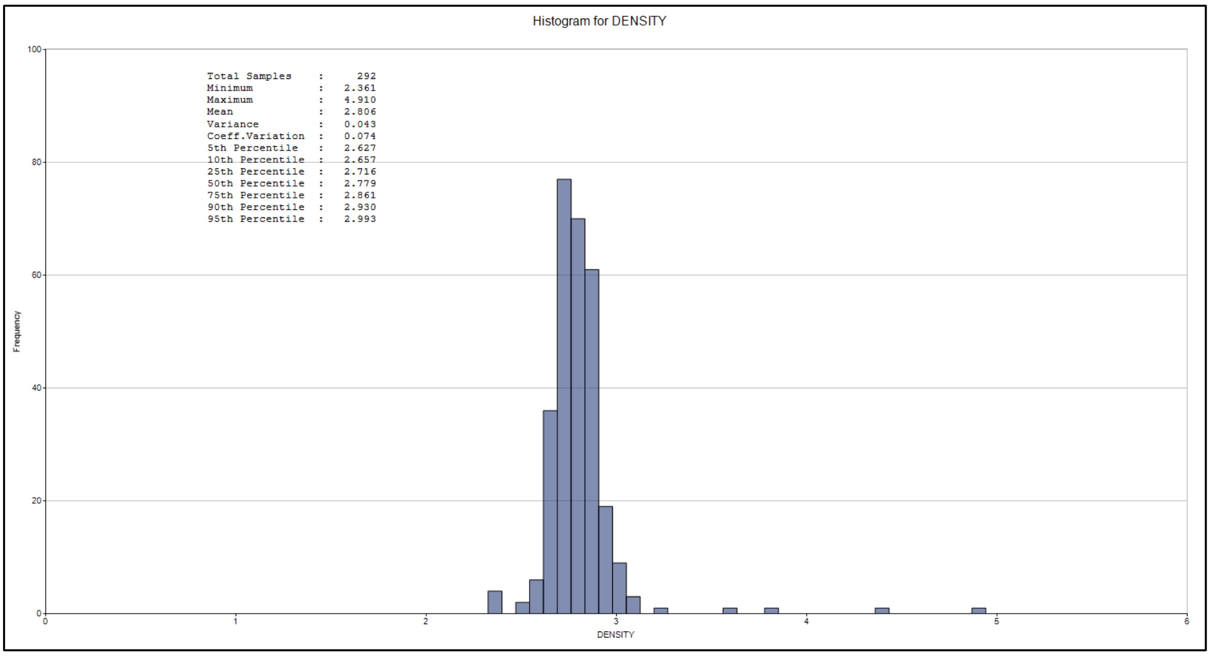
Bulk density measurements were determined for use in the Gadir Resource Block Model. A total of 292 samples were tested from selected core samples that comprised of both mineralised and waste rocks. The density was tested by rock type, extent of alteration and depth. The method used was hydrostatic weighing. It should be noted that density measurements were obtained from DD material, not CH samples.

Further details regarding bulk density can be found below and in Appendix I (JORC Table 1).

7.13.1. Density Data Analysis

Histograms were created with the data available for Gadir and the mean densities for both mineralised and waste rock determined. The samples within the ore material had an average density of 2.8 t/m^3 (Figure 7.17) and the waste rock were assigned a density of 2.5 t/m^3. Both of these values were assigned to the units during Resource estimation.

Figure 7.17 - Histogram showing the density ranges of selected ore samples from Gadir



```
Total Samples    :     292
Minimum          :   2.361
Maximum          :   4.910
Mean             :   2.806
Variance         :   0.043
Coeff.Variation  :   0.074
5th Percentile   :   2.627
10th Percentile  :   2.657
25th Percentile  :   2.716
50th Percentile  :   2.779
75th Percentile  :   2.861
90th Percentile  :   2.930
95th Percentile  :   2.993
```

It was noted by Datamine that a linear relationship may exist between bulk density measurements and the Cu and Zn contents of the sample. This relationship will be tested further.

It has been deemed that the material selected for bulk density analysis was geologically representative of the Gadir orebody. It was further established that for this study, top-capping of the grades did not affect the assigned density values of the ore.

8. Mineral Resource Classification

8.1. Classification Criteria used for the Model

The Gadir Mineral Resource was classified on the basis of confidence in the continuity of mineralised zones, as assessed by the geological block model based on sample density, drilling density and confidence in the geological database. The resource estimation has been classified in accordance with the criteria laid out in the JORC Code [2]. Measured, Indicated and Inferred Resources were defined based upon data density, data quality and geological and/or grade continuity, after detailed consideration of the JORC criteria and consultation with AIMC staff.

The Gadir Mineral Resource Block Model was generated from a combination of the following block models:

- *Gad_waste_mod* – waste block model
- *Gad_class_f1* – classified grade block model

The final classified block model was issued as *Gad_bm_f1* – non-mineralised blocks were assigned a ZONE code of 0.

Classifications were applied using numerical exclusion criteria and were influenced by proximity to current underground ore exposures (geological continuity). They were also influenced by the search volumes used (estimation and geological continuity) for the block estimations. Proximity to underground workings was determined by using nearest-neighbour techniques to determine the distance between each estimated block using the MINED code as outlined in Table 7.11.

Figures 8.1 and 8.2 show the distribution of the Resource Classifications for the Gadir Mineral Resource Block Model. The SE-dipping orientation of the orebody is clear to see in both images.

Figure 8.1 – Gadir Underground Mine Classified Resource Model (NW-SE cross-section)

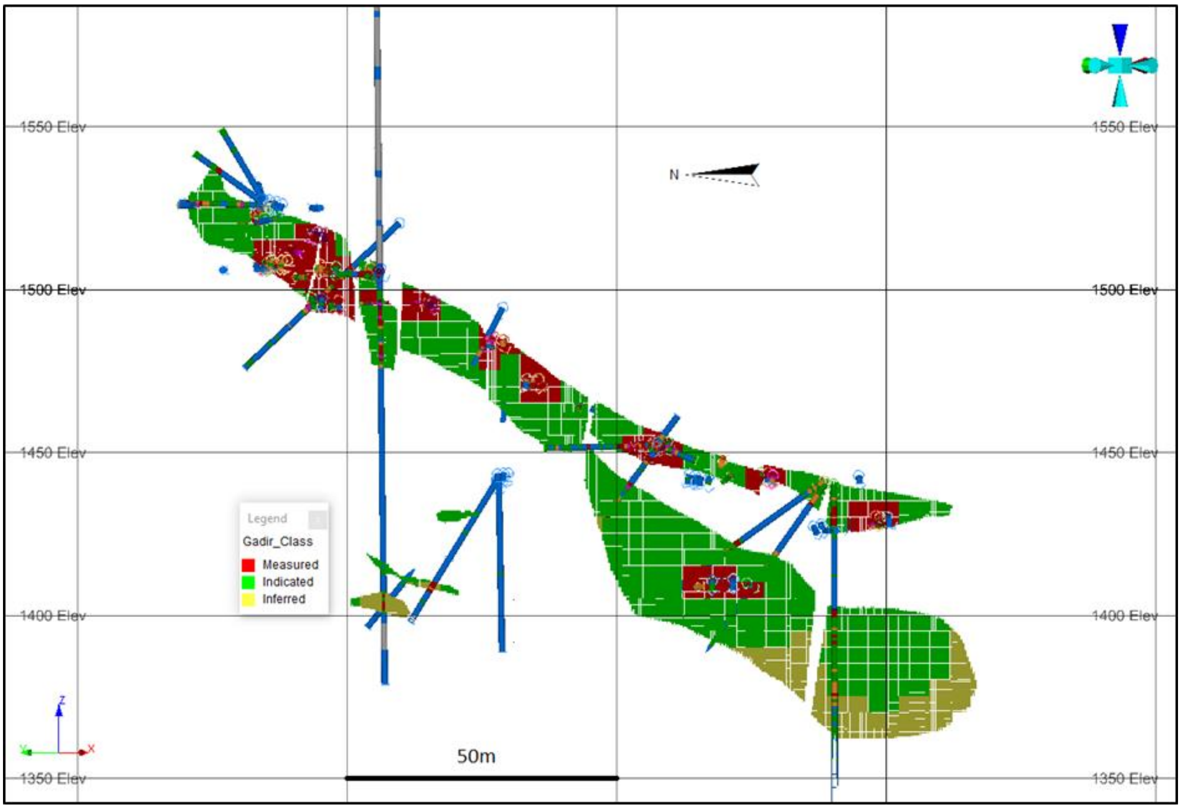
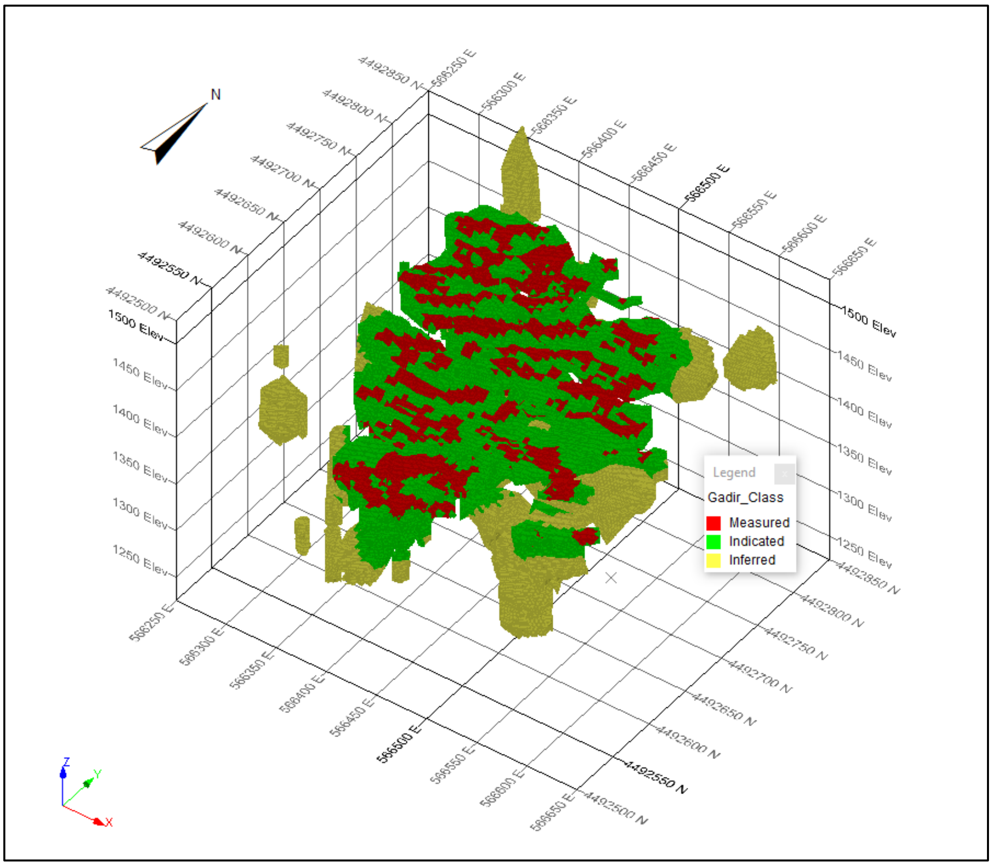


Figure 8.2 - Gadir Underground Mine Classified Resource Model (oblique view, looking NW)



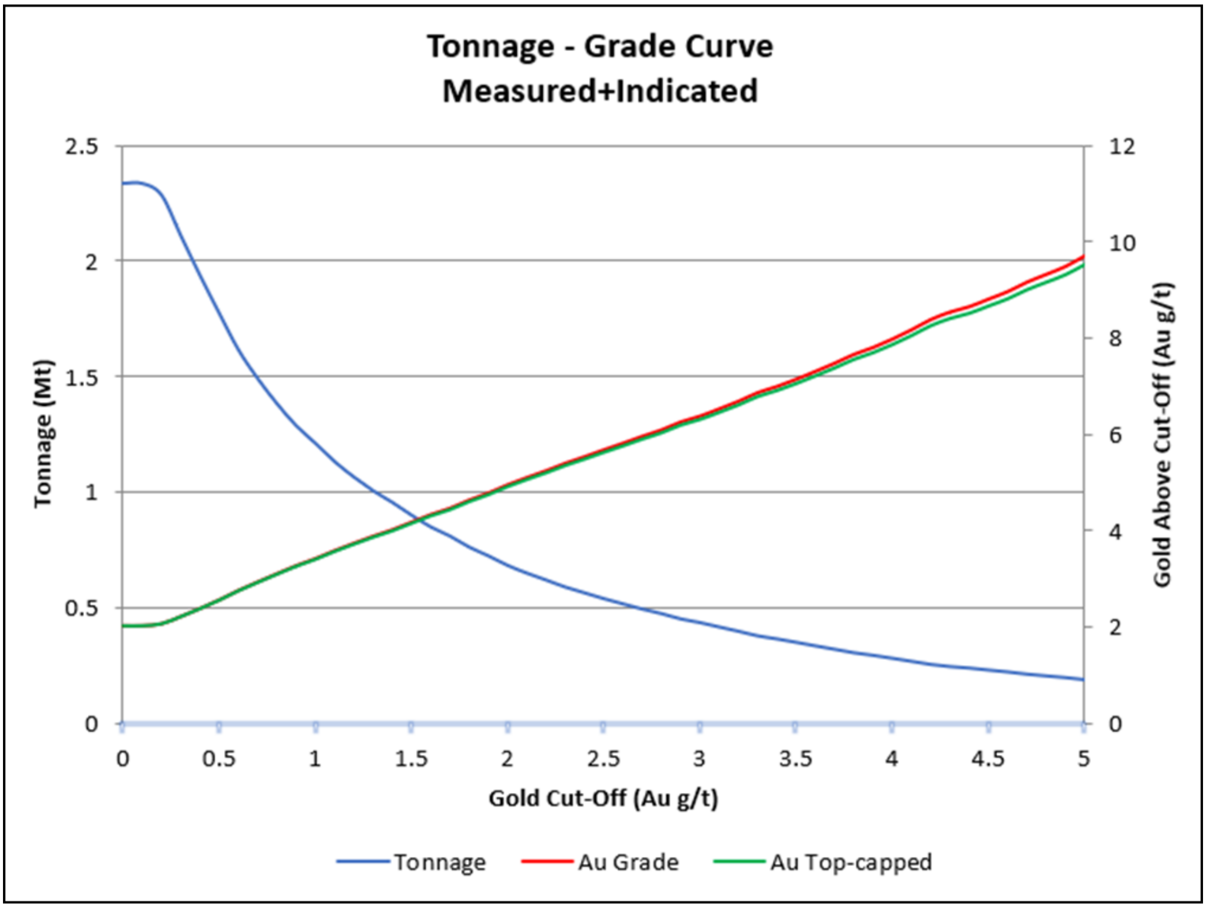
8.2. Grade-Tonnage Relationship

The creation of the grade-tonnage curve for the Gadir deposit was based on the classified gold resources. Incremental intervals of 0.1 g/t Au were applied to all estimated blocks and the tonnages subsequently calculated (Table 8.1). The grade-tonnage data is further presented in Figure 8.3 below and Appendix H.

Table 8.1 - A table showing output tonnages at various Au COGs at the Gadir deposit with top cap grades in place (assigned COG of 0.5 g/t highlighted)

Au COG	Measured+Indicated					Metal Contained			
	Tonnes	Au	Ag	Cu	Zn	Au	Ag	Cu	Zn
g/t	Kt	g/t	g/t	%	%	koz	koz	t	t
0	2,336	2.01	10.95	0.16	0.72	151	822	3,774	16,899
0.1	2,335	2.01	10.95	0.16	0.72	151	822	3,774	16,897
0.2	2,286	2.05	11.11	0.16	0.73	151	817	3,748	16,736
0.3	2,111	2.20	11.71	0.17	0.76	149	794	3,624	16,080
0.4	1,939	2.37	12.29	0.18	0.79	147	766	3,483	15,317
0.5	**1,775**	**2.54**	**12.90**	**0.19**	**0.82**	**145**	**736**	**3,348**	**14,502**
0.6	1,617	2.74	13.55	0.20	0.85	142	704	3,209	13,726
0.7	1,492	2.91	14.15	0.21	0.87	140	679	3,109	13,046
0.8	1,384	3.08	14.75	0.22	0.90	137	656	3,014	12,465
0.9	1,288	3.25	15.37	0.23	0.93	135	636	2,928	11,931
1	1,212	3.39	15.90	0.24	0.95	132	620	2,858	11,494
1.1	1,133	3.56	16.45	0.24	0.97	130	599	2,769	11,034
1.2	1,066	3.71	16.98	0.25	1.00	127	582	2,701	10,628
1.3	1,007	3.85	17.53	0.26	1.02	125	568	2,637	10,247
1.4	956	3.98	18.01	0.27	1.04	122	554	2,573	9,930
1.5	901	4.14	18.58	0.28	1.07	120	538	2,503	9,616
1.6	850	4.29	19.13	0.29	1.09	117	523	2,447	9,282
1.7	810	4.42	19.56	0.30	1.12	115	510	2,396	9,041
1.8	763	4.59	20.11	0.31	1.14	113	493	2,332	8,708
1.9	725	4.73	20.67	0.31	1.17	110	482	2,276	8,475
2	683	4.90	21.18	0.32	1.20	108	465	2,199	8,170
2.1	650	5.05	21.68	0.33	1.21	106	453	2,136	7,875
2.2	620	5.19	22.15	0.34	1.23	103	442	2,081	7,630
2.3	590	5.34	22.70	0.34	1.26	101	430	2,034	7,414
2.4	565	5.47	23.10	0.35	1.27	99	419	1,972	7,196
2.5	540	5.61	23.45	0.35	1.29	97	407	1,913	6,950
2.6	517	5.75	23.88	0.36	1.31	96	397	1,863	6,750
2.7	495	5.89	24.32	0.37	1.32	94	387	1,814	6,552
2.8	475	6.02	24.79	0.37	1.34	92	379	1,759	6,387
2.9	452	6.18	25.23	0.37	1.36	90	367	1,693	6,158
3	436	6.30	25.51	0.38	1.38	88	358	1,650	6,002

Figure 8.3 - A graphical representation of the grade-tonnage calculations for the Gadir deposit



8.3. Mineral Resources Statement

Independent consultants Datamine carried out the resource estimation of the Gadir deposit in accordance with JORC guidelines. The parameters used for classifying the Resource Model according Measured, Indicated and Inferred categories are presented below. Additional 'Exploration Potential', that fall outside Inferred parameters, have also been considered. Refer to Table 7.8 for search volume parameters.

Measured:

Blocks estimated in search volume 1 with a minimum 16 samples (maximum of 32) and maximum of 5 per drillhole within 25 m of workings.

Indicated:

Blocks estimated in search volume 2 with a minimum 10 samples (maximum of 32) and maximum of 5 per drillhole within 25 m of workings.

Inferred:

- Blocks estimated in search volume 2 with a minimum 10 samples (maximum of 32) and maximum of 5 per drillhole outside of 25 m of workings or,
- Blocks estimated in search volume 3 with a minimum 5 samples (maximum of 20) and maximum of 5 per drillhole outside of 25 m of workings.

Exploration Potential:

- Blocks estimated in search volume 3 with a minimum 3 samples (maximum of 20) and all the blocks estimated less than 5 samples or,
- All other mineralised material not classified within the Resource Categories and parameters above.

It is anticipated that material classified as 'Inferred' or 'Exploration Potential' may be upgraded with further drilling and sampling. The Mineral Resource estimate, depleted for mining development and production to the end of August 2018, for Gadir is detailed below (Table 8.2).

Table 8.2 – Gadir Mineral Resource Estimate, depleted of material to August 2018

MINERAL RESOURCES	**Tonnage**	**Gold**		**Silver**		**Copper**		**Zinc**	
(Cut-off grade 0.5 g/t Au)	kt	g/t	koz	g/t	koz	%	t	%	t
Measured	540	3.70	64.2	17.49	303.6	0.29	1,566	1.01	5,454
Indicated	1,235	2.04	81.0	10.89	432.4	0.14	1,729	0.73	9,016
Measured + Indicated	**1,775**	**2.54**	**145.2**	**12.90**	**736.1**	**0.21**	**3,295**	**0.84**	**14,470**
Inferred	571	1.48	27.2	5.68	104.4	0.10	571	0.52	2,972
Total	**2,347**	**2.29**	**172.4**	**11.14**	**840.4**	**0.19**	**3,866**	**0.78**	**17,442**
Exploration	5	1.37	0.2	5.94	0.9	0.09	2,470	0.60	7,620

Note that due to rounding, numbers presented may not add up precisely to totals.

For the Gadir deposit, it has been determined the Measured plus Indicated Mineral Resource is:

> 1,775 kt at a grade of 2.54 g/t Au containing 145.2 koz of Au and 736.1 kt of Ag.
>
> In addition, an Inferred Mineral Resource of 571 kt at a grade of 1.48 g/t Au containing 27.2 koz of Au was determined (at a cut-off grade of 0.5 g/t).

8.4. Discussion of Relative Accuracy/Confidence

Statistical and visual checking of the Gadir Block model is as expected given the geological data. The mineralisation geometry is well understood and verified by intersections with underground development. The level of data acquired was considered high and the resource estimation approach was completed to international best practice. The application of both statistical and geostatistical approaches resulted in high confidence in the resource, resulting in the appropriate classifications and quantities of Measured, Indicated and Inferred resources. The margins of the deposit (both around the periphery and at depth), where sample density was not as high as over the main central mineralised zone, yielded the majority of the Inferred category resource.

The drilling grid and sample intervals were deemed to be sufficient to assign Measured and Indicated Mineral Resources. The Gadir underground deposit has been in production since 2015. As part of the mining process, grade control drilling, truck sampling and process reconciliation forms part of the daily management of the operations. As such, extensive production data is available for comparison. The relative accuracy of the estimated resource compares well to the production data and the confidence in the estimate, given the amount of geological data, is considered high. Future extraction of material, along with grade control drilling and other mining data, will continue to be used to compare with this Resource Model.

9. Resource Status and Further Work

It has been concluded that the Gadir Resource Model, produced as described in this report, is appropriate to be utilised for Ore Reserves estimation to determine the mineable potential of the deposit. Given that Datamine has been closely associated with the exploration of the deposit and the resources estimation, it has been agreed that Datamine carry out the Gadir Reserve Estimate under the supervision of the CP.

9.1. Further Work

Datamine concurs with the recommendations below. Datamine is prepared to retain the resource classification and agrees that this work be implemented at the earliest opportunity.

Further exploration and grade control drilling is planned at the Gadir deposit. The targets for this drilling include:

- down-dip extension drilling of the mineralisation
- additional drilling chasing mineralisation along-strike
- exploration drilling between Gadir and Gedabek

No diagrams to show possible extensions are presented in this report as this information is commercially sensitive.

Planned works to increase efficiency and continually improve are currently focused on upgrading and modernising laboratory and data management processes - this includes the implementation of a laboratory information management system ("LIMS") so that sample and assay data handling can be managed with less human interaction. A project is underway to upgrade the geological database. Datamine are working closely with AIMC to assist in the creation of a system (geological database management system, “GDMS”) that minimises manual data entry and handling through digital importing and automating protocols such as QA/QC checks and data management permissions.

Furthermore, a bulk density study is planned to be carried out to increase the number of density samples to include more waste samples and dense massive polymetallic sulphide samples. This will be done as core is logged and can also be conducted on stored core. Chip and CH samples from high-grade polymetallic ores will also be measured to allow for density domaining of the various ore types.

It is recommended that the grade control data produced during mining should be validated against this Resource Model to check for consistency or variation. Any discrepancies that appear during this reconciliation process should be investigated to ascertain the source and be incorporated in future resource updates.

Planned improvements to resource modelling include wireframing the broader lithologies and structures, allowing for assessment against a geotechnical model of Gadir. This will involve undertaking a detailed study of the critical structural controls on the mineralisation and how these may influence the future resource modelling or operations of the mine.

Zinc resources have been modelled for the first time as presented in this report. Currently Zn is not a final product via AIMC processing methods. Zn grades appear to be becoming more significant with increasing depth at both Gadir and Gedabek hence the reason for inclusion of Zn in this estimate. Analysis and evaluation is underway to define the Zn potential as a payable commodity in the future.

10. References

[1] CAE Mining, “Updated Mineral Reserve Statement for Azerbaijan International Mining Company – Gedabek Mineral Deposit.” September 2014, 43 p.

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

[3] Anglo Asian Mining PLC. “Mineral Resources Report – Gedabek Open Pit,” January 2019.

[4] Richard Parker, “Gadir Exploration and Production Drilling Programme 2016,” February 2016, 17 p.

[5] Google Earth, “Gedabek Contract Area,” DigitalGlobe 2012. http://www.earth.google.com [November 15, 2018].

[6] Anglo Asian Mining PLC. “Ore Reserves Report – Gadir Underground Mine,” January 2019.

11. Compliance Statement

The information in the report that relates to exploration results, minerals resources and ore reserves is based on information compiled by Dr. Stephen Westhead, who is a full-time employee of Azerbaijan International Mining Company with the position of Director of Geology & Mining.

Stephen Westhead is a senior extractive industries professional with over 28 years of experience, who has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'.

Stephen Westhead has sufficient experience, relevant to the style of mineralisation and type of deposit under consideration and to the activity that he is undertaking, to qualify as a "competent person" as defined by the AIM rules. Stephen Westhead has reviewed the resources included in this report.

The information in this report that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr. Stephen Westhead, a Competent Person who is a Member or Fellow of a 'Recognised Professional Organisation' (RPO) included in a list that is posted on the ASX website from time to time (Chartered Geologist and Fellow of the Geological Society and Professional Member of the Institute of Materials, Minerals and Mining), Fellow of the Society of Economic Geologists (FSEG) and Member of the Institute of Directors (MIoD).

Stephen Westhead consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Dr. Stephen J. Westhead

Competent Person

Director of Geology and Mining, Azerbaijan International Mining Company (Anglo Asian Mining PLC.)

Appendix A: Gadir Logging Codes

Code	Description
ATHS	Altered andesitic tuff
AP	Andesite porphyry
AP_PHS	Andesite porphyry with propylitic alteration
APHS	Andesite porphyry with silicification
DYKE	Andesitic dyke (+/- porphyritic texture)
AT	Andesitic tuff (fine and coarse grained)
AF	Around fault-zone' material (e.g. fault clay)
BCZ	Breccia zone (not dependent on lithology)
CZ	Contact zone
DI	Diorite intrusion
DI_DYKE	Dioritic dyke
DUMP	Dumps of old mine works
EB	Eruption breccia
FAU	Fault zone (not dependent on lithology)
GOS	Gossan (oxidised quartz porphyry)
AH	Hornfelsed andesitic hornfelsed rock
HF	Hornfelsed intrusive
LVBC	Lava breccia
PSZ	Propylitic silicified zone
QP	Quartz porphyry
RHYL	Rhyolite
SQ	Secondary quartzite
SS	Silica sinter
SAP	Silicifed andesite porphyry
TL	Tuff layered hornfelsed unit
VOID	Voids (e.g. mined-out areas)
TUFF	Volcanic rock

Appendix B: Drillhole Collar Details

BHID	Easting	Northing	Elevation (m)	EOH (m)	Hole Type
AIMCDD105	566306.515	4492730.012	1757.58	350.20	DD
AIMCDD106	566433.930	4492728.543	1736.13	348.45	DD
AIMCDD107	566431.468	4492701.603	1732.55	447.50	DD
AIMCDD108	566403.736	4492705.514	1739.47	360.60	DD
AIMCDD115	566472.251	4492711.185	1723.03	411.50	DD
AIMCDD116	566440.894	4492758.992	1736.42	329.00	DD
AIMCDD117A	566451.385	4492741.899	1734.53	401.00	DD
AIMCDD118	566375.821	4492711.530	1746.44	361.30	DD
AIMCDD119	566395.052	4492676.811	1737.42	373.00	DD
AIMCDD121	566447.307	4492683.890	1724.06	361.00	DD
AIMCDD42	566699.908	4492991.170	1641.72	159.25	DD
AIMCDD42A	566705.463	4492994.979	1641.61	495.30	DD
AIMCDD53	566741.815	4492963.490	1650.54	148.30	DD
AIMCDD57	566806.619	4493007.423	1638.90	91.40	DD
AIMCDD86	566412.379	4492718.575	1738.68	666.00	DD
AIMCDD87	566558.968	4492542.308	1718.49	332.00	DD
AIMCDD95	566623.765	4492857.802	1690.45	300.00	DD
AIMCDD96A	566363.981	4492920.581	1689.86	299.00	DD
EDD1437-1-1	566407.376	4492507.151	1441.83	88.00	UDD
EDD1437-1-2	566407.110	4492507.510	1442.61	90.00	UDD
EDD1437-1-3	566407.783	4492506.571	1441.85	89.00	UDD
EDD1437-1-4	566407.180	4492507.460	1442.12	85.55	UDD
EDD1437-15-1	566421.940	4492517.700	1442.76	55.00	UDD
EDD1437-15-2	566423.070	4492516.860	1441.93	45.30	UDD
EDD1437-2-1	566428.608	4492527.738	1441.77	89.50	UDD
EDD1437-2-2	566428.860	4492527.260	1441.87	89.50	UDD
EDD1437-2-3	566428.380	4492528.070	1442.37	79.00	UDD
EDD1437-25-1	566442.560	4492537.450	1441.00	62.85	UDD
EDD1437-25-2	566442.930	4492536.800	1441.53	64.40	UDD
EDD1437-3-1	566452.467	4492548.380	1440.85	88.10	UDD
EDD1437-3-2	566453.042	4492547.689	1440.10	90.00	UDD
EDD1437-3-3	566451.990	4492548.940	1441.80	77.00	UDD
EDD1437-35-1	566461.352	4492560.353	1440.40	103.20	UDD
EDD1437-35-2	566461.690	4492559.740	1440.10	71.35	UDD
EDD1437-4-1	566468.182	4492571.110	1440.40	96.90	UDD
EDD1437-4-2	566467.860	4492571.520	1441.49	92.30	UDD
EDD1437-4-3	566468.850	4492570.150	1440.35	76.00	UDD
EDD1437-45-1	566481.220	4492582.440	1440.31	74.30	UDD
EDD1437-45-2	566481.750	4492581.780	1440.58	58.00	UDD
EDD1437-45-3	566481.050	4492582.710	1441.03	77.40	UDD
EDD1437-5-1	566487.900	4492595.200	1440.37	110.60	UDD
EDD1437-5-2	566487.710	4492595.440	1441.20	101.70	UDD

EDD1437-5-3	566489.473	4492593.176	1440.22	104.10	UDD
EDD1437EKV1-1-1	566582.881	4492525.782	1444.61	113.50	UDD
EDD1437EKV1-1-2	566583.293	4492525.308	1444.23	161.70	UDD
EDD1437EKV1-1-3	566583.799	4492524.610	1444.15	150.00	UDD
EDD1437EKV1-2-1	566611.417	4492543.579	1443.45	170.00	UDD
EDD1437KV1-1-1	566473.930	4492500.430	1441.67	16.60	UDD
EDD1437KV1-1-2	566474.420	4492499.657	1441.62	92.00	UDD
EDD1437KV1-1-3	566475.504	4492502.764	1442.50	43.60	UDD
EDD1437KV1-1-3A	566475.336	4492502.961	1442.26	67.00	UDD
EDD-1440-2-5-1	566431.920	4492683.803	1440.99	57.60	UDD
EDD-1440-4-1	566440.980	4492694.472	1441.62	50.60	UDD
EDD-1440-4-2	566440.980	4492693.670	1440.71	55.85	UDD
EDD-1440-5-1	566447.221	4492704.096	1440.54	58.25	UDD
EDD-1440-5-2	566446.900	4492705.350	1440.69	50.60	UDD
EDD-1440-5-3	566448.350	4492703.660	1440.56	48.80	UDD
EDD-1440-6-1	566448.808	4492710.383	1440.95	47.00	UDD
EDD-1440-6-2	566449.229	4492709.836	1440.54	74.80	UDD
EDD-1440-6-3	566449.840	4492709.810	1440.52	63.40	UDD
EDD-1440-7-2	566452.770	4492718.120	1440.48	75.10	UDD
EDD-1440-8-1	566458.772	4492724.489	1440.72	76.10	UDD
EDD-1450-10-1	566601.700	4492656.080	1450.67	92.00	UDD
EDD-1450-10-2	566602.060	4492655.530	1450.67	94.00	UDD
EDD-1450-10-3	566601.420	4492656.570	1450.63	90.00	UDD
EDD-1450-10-4	566600.934	4492657.379	1451.35	124.50	UDD
EDD-1450-10-5	566605.318	4492657.131	1450.66	99.50	UDD
EDD-1450-6-1	566518.916	4492603.297	1451.32	122.20	UDD
EDD-1450-6-2	566519.980	4492601.600	1450.98	128.80	UDD
EDD-1450-7-1	566540.866	4492617.634	1452.02	128.20	UDD
EDD-1450-7-2	566541.876	4492616.466	1451.83	132.00	UDD
EDD-1450-8-1	566564.128	4492632.576	1451.37	88.10	UDD
EDD-1450-8-2	566563.830	4492632.910	1452.39	90.10	UDD
EDD-1450-8-3	566564.680	4492631.730	1451.10	120.30	UDD
EDD-1450-9-1	566581.480	4492639.583	1450.41	105.30	UDD
EDD-1450-9-2	566580.229	4492641.121	1450.38	53.70	UDD
EDD-1450-9-3	566583.510	4492638.459	1450.49	127.75	UDD
EDD1553-1	566634.931	4492861.831	1555.68	88.50	UDD
EDD1553-2	566637.010	4492859.320	1555.43	105.00	UDD
EUD-1440-1-1	566425.970	4492670.630	1441.44	59.80	UDD
EUD-1440-1-2	566426.770	4492669.950	1441.30	50.60	UDD
EUD-1440-2-1	566429.607	4492677.631	1440.99	50.60	UDD
EUD-1440-2-2	566430.070	4492677.000	1440.95	52.00	UDD
EUD-1440-3-1	566436.550	4492688.370	1441.00	51.20	UDD
EUD-1440-3-2	566437.584	4492687.246	1440.82	71.00	UDD
EUD-1440-7-1	566453.402	4492716.950	1440.48	89.10	UDD
EUD-1440-8-2	566460.223	4492723.110	1440.28	87.00	UDD

EUD-1492-2-1	566375.746	4492639.907	1495.83	70.70	UDD
EUD-1492-2-2	566376.587	4492639.604	1495.92	80.60	UDD
EUD-1492-2-4	566376.994	4492638.890	1495.92	82.10	UDD
EUD-1492-2-7	566374.512	4492638.197	1496.08	101.60	UDD
EUD-1492-3-1	566396.211	4492653.689	1495.40	127.10	UDD
EUD-1492-3-2	566396.857	4492652.855	1495.29	100.10	UDD
EUD-1492-3-3	566397.296	4492652.239	1495.37	91.50	UDD
EUD-1492-4-1	566416.751	4492665.916	1494.48	121.60	UDD
EUD-1492-4-2	566417.389	4492665.137	1494.52	142.10	UDD
EUD-1492-4-3	566418.321	4492663.567	1494.52	121.80	UDD
EUD-1492-5-1	566444.460	4492680.243	1494.09	100.50	UDD
EUD-1492-5-3	566443.956	4492680.932	1494.10	85.10	UDD
EUD-1492-5-4	566444.285	4492680.797	1494.04	106.25	UDD
EUD-1492-5-5	566446.272	4492678.500	1494.07	141.00	UDD
EUD-1492-6-1	566467.463	4492698.700	1493.02	141.00	UDD
EUD-1492-6-2	566467.767	4492698.408	1493.00	145.00	UDD
EUD-1492-7-3	566482.528	4492713.629	1493.83	93.60	UDD
EUD-1492-7-4	566486.343	4492708.956	1492.96	104.85	UDD
EUD-1492-7-5	566482.425	4492713.657	1493.59	90.00	UDD
EUD-1492-8-1	566499.298	4492724.022	1492.66	55.50	UDD
EUD-1492-8-2	566499.098	4492724.296	1492.81	101.60	UDD
EUD-1492-8-3	566497.907	4492726.461	1493.74	70.10	UDD
EUD-1492-8-4	566501.269	4492720.241	1492.73	50.10	UDD
EUD-1492-8-5	566501.209	4492719.077	1492.81	136.10	UDD
GDDD35	566714.397	4492934.020	1657.21	110.00	DD
GDDD36	566697.885	4493028.353	1630.88	100.20	DD
GEGDD01	566059.555	4492563.239	1870.49	452.00	DD
GEGDD02	565997.743	4492710.567	1847.54	461.20	DD
GEGDD06	566283.313	4492739.933	1764.01	364.00	DD
GEGDD13	566355.013	4492830.047	1725.29	419.00	DD
GEGDD14	566512.484	4492714.334	1711.42	407.60	DD
GEGDD15	566414.566	4492641.783	1724.14	443.00	DD
GEGDD16	565829.586	4492850.122	1787.35	365.00	DD
GEGDD17	566400.313	4492616.605	1736.89	352.35	DD
GEGDD18	566309.994	4492822.459	1730.60	288.60	DD
GEGDD19	566453.430	4492618.710	1724.30	374.00	DD
GEGDD20	564748.324	4493482.036	1777.29	326.00	DD
GEGDD21	566384.421	4492576.191	1753.66	343.00	DD
GEGDD22	566426.024	4492546.447	1750.25	366.00	DD
GEGDD23	566461.995	4492518.590	1748.84	364.00	DD
GEGDD24	566389.500	4492541.475	1760.89	419.00	DD
GEGDD25	566416.791	4492518.959	1760.14	369.00	DD
GEGDD26	566453.434	4492481.858	1760.08	381.00	DD
GEGDD27	566477.576	4492452.135	1754.81	379.70	DD
GEGDD28	566418.647	4492484.772	1772.18	402.00	DD

GEGDD29	566437.113	4492459.192	1771.33	396.40	DD
GEGDD30	566401.158	4492456.088	1786.30	423.00	DD
GEGDD31	566384.230	4492434.767	1799.86	441.00	DD
GEGDD32	566426.000	4492432.000	1783.00	450.00	DD
GEGDD33	566344.081	4492641.657	1743.77	319.00	UDD
GEGDD34	566295.776	4492686.225	1769.32	452.80	DD
GEGDD35	566331.263	4492562.467	1769.33	408.00	DD
GEGDD36	566597.110	4492716.698	1691.57	402.00	DD
GEGDD37	566276.714	4492608.576	1758.76	446.00	DD
GEGDD38	566599.272	4492342.377	1775.66	802.00	DD
GEGDD39A	566228.099	4492590.966	1781.23	454.00	DD
GEGDD40	566647.739	4492755.237	1694.40	396.00	DD
GEGDD41	566569.542	4492347.098	1774.70	512.50	DD
GEGDD42	566372.811	4492800.369	1732.61	274.40	DD
GEGDD44	566635.911	4492336.719	1780.45	524.00	DD
GEGDD45	566668.498	4492341.550	1774.92	506.80	DD
GG01	566406.455	4492736.403	1741.69	418.50	DD
GG02	566460.183	4492694.113	1723.95	360.00	DD
GG03	566455.394	4492816.899	1720.60	323.00	DD
GG04	566596.700	4492969.000	1665.50	123.00	DD
GG05	566713.800	4493109.000	1614.74	40.00	DD
GG06	566656.997	4492901.512	1674.19	136.00	DD
M-UDD01	566435.396	4492721.439	1504.36	36.00	UDD
M-UDD04	566468.212	4492742.827	1502.24	17.50	UDD
M-UDD05	566464.180	4492740.319	1502.28	15.50	UDD
M-UDD06	566492.165	4492763.348	1530.33	20.00	UDD
M-UDD07	566492.166	4492763.349	1530.33	21.00	UDD
M-UDD08	566418.701	4492732.040	1507.05	10.00	UDD
M-UDD09	566425.900	4492725.375	1506.73	10.00	UDD
M-UDD10	566515.491	4492731.609	1471.14	20.00	UDD
M-UDD11	566517.092	4492729.369	1467.77	22.50	UDD
M-UDD12	566457.207	4492634.514	1451.79	11.00	UDD
M-UDD13	566451.856	4492636.635	1451.32	12.90	UDD
M-UDD14	566447.034	4492631.072	1450.98	15.00	UDD
MUDD15	566439.108	4492623.254	1451.51	20.00	UDD
UDD01	566415.017	4492751.032	1516.27	30.30	UDD
UDD02	566480.155	4492736.585	1510.40	51.00	UDD
UDD03	566497.742	4492730.374	1508.40	53.50	UDD
UDD04	566403.000	4492734.000	1525.00	49.30	UDD
UDD05	566410.180	4492733.594	1523.60	60.00	UDD
UDD06	566411.212	4492730.336	1524.41	82.00	UDD
UDD07	566413.785	4492733.750	1523.75	49.35	UDD
UDD08	566446.025	4492723.867	1523.30	30.00	UDD
UDD08A	566446.025	4492723.867	1523.30	60.00	UDD
UDD09	566450.227	4492726.590	1524.26	50.00	UDD

UDD10	566449.925	4492766.370	1515.43	41.00	UDD
UDD100	566504.280	4492716.660	1493.19	45.00	UDD
UDD101	566498.805	4492724.410	1493.16	43.50	UDD
UDD102	566530.611	4492703.727	1468.87	48.50	UDD
UDD103	566537.929	4492701.693	1468.60	37.00	UDD
UDD104	566555.350	4492701.510	1468.78	45.30	UDD
UDD105	566548.689	4492787.543	1483.97	31.00	UDD
UDD106	566548.046	4492789.764	1484.23	16.00	UDD
UDD107	566549.333	4492784.321	1486.75	30.00	UDD
UDD108	566551.480	4492785.210	1484.17	25.00	UDD
UDD109	566547.074	4492788.764	1485.16	20.00	UDD
UDD11	566465.233	4492736.458	1526.22	62.00	UDD
UDD110	566547.451	4492788.555	1484.10	30.00	UDD
UDD111	566522.851	4492657.134	1461.59	35.00	UDD
UDD112	566522.370	4492656.840	1461.63	50.00	UDD
UDD113	566519.530	4492657.600	1461.50	45.50	UDD
UDD114	566519.800	4492657.460	1461.26	22.00	UDD
UDD115	566519.441	4492658.783	1461.25	40.00	UDD
UDD116	566523.791	4492657.265	1461.72	48.50	UDD
UDD117	566467.482	4492666.709	1464.46	3.50	UDD
UDD118	566566.110	4492732.226	1482.63	10.00	UDD
UDD119	566574.120	4492730.460	1481.46	13.00	UDD
UDD12	566418.610	4492711.424	1504.37	45.00	UDD
UDD120	566561.415	4492733.530	1482.47	14.00	UDD
UDD121	566520.210	4492720.160	1479.63	35.00	UDD
UDD122	566525.041	4492717.843	1479.86	39.00	UDD
UDD123	566498.490	4492648.740	1462.56	38.20	UDD
UDD124	566498.470	4492649.280	1462.08	33.00	UDD
UDD125	566507.490	4492649.490	1461.64	22.00	UDD
UDD126	566507.751	4492649.664	1461.81	30.00	UDD
UDD127	566510.140	4492649.590	1462.34	45.00	UDD
UDD128	566496.940	4492649.520	1461.40	40.00	UDD
UDD129	566516.349	4492654.240	1461.45	32.00	UDD
UDD13	566431.580	4492717.729	1504.45	45.00	UDD
UDD130	566518.092	4492652.126	1461.32	37.20	UDD
UDD131	566542.946	4492682.625	1463.76	11.50	UDD
UDD132	566541.920	4492684.500	1460.86	23.00	UDD
UDD133	566484.480	4492635.250	1450.66	35.00	UDD
UDD134	566456.721	4492635.648	1453.39	9.60	UDD
UDD135	566455.960	4492636.760	1450.42	26.00	UDD
UDD136	566455.798	4492640.279	1452.07	30.80	UDD
UDD137	566454.850	4492637.133	1452.24	27.00	UDD
UDD138	566439.640	4492690.530	1440.69	27.45	UDD
UDD139	566440.010	4492689.690	1440.73	44.30	UDD
UDD14	566431.520	4492717.830	1503.84	40.00	UDD

UDD140	566444.131	4492697.857	1440.47	45.00	UDD
UDD141	566451.018	4492712.115	1440.40	35.00	UDD
UDD142	566450.660	4492712.711	1440.42	35.00	UDD
UDD143	566454.275	4492719.933	1440.62	36.00	UDD
UDD144	566530.250	4492610.120	1452.00	33.70	UDD
UDD145	566530.254	4492610.121	1452.17	30.00	UDD
UDD146	566503.460	4492608.940	1450.93	25.00	UDD
UDD147	566511.570	4492601.210	1451.02	25.00	UDD
UDD148	566512.390	4492604.710	1452.20	13.00	UDD
UDD149	566513.070	4492604.200	1452.31	53.50	UDD
UDD15	566431.657	4492717.626	1504.87	45.00	UDD
UDD150	566490.700	4492625.500	1450.68	38.00	UDD
UDD151	566484.930	4492627.590	1450.60	14.40	UDD
UDD152	566483.237	4492630.102	1451.22	17.00	UDD
UDD152A	566483.323	4492629.860	1451.76	33.00	UDD
UDD153	566490.110	4492620.700	1451.21	28.00	UDD
UDD154	566469.300	4492708.620	1440.71	33.80	UDD
UDD155	566469.380	4492708.750	1440.28	30.00	UDD
UDD156	566451.577	4492617.112	1442.53	10.00	UDD
UDD157	566462.379	4492624.037	1442.72	10.00	UDD
UDD158	566472.465	4492630.104	1442.61	9.00	UDD
UDD159	566418.980	4492514.390	1441.98	35.00	UDD
UDD16	566383.405	4492699.956	1505.48	45.00	UDD
UDD160	566425.873	4492521.878	1441.81	30.00	UDD
UDD161	566566.810	4492659.750	1452.86	15.00	UDD
UDD162	566566.540	4492658.660	1450.57	25.00	UDD
UDD163	566559.480	4492663.320	1450.68	25.00	UDD
UDD164	566559.780	4492667.120	1452.82	20.00	UDD
UDD165	566550.582	4492624.213	1453.11	61.00	UDD
UDD166	566551.467	4492624.772	1453.02	64.40	UDD
UDD167	566577.980	4492666.990	1451.22	27.00	UDD
UDD168	566577.030	4492670.406	1451.31	25.00	UDD
UDD169	566518.384	4492615.286	1442.04	40.00	UDD
UDD17	566403.296	4492707.430	1504.79	52.00	UDD
UDD170	566518.384	4492615.315	1442.25	50.00	UDD
UDD179	566429.540	4492723.630	1442.17	36.00	UDD
UDD18	566385.184	4492701.240	1504.60	50.00	UDD
UDD180	566429.782	4492723.093	1442.17	30.00	UDD
UDD181	566428.860	4492724.000	1441.46	30.00	UDD
UDD182	566451.381	4492717.338	1441.90	30.50	UDD
UDD183	566455.883	4492722.420	1441.88	29.50	UDD
UDD184	566459.170	4492724.950	1441.84	27.00	UDD
UDD185	566458.790	4492724.460	1441.41	25.00	UDD
UDD186	566449.220	4492711.570	1441.40	23.00	UDD
UDD186A	566449.445	4492712.067	1441.43	28.00	UDD

UDD187	566561.980	4492608.880	1441.02	43.50	UDD
UDD188	566564.470	4492606.850	1441.03	38.00	UDD
UDD189	566569.150	4492608.200	1441.22	50.00	UDD
UDD19	566403.708	4492692.494	1519.51	50.00	UDD
UDD190	566569.150	4492608.200	1441.22	50.00	UDD
UDD191	566568.966	4492605.866	1443.38	15.00	UDD
UDD192	566561.792	4492605.668	1443.84	15.00	UDD
UDD193	566562.210	4492605.160	1443.72	15.00	UDD
UDD194	566574.930	4492610.930	1443.32	31.40	UDD
UDD195	566575.711	4492612.178	1443.45	20.00	UDD
UDD196	566549.294	4492606.673	1442.05	23.80	UDD
UDD197	566565.073	4492593.143	1444.23	15.00	UDD
UDD198	566574.545	4492600.440	1442.57	10.00	UDD
UDD199	566569.705	4492597.970	1444.20	10.00	UDD
UDD20	566402.395	4492695.191	1520.58	25.00	UDD
UDD200	566571.928	4492597.459	1444.26	12.00	UDD
UDD201	566568.838	4492590.571	1444.02	15.00	UDD
UDD202	566566.721	4492591.398	1443.59	16.00	UDD
UDD203	566575.265	4492590.714	1442.97	15.00	UDD
UDD204	566574.741	4492590.415	1444.25	16.00	UDD
UDD205	566575.132	4492590.467	1441.76	32.50	UDD
UDD206	566575.410	4492583.150	1444.69	15.00	UDD
UDD207	566572.420	4492583.580	1444.54	15.00	UDD
UDD208	566571.690	4492584.840	1444.62	12.50	UDD
UDD209	566571.240	4492582.710	1445.42	15.00	UDD
UDD21	566402.235	4492695.222	1520.38	30.00	UDD
UDD210	566574.190	4492581.780	1444.42	13.80	UDD
UDD211	566573.820	4492587.370	1444.49	15.00	UDD
UDD212	566573.220	4492587.480	1444.46	15.00	UDD
UDD213	566573.470	4492587.110	1441.36	36.40	UDD
UDD214	566568.690	4492579.900	1443.01	11.20	UDD
UDD215	566569.190	4492579.920	1444.30	15.00	UDD
UDD216	566566.430	4492573.160	1444.04	8.00	UDD
UDD217	566566.220	4492573.100	1443.05	20.00	UDD
UDD218	566536.440	4492603.810	1442.22	20.00	UDD
UDD219	566536.460	4492603.870	1441.74	20.00	UDD
UDD22	566411.335	4492701.066	1520.35	65.00	UDD
UDD220	566531.363	4492604.931	1440.97	20.00	UDD
UDD221	566523.913	4492609.524	1441.59	20.00	UDD
UDD222	566514.188	4492603.194	1450.97	21.00	UDD
UDD223	566514.380	4492600.182	1451.17	34.10	UDD
UDD224	566514.117	4492599.418	1450.94	29.00	UDD
UDD225	566511.390	4492601.463	1450.93	31.50	UDD
UDD226	566519.653	4492598.808	1451.36	32.80	UDD
UDD23	566366.476	4492672.221	1505.26	30.00	UDD

UDD235	566475.200	4492519.030	1429.40	25.00	UDD
UDD236	566474.484	4492519.063	1429.28	23.00	UDD
UDD237	566474.483	4492521.373	1429.86	25.80	UDD
UDD238	566468.326	4492504.248	1428.90	37.00	UDD
UDD239	566466.976	4492504.194	1429.28	41.30	UDD
UDD24	566375.764	4492682.507	1505.09	30.00	UDD
UDD240	566469.285	4492506.324	1429.41	38.90	UDD
UDD241	566470.843	4492520.053	1429.44	31.50	UDD
UDD242	566452.680	4492511.780	1428.91	25.00	UDD
UDD243	566455.440	4492509.510	1428.86	35.00	UDD
UDD244	566467.114	4492518.249	1429.45	8.00	UDD
UDD245	566447.930	4492501.340	1427.65	48.90	UDD
UDD246	566446.830	4492503.430	1427.35	44.00	UDD
UDD247	566436.430	4492520.700	1426.93	30.40	UDD
UDD248	566430.920	4492530.880	1426.77	24.00	UDD
UDD249	566440.500	4492504.065	1427.51	44.90	UDD
UDD25	566352.301	4492670.790	1505.72	30.00	UDD
UDD26	566352.263	4492670.833	1505.05	30.00	UDD
UDD27	566350.353	4492669.169	1505.79	30.00	UDD
UDD28	566391.467	4492682.163	1503.95	50.00	UDD
UDD29	566381.323	4492679.846	1504.65	26.00	UDD
UDD30	566371.568	4492726.808	1524.61	20.00	UDD
UDD31	566367.371	4492733.452	1526.25	25.00	UDD
UDD32	566370.421	4492733.760	1525.97	20.00	UDD
UDD33	566383.519	4492732.892	1524.81	35.00	UDD
UDD34	566383.864	4492733.330	1525.97	25.00	UDD
UDD35	566383.638	4492733.327	1527.08	25.00	UDD
UDD36	566384.032	4492732.749	1527.59	25.00	UDD
UDD37	566383.298	4492732.502	1527.56	25.00	UDD
UDD38	566388.333	4492755.141	1506.03	20.00	UDD
UDD39	566389.025	4492750.380	1506.06	30.00	UDD
UDD40	566396.715	4492752.281	1506.00	25.00	UDD
UDD41	566376.077	4492681.940	1503.63	30.00	UDD
UDD42	566375.170	4492677.880	1503.57	25.00	UDD
UDD43	566367.390	4492670.930	1503.68	25.00	UDD
UDD44	566355.330	4492669.250	1504.00	30.00	UDD
UDD45	566453.029	4492756.568	1512.63	50.00	UDD
UDD46	566444.276	4492743.971	1512.48	50.00	UDD
UDD47	566452.943	4492749.663	1512.77	47.00	UDD
UDD48	566419.154	4492749.056	1504.19	50.00	UDD
UDD49	566544.027	4492754.253	1492.05	20.00	UDD
UDD50	566543.006	4492742.365	1491.22	13.60	UDD
UDD51	566540.829	4492723.116	1488.38	19.50	UDD
UDD52	566539.631	4492717.665	1489.32	13.50	UDD
UDD53	566539.601	4492717.742	1488.75	15.00	UDD

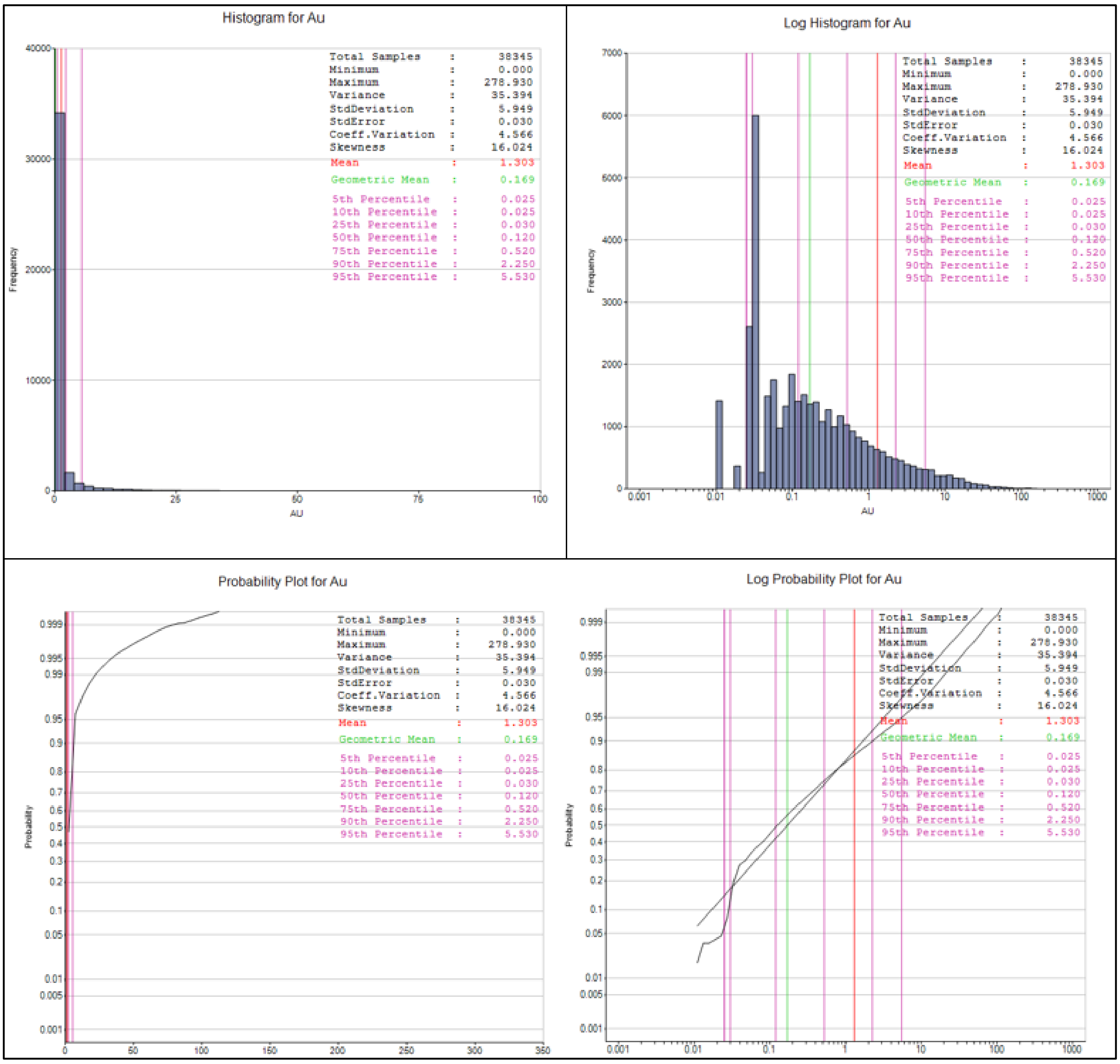
UDD54	566539.664	4492717.952	1488.68	43.00	UDD
UDD56	566443.774	4492721.291	1496.64	15.00	UDD
UDD57	566439.045	4492731.202	1495.47	10.00	UDD
UDD58	566390.960	4492736.967	1507.01	33.50	UDD
UDD59	566399.606	4492745.893	1507.50	29.00	UDD
UDD60	566399.696	4492745.463	1507.29	40.00	UDD
UDD61	566420.560	4492745.733	1506.53	31.00	UDD
UDD62	566420.702	4492745.599	1506.92	27.00	UDD
UDD63	566405.298	4492724.174	1506.80	30.00	UDD
UDD64	566395.152	4492711.997	1506.45	25.00	UDD
UDD65	566437.540	4492743.899	1505.71	25.00	UDD
UDD67	566437.470	4492743.970	1505.43	25.00	UDD
UDD68	566530.774	4492738.936	1488.87	25.00	UDD
UDD69	566530.016	4492738.333	1488.68	30.00	UDD
UDD70	566389.510	4492740.470	1505.02	18.00	UDD
UDD71	566410.290	4492743.080	1504.21	20.00	UDD
UDD72	566417.104	4492744.561	1504.32	10.00	UDD
UDD73	566426.818	4492727.650	1503.66	23.00	UDD
UDD74	566399.048	4492723.387	1504.47	17.00	UDD
UDD75	566390.560	4492708.890	1505.24	15.00	UDD
UDD76	566409.974	4492710.326	1503.62	25.00	UDD
UDD77	566397.287	4492704.066	1503.26	20.00	UDD
UDD78	566410.900	4492707.939	1502.62	7.50	UDD
UDD79	566434.500	4492733.827	1503.40	20.00	UDD
UDD80	566428.128	4492738.978	1503.63	20.00	UDD
UDD81	566407.750	4492731.530	1504.46	21.00	UDD
UDD82	566434.360	4492746.260	1503.54	13.50	UDD
UDD82A	566434.100	4492746.510	1503.37	23.00	UDD
UDD83	566420.227	4492731.330	1503.64	6.50	UDD
UDD87	566429.593	4492675.077	1494.53	20.00	UDD
UDD88	566460.990	4492691.187	1493.24	23.00	UDD
UDD89	566476.469	4492707.131	1481.99	18.00	UDD
UDD90	566475.270	4492700.689	1492.91	35.00	UDD
UDD91	566468.264	4492694.761	1493.00	28.50	UDD
UDD92	566469.734	4492704.088	1482.10	17.50	UDD
UDD93	566453.596	4492683.114	1493.73	36.20	UDD
UDD94	566453.058	4492685.504	1493.69	16.50	UDD
UDD95	566455.240	4492695.560	1482.22	35.00	UDD
UDD96	566423.955	4492671.294	1494.39	35.00	UDD
UDD97	566423.651	4492671.786	1495.36	30.00	UDD
UDD98	566433.029	4492676.496	1494.24	35.00	UDD
UDD99	566410.108	4492661.910	1495.12	30.00	UDD
UDD257	566420.331	4492512.556	1427.18	40.00	UDD
UDD258	566412.565	4492515.738	1427.22	40.00	UDD
UDD259	566493.175	4492577.367	1426.68	40.00	UDD

Appendix C: Raw Assay Statistics (All Data)

Summary Statistics for raw Au assays

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
38,345	278.93	1.3	0.03	35.39	5.95	4.56

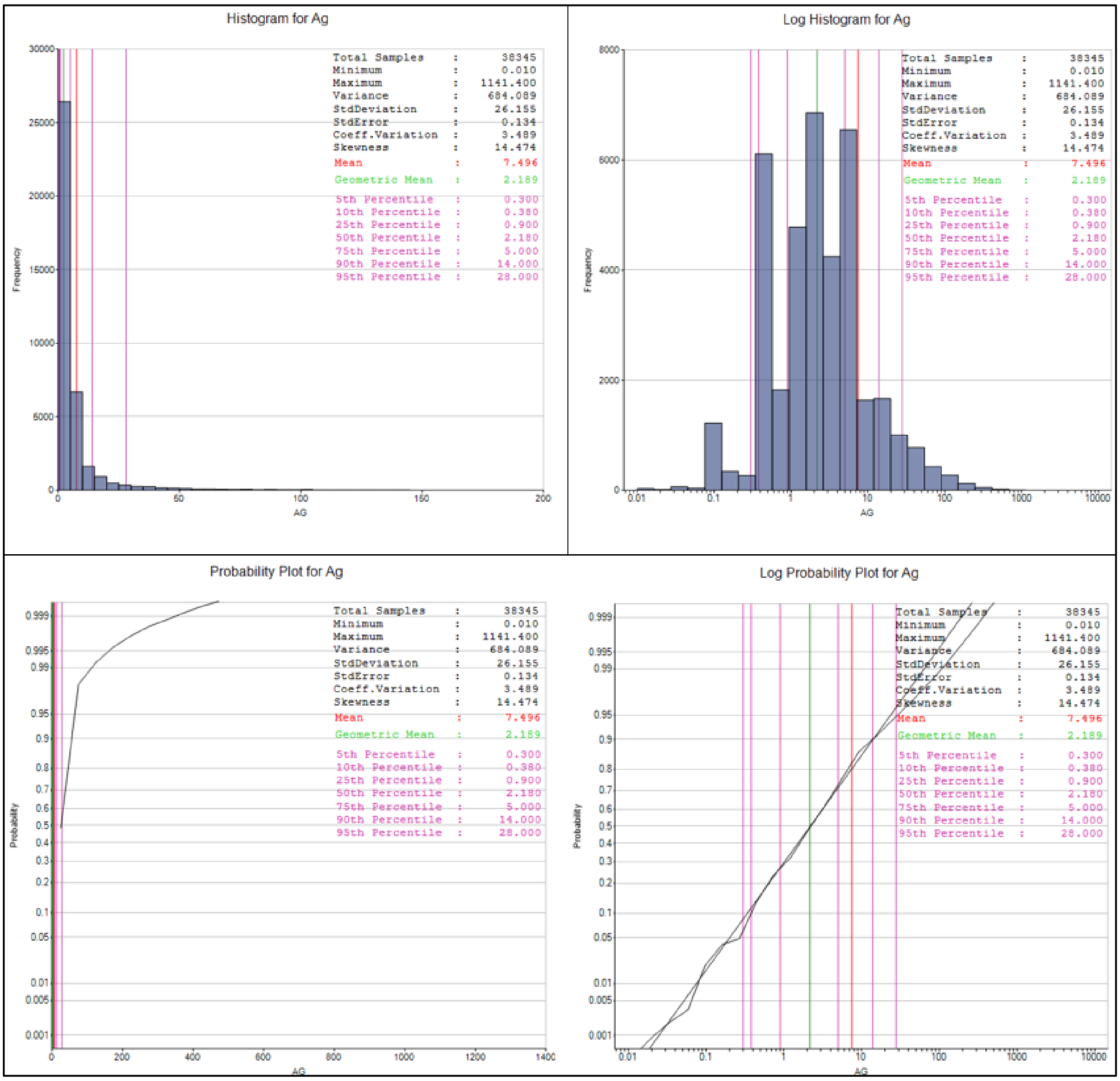
Raw Au Charts



Summary Statistics for raw Ag assays

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
38,345	1,141.40	7.5	0.13	684.09	26.16	3.49

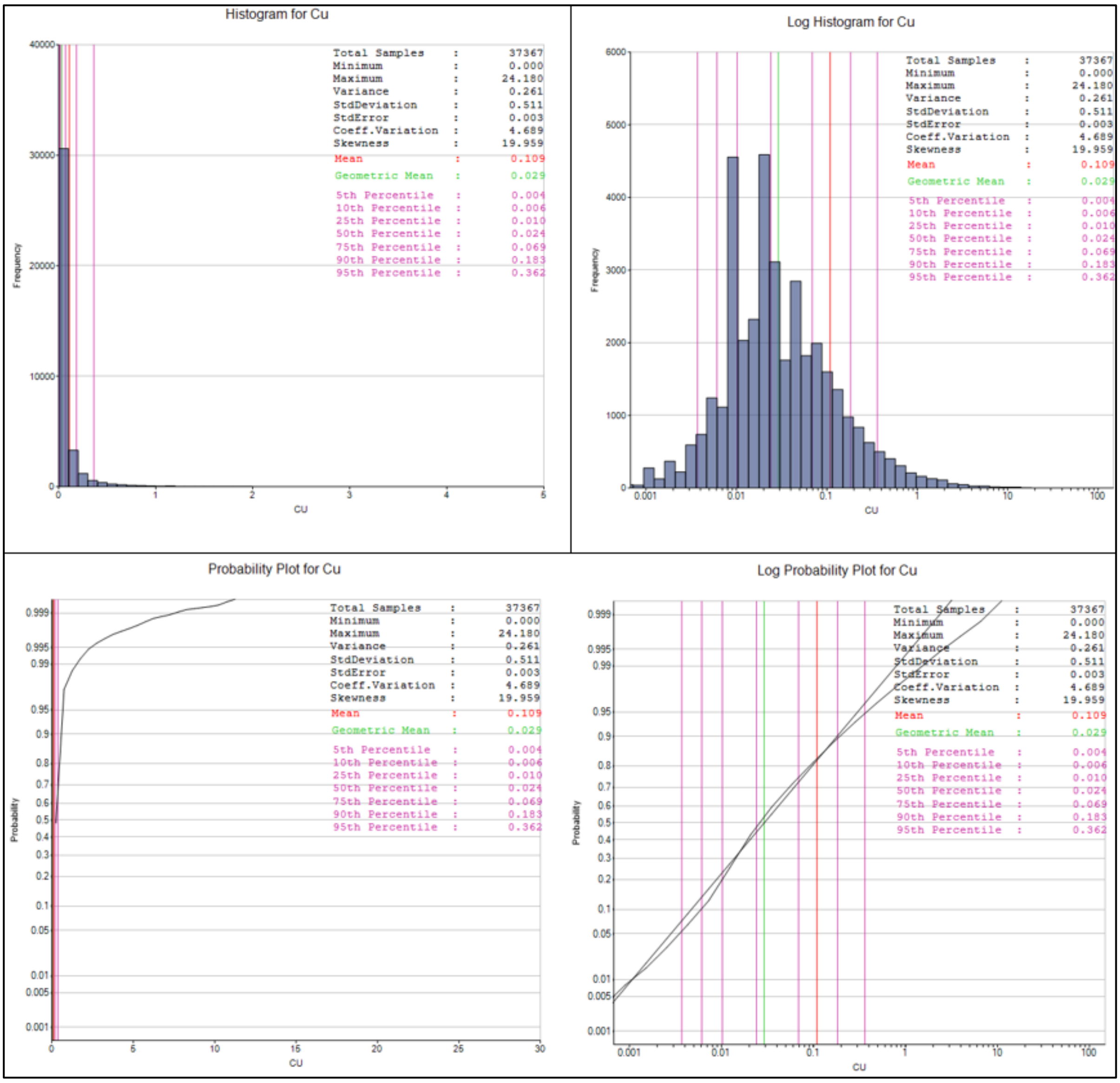
Raw Ag Charts



Summary Statistics for raw Cu assays

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
37,367	24.18	0.11	0.001	0.26	0.51	4.69

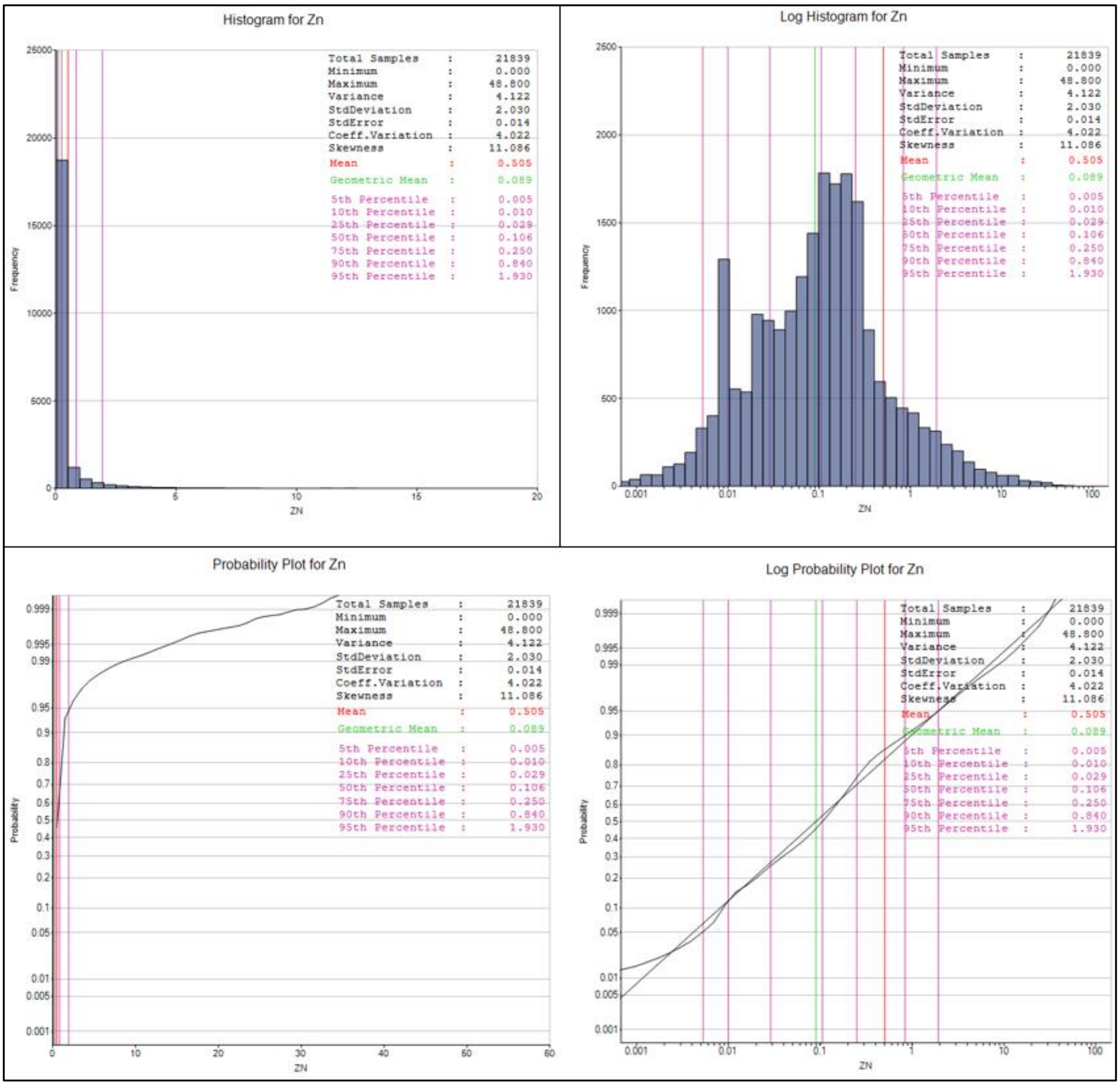
Raw Cu Charts



Summary Statistics for raw Zn assays

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
21,839	48.8	0.5	0.01	4.12	2.03	4.02

Raw Zn Charts

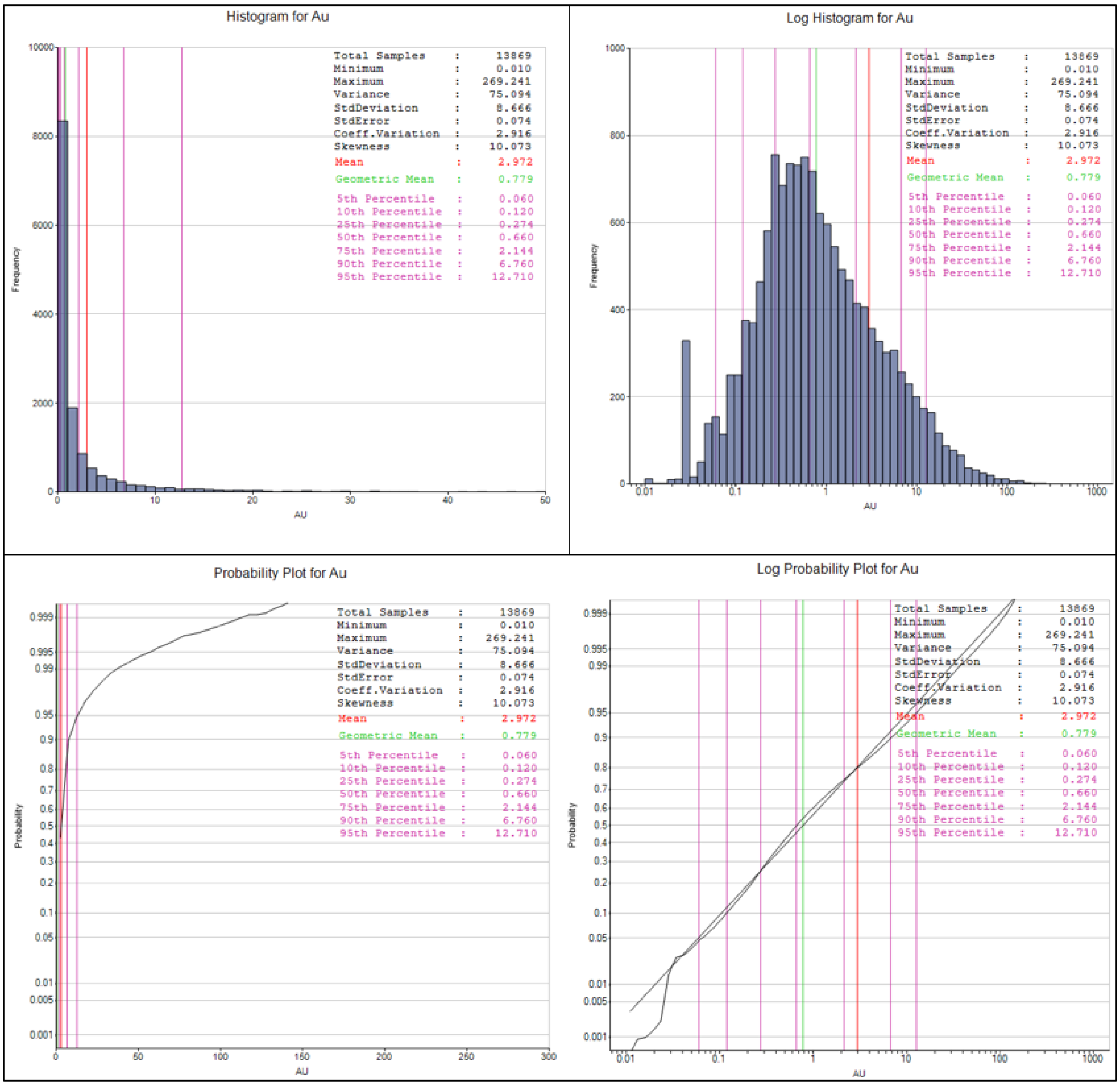


Appendix D: Composite Statistics

Summary Statistics for 1 m Au Composites

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
13,869	269.24	2.97	0.07	75.09	8.67	2.91

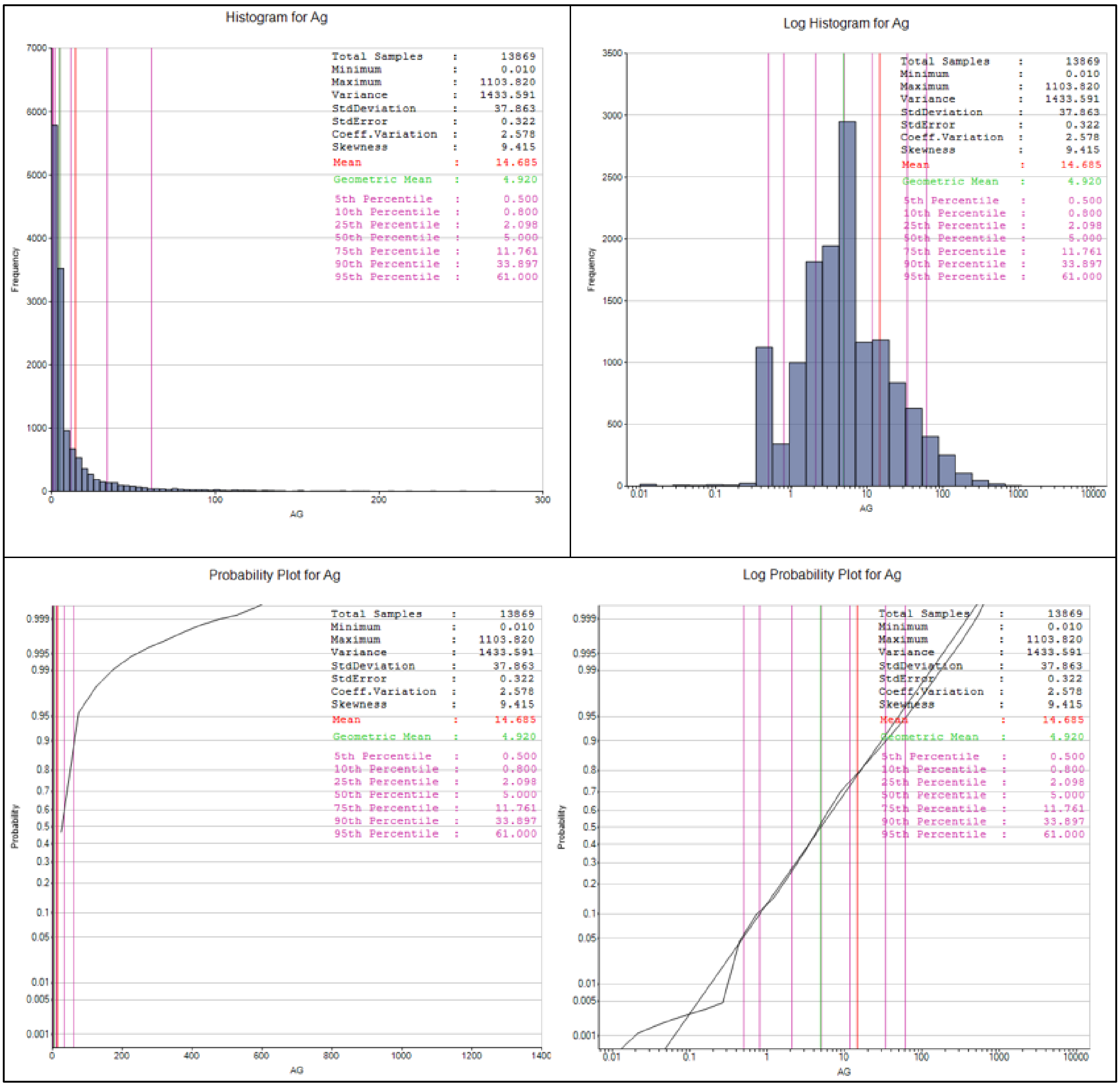
1 m Composite Au Charts



Summary Statistics for 1 m Ag Composites

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
13,869	1,103.82	14.69	0.32	1,433.59	37.86	2.58

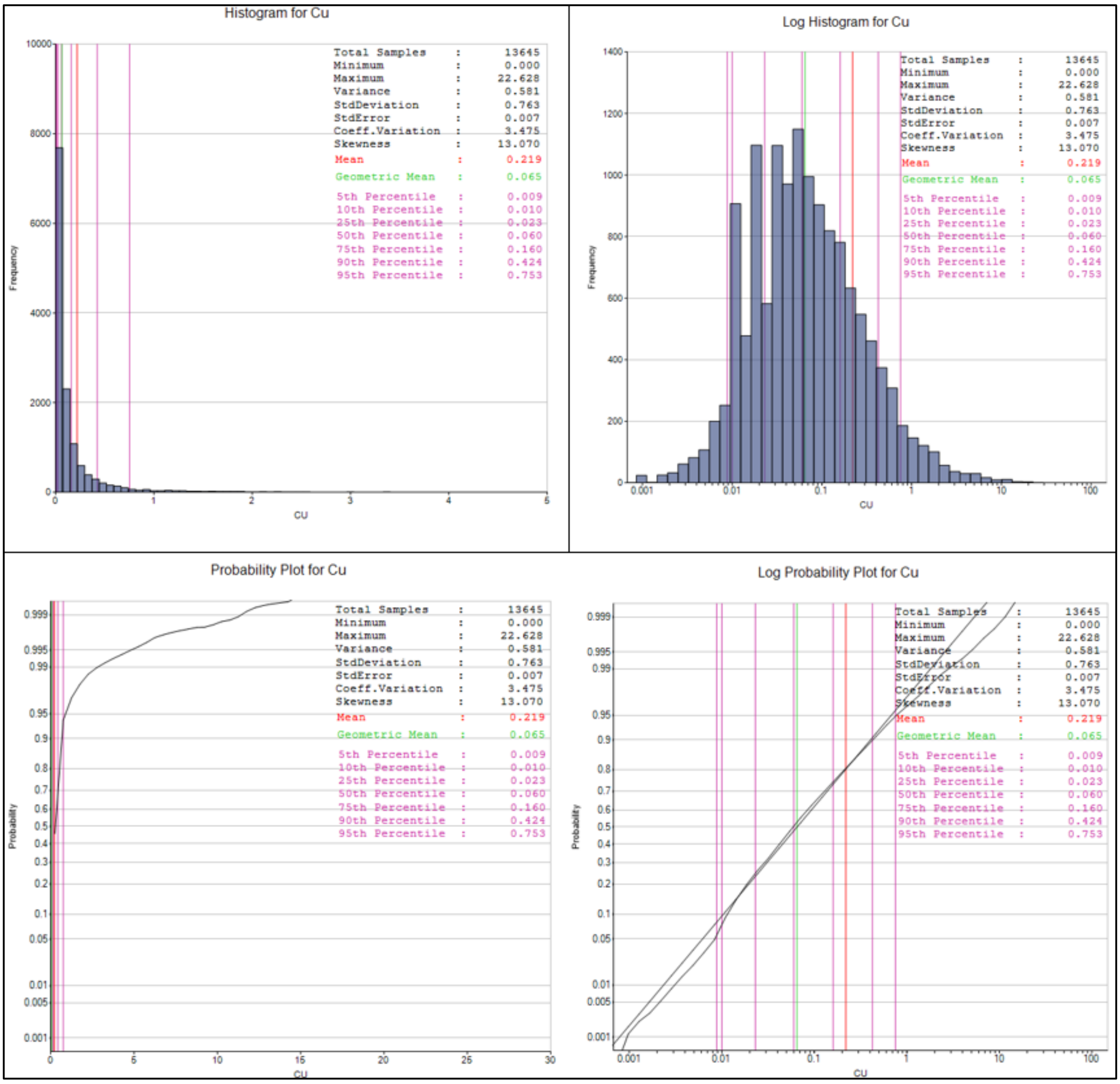
1 m Composite Ag Charts



Summary Statistics for 1 m Cu Composites

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
13,645	22.63	0.22	0.01	0.58	0.76	3.47

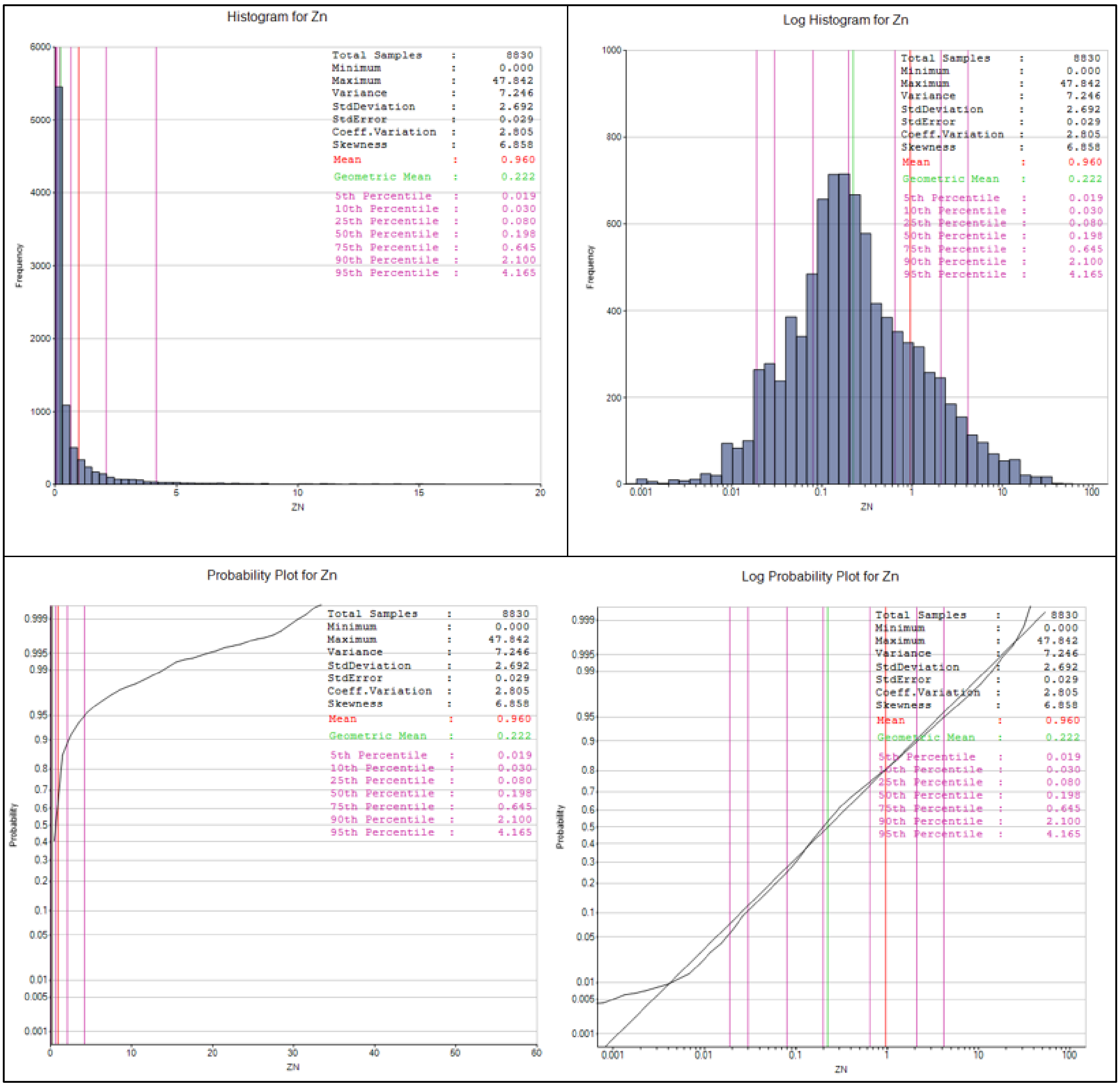
1 m Composite Cu Charts



Summary Statistics for 1 m Zn Composites

Number Samples	Max. grade (g/t)	Mean grade (g/t)	Standard Error	Variance	Standard Deviation	CV
8,830	47.84	0.96	0.03	7.25	2.69	2.8

1 m Composite Zn Charts



Appendix E: Top Cap Statistics

Summary Statistics for Au Top-Capping

	Number Samples	Max. grade (g/t)	Mean grade (g/t)	Variance	Standard Deviation	CV
Au	13,869	269.24	2.97	75.09	8.67	2.92
Au Capped	13,869	**115.00**	2.94	63.99	8.00	2.72

Summary Statistics for Ag Top-Capping

	Number Samples	Max. grade (g/t)	Mean grade (g/t)	Variance	Standard Deviation	CV
Ag	13,869	1103.82	14.69	1,433.59	37.86	2.57
Ag Capped	13,869	**480.00**	14.52	1,218.10	34.90	2.40

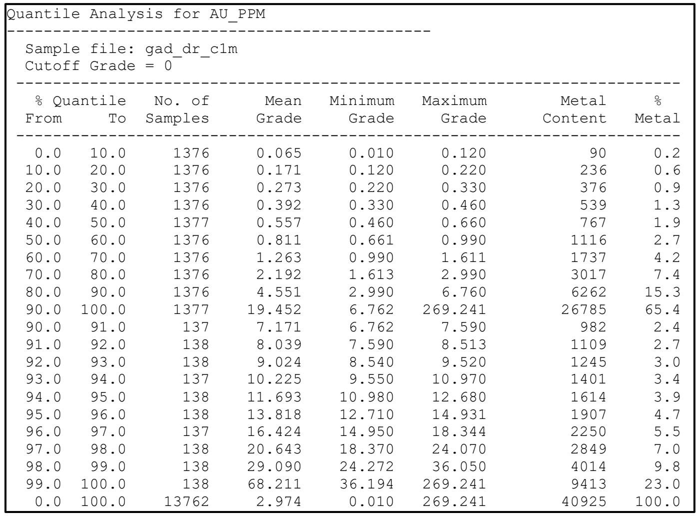
Summary Statistics for Cu Top-Capping

	Number Samples	Max. grade (g/t)	Mean grade (g/t)	Variance	Standard Deviation	CV
Cu	13,645	22.63	0.22	0.58	0.76	3.47
Cu Capped	13,645	**8.50**	0.21	0.39	0.62	2.94

Summary Statistics for Zn Top-Capping

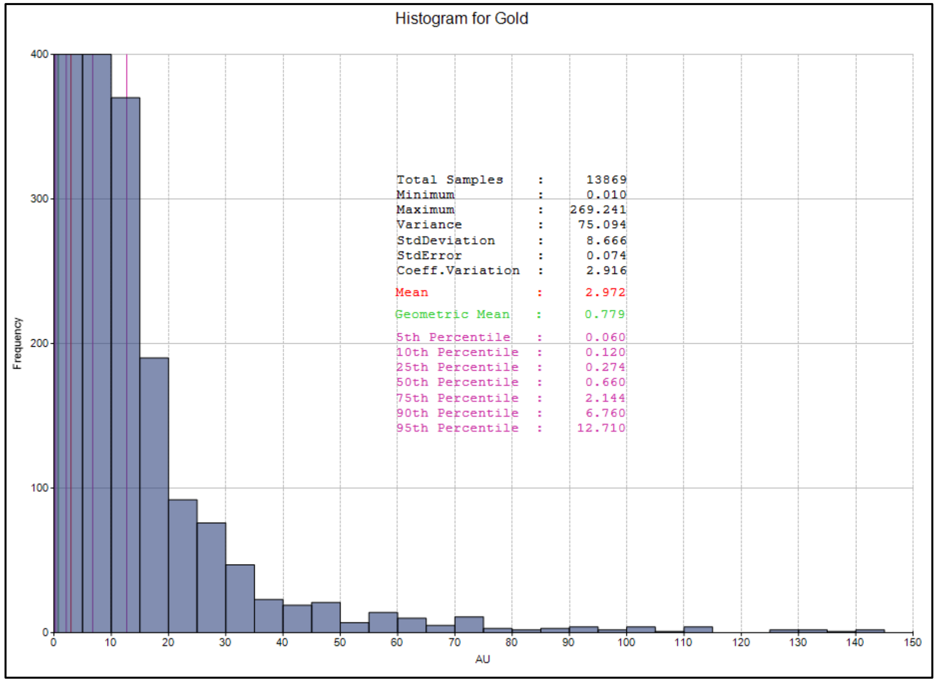
	Number Samples	Max. grade (g/t)	Mean grade (g/t)	Variance	Standard Deviation	CV
Zn	8,830	47.84	0.96	7.25	2.69	2.80
Zn Capped	8,830	**22.00**	0.93	5.89	2.43	2.59

Top-Capping – Au Charts

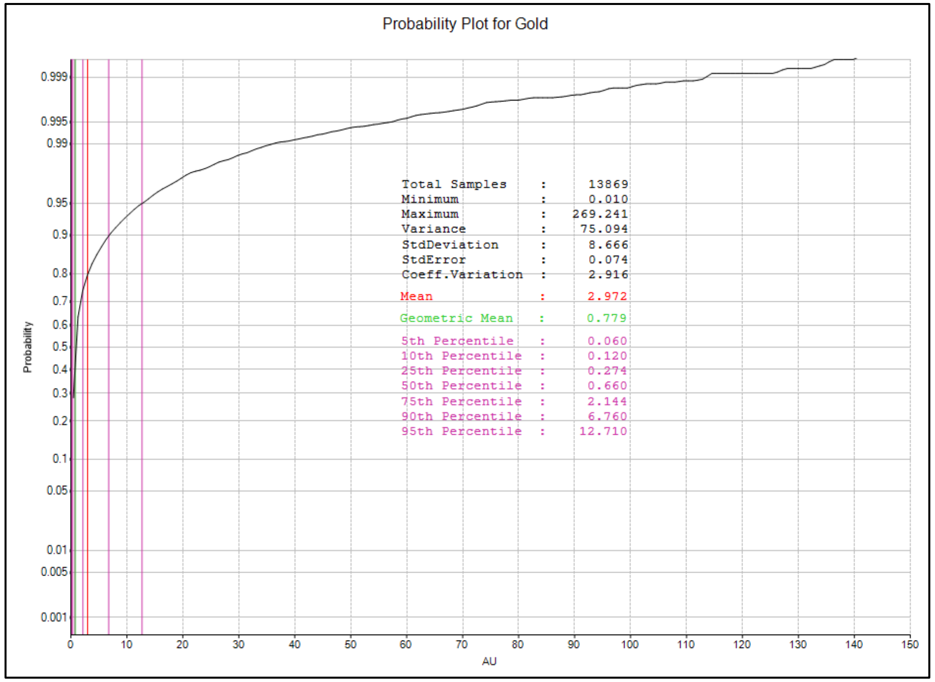


```
Quantile Analysis for AU_PPM
----------------------------------------------

  Sample file: gad_dr_c1m
  Cutoff Grade = 0
  ----------------------------------------------------------------------
   % Quantile   No. of     Mean   Minimum   Maximum       Metal      %
  From     To  Samples    Grade     Grade     Grade     Content  Metal
  ----------------------------------------------------------------------
   0.0   10.0     1376    0.065     0.010     0.120          90    0.2
  10.0   20.0     1376    0.171     0.120     0.220         236    0.6
  20.0   30.0     1376    0.273     0.220     0.330         376    0.9
  30.0   40.0     1376    0.392     0.330     0.460         539    1.3
  40.0   50.0     1377    0.557     0.460     0.660         767    1.9
  50.0   60.0     1376    0.811     0.661     0.990        1116    2.7
  60.0   70.0     1376    1.263     0.990     1.611        1737    4.2
  70.0   80.0     1376    2.192     1.613     2.990        3017    7.4
  80.0   90.0     1376    4.551     2.990     6.760        6262   15.3
  90.0  100.0     1377   19.452     6.762   269.241       26785   65.4
  90.0   91.0      137    7.171     6.762     7.590         982    2.4
  91.0   92.0      138    8.039     7.590     8.513        1109    2.7
  92.0   93.0      138    9.024     8.540     9.520        1245    3.0
  93.0   94.0      137   10.225     9.550    10.970        1401    3.4
  94.0   95.0      138   11.693    10.980    12.680        1614    3.9
  95.0   96.0      138   13.818    12.710    14.931        1907    4.7
  96.0   97.0      137   16.424    14.950    18.344        2250    5.5
  97.0   98.0      138   20.643    18.370    24.070        2849    7.0
  98.0   99.0      138   29.090    24.272    36.050        4014    9.8
  99.0  100.0      138   68.211    36.194   269.241        9413   23.0
   0.0  100.0    13762    2.974     0.010   269.241       40925  100.0
```

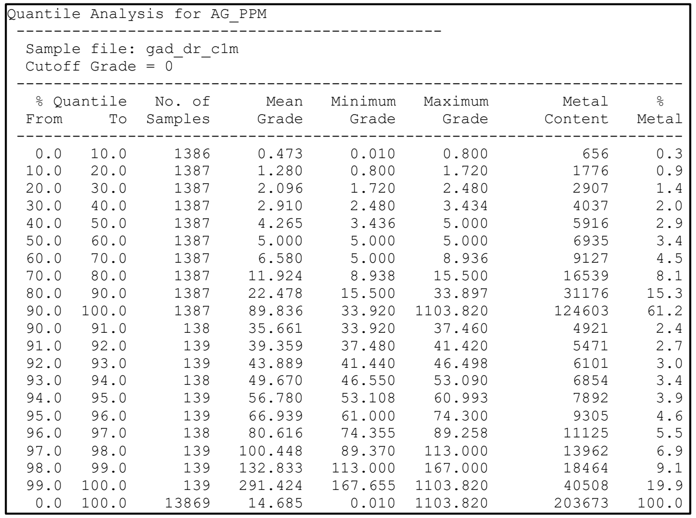


```
Total Samples       :     13869
Minimum             :     0.010
Maximum             :   269.241
Variance            :    75.094
StdDeviation        :     8.666
StdError            :     0.074
Coeff.Variation     :     2.916
Mean                :     2.972
Geometric Mean      :     0.779
5th Percentile      :     0.060
10th Percentile     :     0.120
25th Percentile     :     0.274
50th Percentile     :     0.660
75th Percentile     :     2.144
90th Percentile     :     6.760
95th Percentile     :    12.710
```



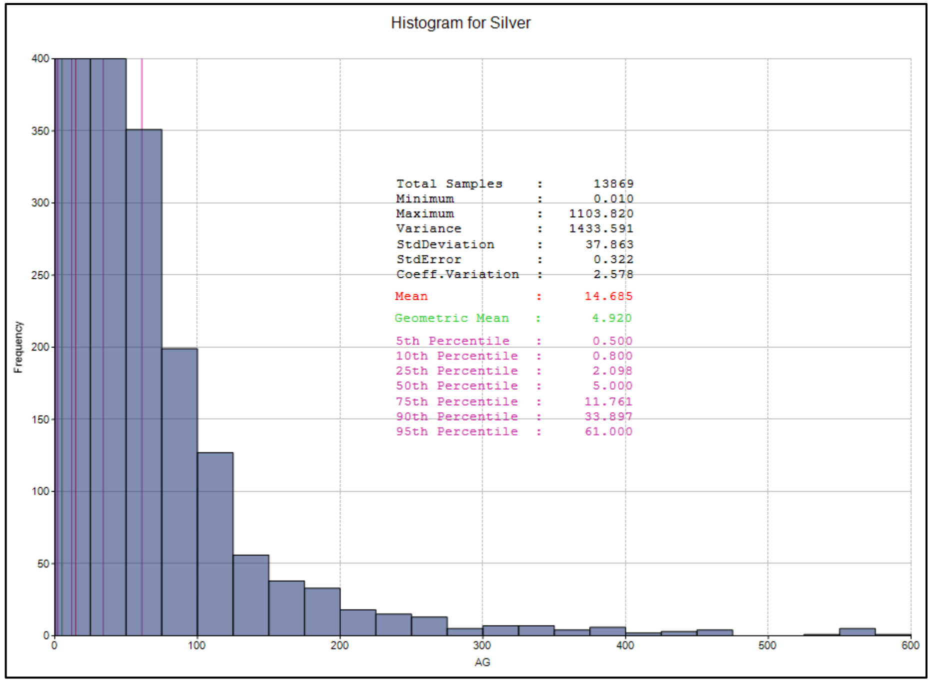
```
Total Samples       :     13869
Minimum             :     0.010
Maximum             :   269.241
Variance            :    75.094
StdDeviation        :     8.666
StdError            :     0.074
Coeff.Variation     :     2.916
Mean                :     2.972
Geometric Mean      :     0.779
5th Percentile      :     0.060
10th Percentile     :     0.120
25th Percentile     :     0.274
50th Percentile     :     0.660
75th Percentile     :     2.144
90th Percentile     :     6.760
95th Percentile     :    12.710
```

Top-Capping – Ag Charts



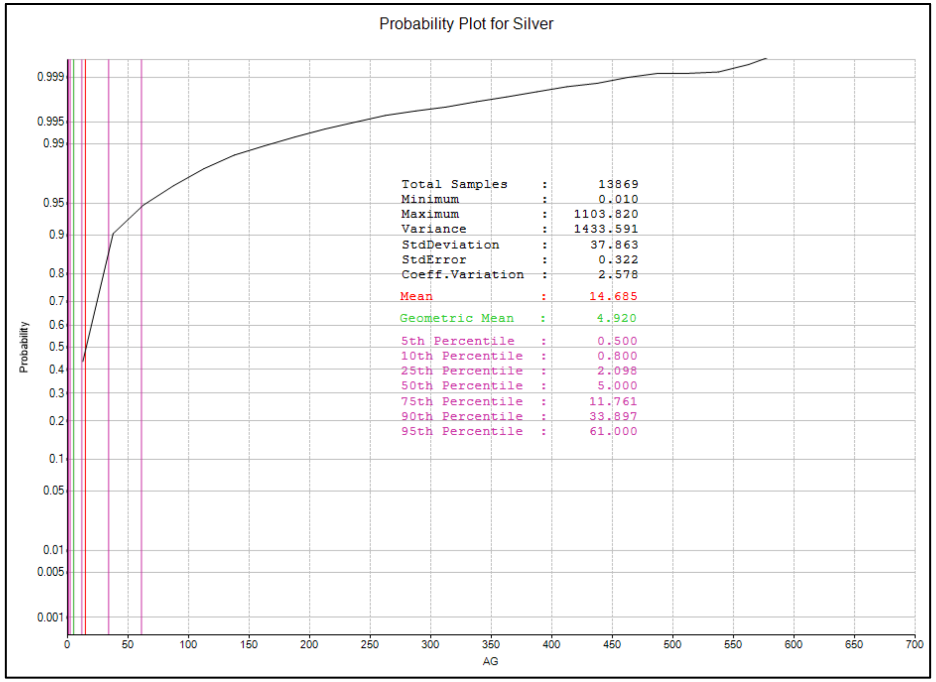
```
Quantile Analysis for AG_PPM
---------------------------------------------

  Sample file: gad_dr_clm
  Cutoff Grade = 0
  ---------------------------------------------------------------------------
   % Quantile    No. of       Mean   Minimum   Maximum        Metal       %
  From     To   Samples      Grade     Grade     Grade      Content   Metal
  ---------------------------------------------------------------------------
   0.0   10.0      1386      0.473     0.010     0.800          656     0.3
  10.0   20.0      1387      1.280     0.800     1.720         1776     0.9
  20.0   30.0      1387      2.096     1.720     2.480         2907     1.4
  30.0   40.0      1387      2.910     2.480     3.434         4037     2.0
  40.0   50.0      1387      4.265     3.436     5.000         5916     2.9
  50.0   60.0      1387      5.000     5.000     5.000         6935     3.4
  60.0   70.0      1387      6.580     5.000     8.936         9127     4.5
  70.0   80.0      1387     11.924     8.938    15.500        16539     8.1
  80.0   90.0      1387     22.478    15.500    33.897        31176    15.3
  90.0  100.0      1387     89.836    33.920  1103.820       124603    61.2
  90.0   91.0       138     35.661    33.920    37.460         4921     2.4
  91.0   92.0       139     39.359    37.480    41.420         5471     2.7
  92.0   93.0       139     43.889    41.440    46.498         6101     3.0
  93.0   94.0       138     49.670    46.550    53.090         6854     3.4
  94.0   95.0       139     56.780    53.108    60.993         7892     3.9
  95.0   96.0       139     66.939    61.000    74.300         9305     4.6
  96.0   97.0       138     80.616    74.355    89.258        11125     5.5
  97.0   98.0       139    100.448    89.370   113.000        13962     6.9
  98.0   99.0       139    132.833   113.000   167.000        18464     9.1
  99.0  100.0       139    291.424   167.655  1103.820        40508    19.9
   0.0  100.0     13869     14.685     0.010  1103.820       203673   100.0
```



Histogram for Silver

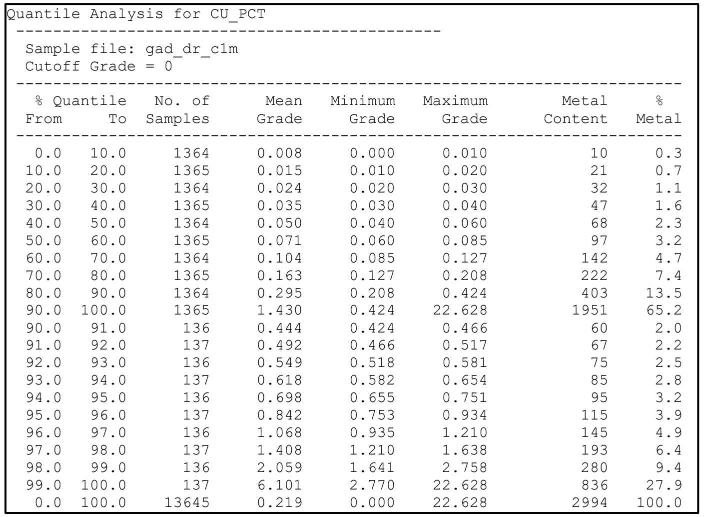
```
Total Samples      :     13869
Minimum            :     0.010
Maximum            :  1103.820
Variance           :  1433.591
StdDeviation       :    37.863
StdError           :     0.322
Coeff.Variation    :     2.578
Mean               :    14.685
Geometric Mean     :     4.920
5th Percentile     :     0.500
10th Percentile    :     0.800
25th Percentile    :     2.098
50th Percentile    :     5.000
75th Percentile    :    11.761
90th Percentile    :    33.897
95th Percentile    :    61.000
```



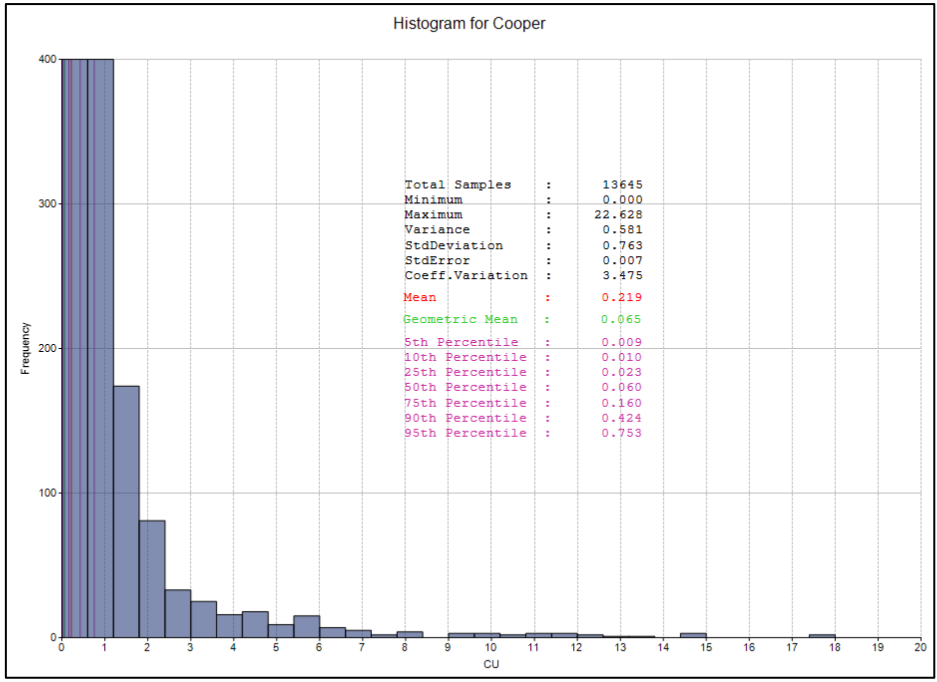
Probability Plot for Silver

```
Total Samples      :     13869
Minimum            :     0.010
Maximum            :  1103.820
Variance           :  1433.591
StdDeviation       :    37.863
StdError           :     0.322
Coeff.Variation    :     2.578
Mean               :    14.685
Geometric Mean     :     4.920
5th Percentile     :     0.500
10th Percentile    :     0.800
25th Percentile    :     2.098
50th Percentile    :     5.000
75th Percentile    :    11.761
90th Percentile    :    33.897
95th Percentile    :    61.000
```

Top-Capping – Cu Charts

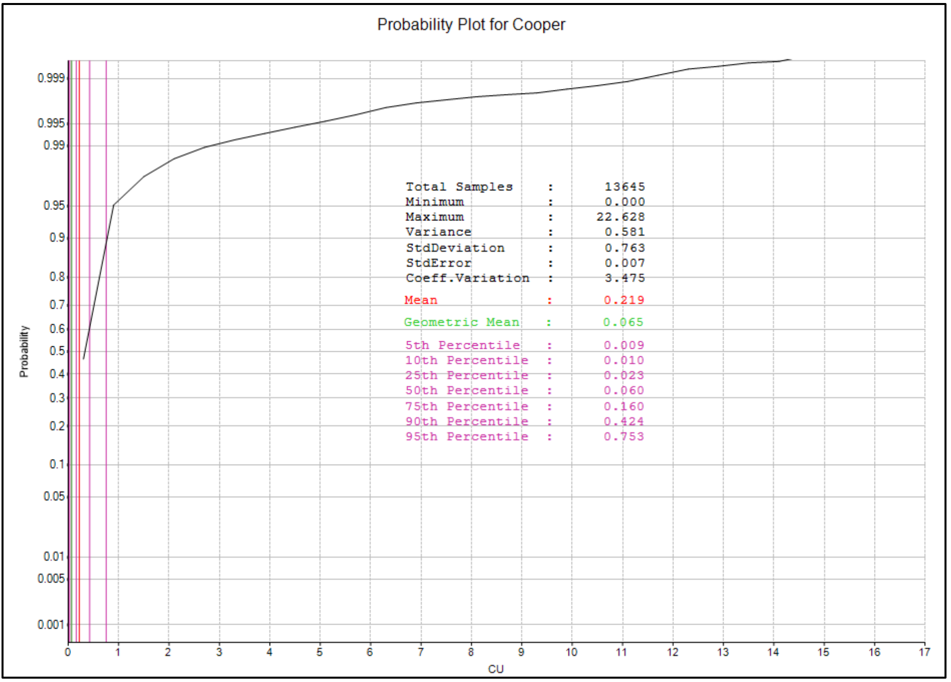


```
Quantile Analysis for CU_PCT
 ----------------------------------------------
  Sample file: gad_dr_clm
  Cutoff Grade = 0
 -------------------------------------------------------------------------
   % Quantile   No. of      Mean   Minimum   Maximum       Metal       %
  From     To  Samples     Grade     Grade     Grade     Content   Metal
 -------------------------------------------------------------------------
   0.0   10.0     1364     0.008     0.000     0.010          10     0.3
  10.0   20.0     1365     0.015     0.010     0.020          21     0.7
  20.0   30.0     1364     0.024     0.020     0.030          32     1.1
  30.0   40.0     1365     0.035     0.030     0.040          47     1.6
  40.0   50.0     1364     0.050     0.040     0.060          68     2.3
  50.0   60.0     1365     0.071     0.060     0.085          97     3.2
  60.0   70.0     1364     0.104     0.085     0.127         142     4.7
  70.0   80.0     1365     0.163     0.127     0.208         222     7.4
  80.0   90.0     1364     0.295     0.208     0.424         403    13.5
  90.0  100.0     1365     1.430     0.424    22.628        1951    65.2
  90.0   91.0      136     0.444     0.424     0.466          60     2.0
  91.0   92.0      137     0.492     0.466     0.517          67     2.2
  92.0   93.0      136     0.549     0.518     0.581          75     2.5
  93.0   94.0      137     0.618     0.582     0.654          85     2.8
  94.0   95.0      136     0.698     0.655     0.751          95     3.2
  95.0   96.0      137     0.842     0.753     0.934         115     3.9
  96.0   97.0      136     1.068     0.935     1.210         145     4.9
  97.0   98.0      137     1.408     1.210     1.638         193     6.4
  98.0   99.0      136     2.059     1.641     2.758         280     9.4
  99.0  100.0      137     6.101     2.770    22.628         836    27.9
   0.0  100.0    13645     0.219     0.000    22.628        2994   100.0
```



Histogram for Cooper

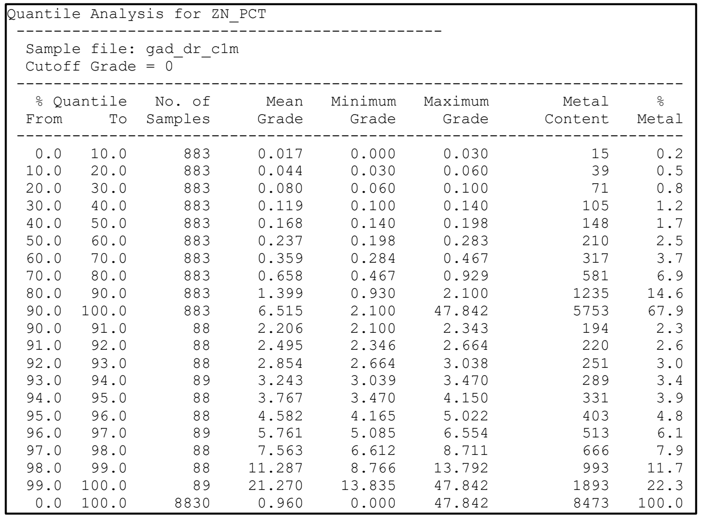
```
Total Samples      :     13645
Minimum            :     0.000
Maximum            :    22.628
Variance           :     0.581
StdDeviation       :     0.763
StdError           :     0.007
Coeff.Variation    :     3.475
Mean               :     0.219
Geometric Mean     :     0.065
5th Percentile     :     0.009
10th Percentile    :     0.010
25th Percentile    :     0.023
50th Percentile    :     0.060
75th Percentile    :     0.160
90th Percentile    :     0.424
95th Percentile    :     0.753
```



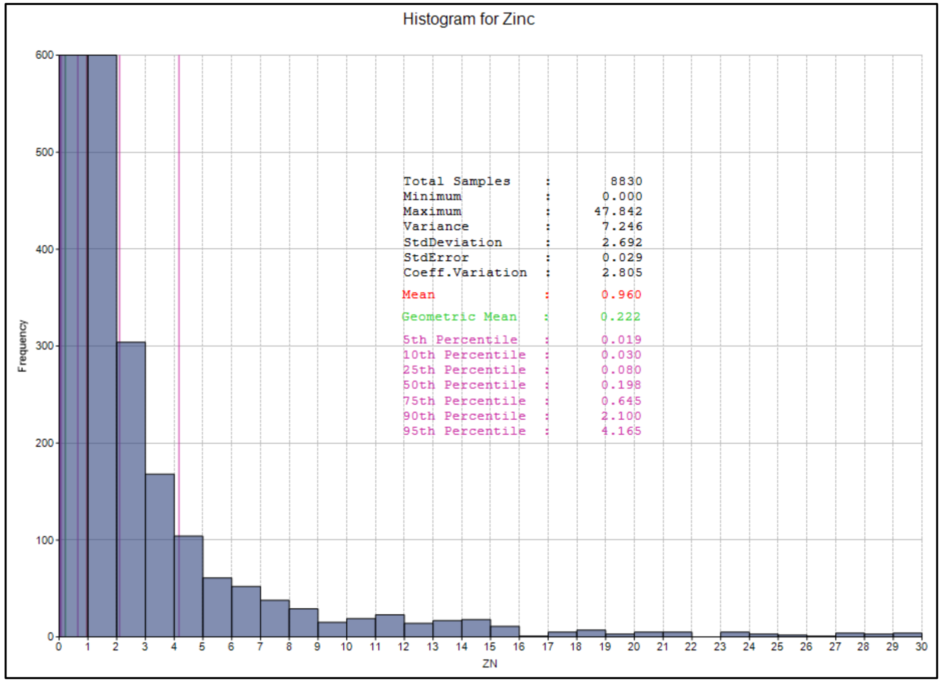
Probability Plot for Cooper

```
Total Samples      :     13645
Minimum            :     0.000
Maximum            :    22.628
Variance           :     0.581
StdDeviation       :     0.763
StdError           :     0.007
Coeff.Variation    :     3.475
Mean               :     0.219
Geometric Mean     :     0.065
5th Percentile     :     0.009
10th Percentile    :     0.010
25th Percentile    :     0.023
50th Percentile    :     0.060
75th Percentile    :     0.160
90th Percentile    :     0.424
95th Percentile    :     0.753
```

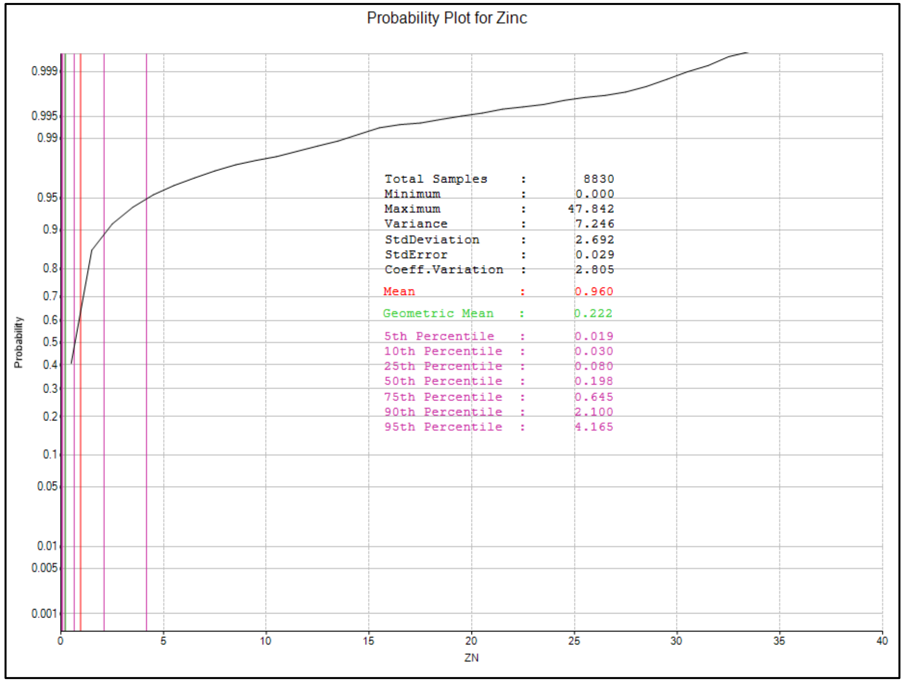
Top-Capping – Zn Charts



```
Quantile Analysis for ZN_PCT
 ------------------------------------------------
  Sample file: gad_dr_clm
  Cutoff Grade = 0
 ----------------------------------------------------------------------------
   % Quantile    No. of      Mean   Minimum   Maximum        Metal       %
  From     To   Samples     Grade     Grade     Grade      Content   Metal
 ----------------------------------------------------------------------------
   0.0   10.0       883     0.017     0.000     0.030           15     0.2
  10.0   20.0       883     0.044     0.030     0.060           39     0.5
  20.0   30.0       883     0.080     0.060     0.100           71     0.8
  30.0   40.0       883     0.119     0.100     0.140          105     1.2
  40.0   50.0       883     0.168     0.140     0.198          148     1.7
  50.0   60.0       883     0.237     0.198     0.283          210     2.5
  60.0   70.0       883     0.359     0.284     0.467          317     3.7
  70.0   80.0       883     0.658     0.467     0.929          581     6.9
  80.0   90.0       883     1.399     0.930     2.100         1235    14.6
  90.0  100.0       883     6.515     2.100    47.842         5753    67.9
  90.0   91.0        88     2.206     2.100     2.343          194     2.3
  91.0   92.0        88     2.495     2.346     2.664          220     2.6
  92.0   93.0        88     2.854     2.664     3.038          251     3.0
  93.0   94.0        89     3.243     3.039     3.470          289     3.4
  94.0   95.0        88     3.767     3.470     4.150          331     3.9
  95.0   96.0        88     4.582     4.165     5.022          403     4.8
  96.0   97.0        89     5.761     5.085     6.554          513     6.1
  97.0   98.0        88     7.563     6.612     8.711          666     7.9
  98.0   99.0        88    11.287     8.766    13.792          993    11.7
  99.0  100.0        89    21.270    13.835    47.842         1893    22.3
   0.0  100.0      8830     0.960     0.000    47.842         8473   100.0
```

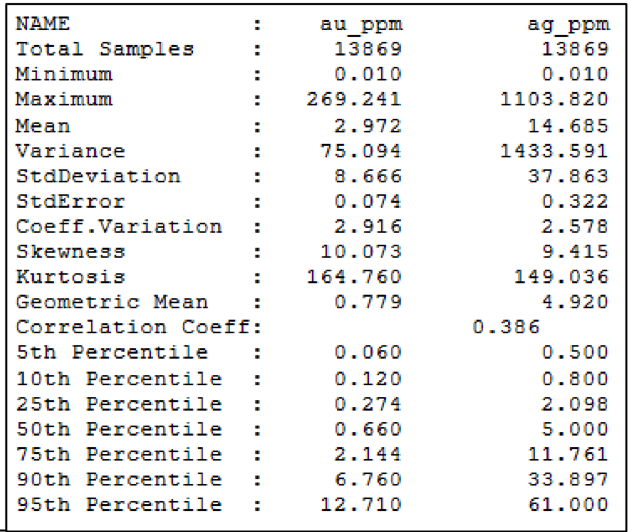


```
Total Samples     :     8830
Minimum           :    0.000
Maximum           :   47.842
Variance          :    7.246
StdDeviation      :    2.692
StdError          :    0.029
Coeff.Variation   :    2.805
Mean              :    0.960
Geometric Mean    :    0.222
5th Percentile    :    0.019
10th Percentile   :    0.030
25th Percentile   :    0.080
50th Percentile   :    0.198
75th Percentile   :    0.645
90th Percentile   :    2.100
95th Percentile   :    4.165
```



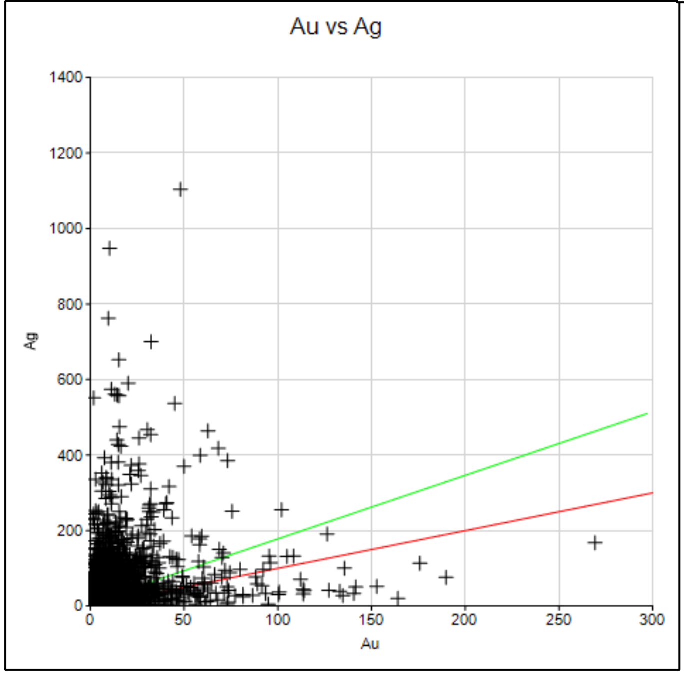
```
Total Samples     :     8830
Minimum           :    0.000
Maximum           :   47.842
Variance          :    7.246
StdDeviation      :    2.692
StdError          :    0.029
Coeff.Variation   :    2.805
Mean              :    0.960
Geometric Mean    :    0.222
5th Percentile    :    0.019
10th Percentile   :    0.030
25th Percentile   :    0.080
50th Percentile   :    0.198
75th Percentile   :    0.645
90th Percentile   :    2.100
95th Percentile   :    4.165
```

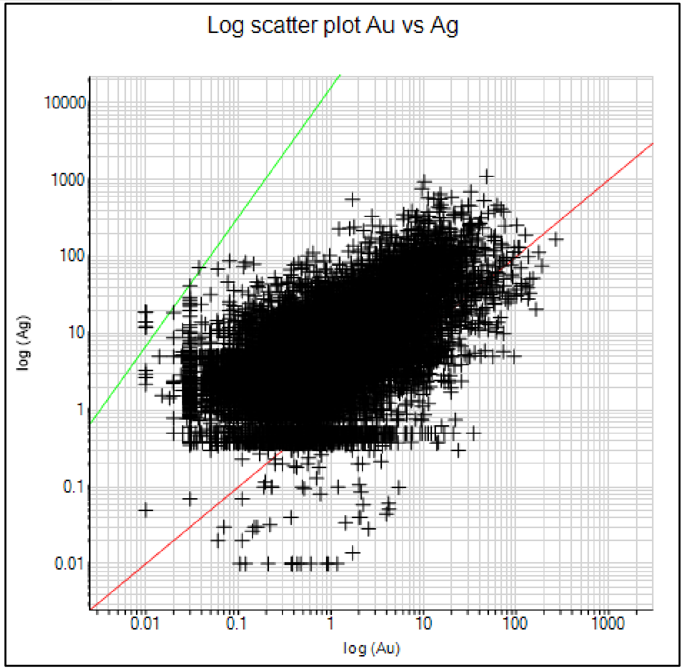
Appendix F: Gold Correlation Charts



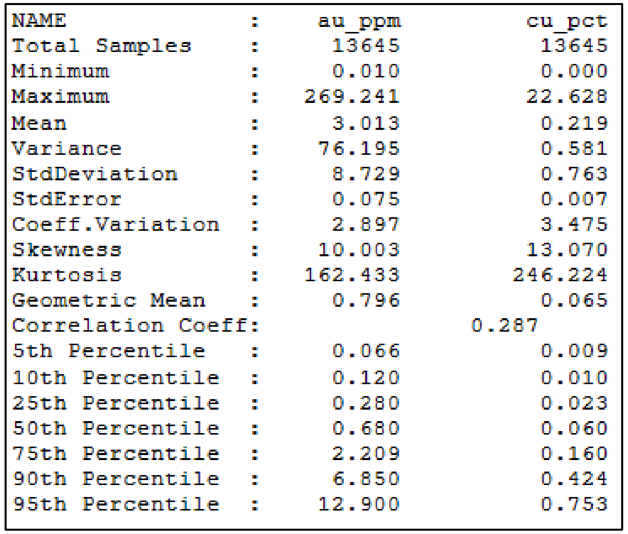
```
NAME              :     au_ppm          ag_ppm
Total Samples     :      13869           13869
Minimum           :      0.010           0.010
Maximum           :    269.241        1103.820
Mean              :      2.972          14.685
Variance          :     75.094        1433.591
StdDeviation      :      8.666          37.863
StdError          :      0.074           0.322
Coeff.Variation   :      2.916           2.578
Skewness          :     10.073           9.415
Kurtosis          :    164.760         149.036
Geometric Mean    :      0.779           4.920
Correlation Coeff:                  0.386
5th Percentile    :      0.060           0.500
10th Percentile   :      0.120           0.800
25th Percentile   :      0.274           2.098
50th Percentile   :      0.660           5.000
75th Percentile   :      2.144          11.761
90th Percentile   :      6.760          33.897
95th Percentile   :     12.710          61.000
```

<u>Au - Ag Correlation</u>

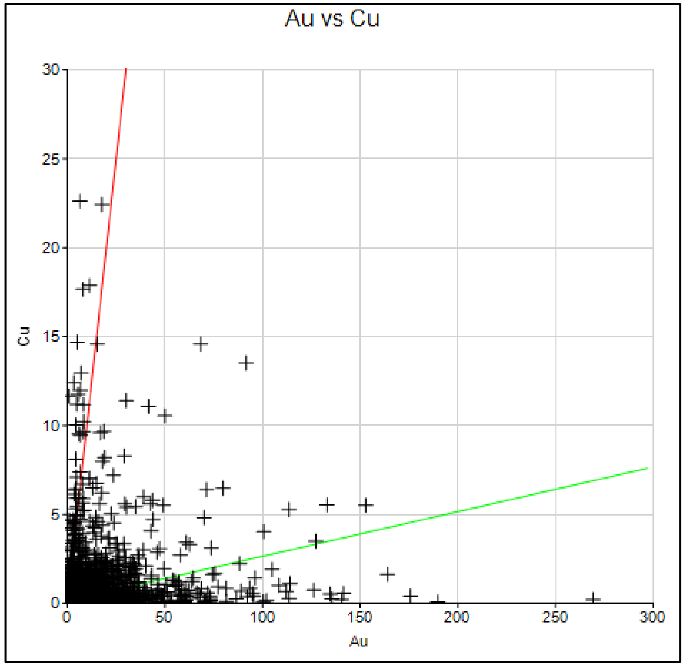


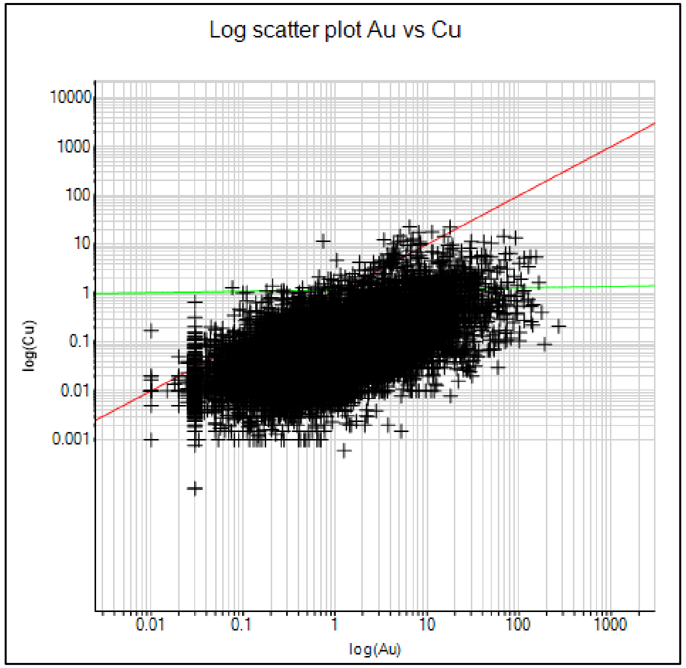


Au – Cu Correlation

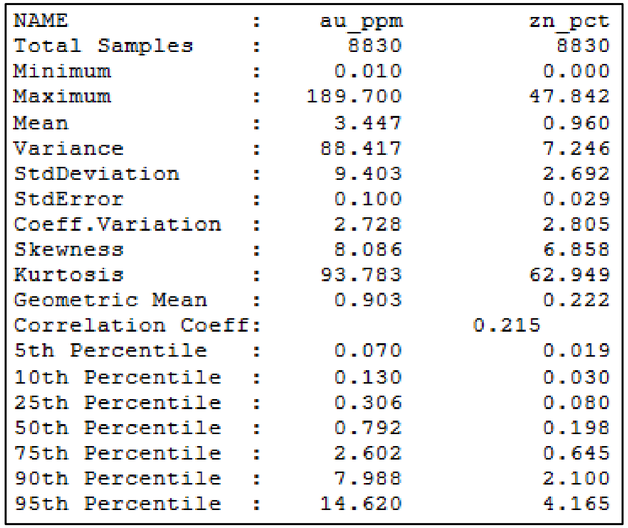


```
NAME                :      au_ppm        cu_pct
Total Samples       :       13645         13645
Minimum             :       0.010         0.000
Maximum             :     269.241        22.628
Mean                :       3.013         0.219
Variance            :      76.195         0.581
StdDeviation        :       8.729         0.763
StdError            :       0.075         0.007
Coeff.Variation     :       2.897         3.475
Skewness            :      10.003        13.070
Kurtosis            :     162.433       246.224
Geometric Mean      :       0.796         0.065
Correlation Coeff:                    0.287
5th Percentile      :       0.066         0.009
10th Percentile     :       0.120         0.010
25th Percentile     :       0.280         0.023
50th Percentile     :       0.680         0.060
75th Percentile     :       2.209         0.160
90th Percentile     :       6.850         0.424
95th Percentile     :      12.900         0.753
```

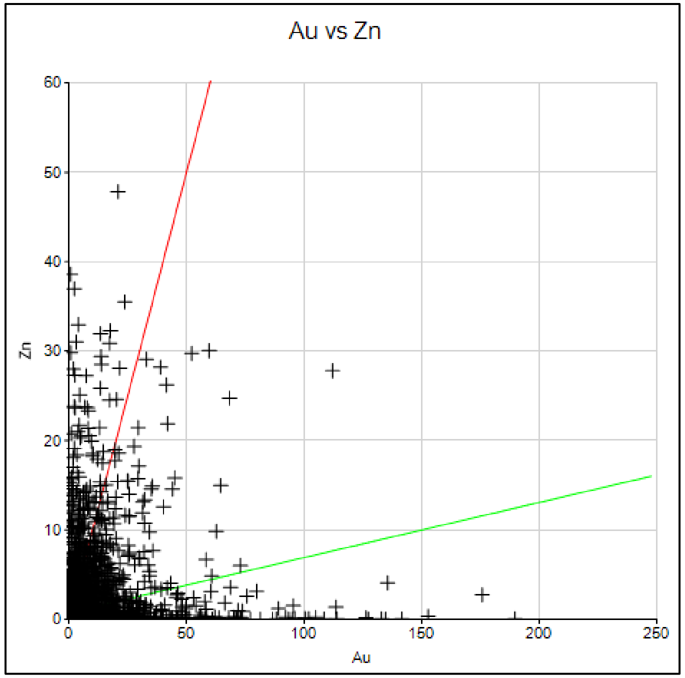




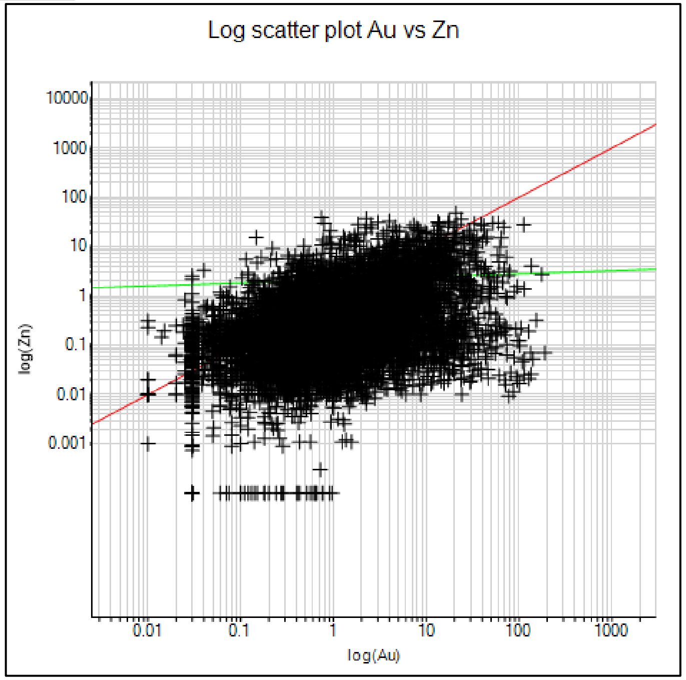
Au – Zn Correlation



```
NAME             :     au_ppm         zn_pct
Total Samples    :       8830           8830
Minimum          :      0.010          0.000
Maximum          :    189.700         47.842
Mean             :      3.447          0.960
Variance         :     88.417          7.246
StdDeviation     :      9.403          2.692
StdError         :      0.100          0.029
Coeff.Variation  :      2.728          2.805
Skewness         :      8.086          6.858
Kurtosis         :     93.783         62.949
Geometric Mean   :      0.903          0.222
Correlation Coeff:               0.215
5th Percentile   :      0.070          0.019
10th Percentile  :      0.130          0.030
25th Percentile  :      0.306          0.080
50th Percentile  :      0.792          0.198
75th Percentile  :      2.602          0.645
90th Percentile  :      7.988          2.100
95th Percentile  :     14.620          4.165
```



Au vs Zn



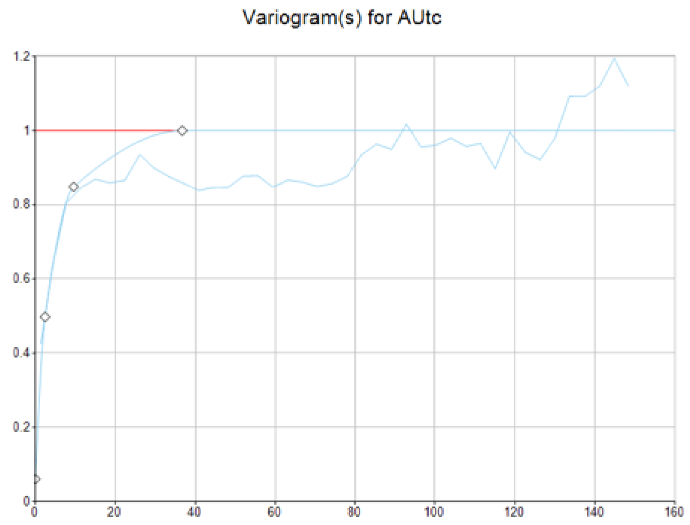
Log scatter plot Au vs Zn

Appendix G: Geostatistics (Variography)

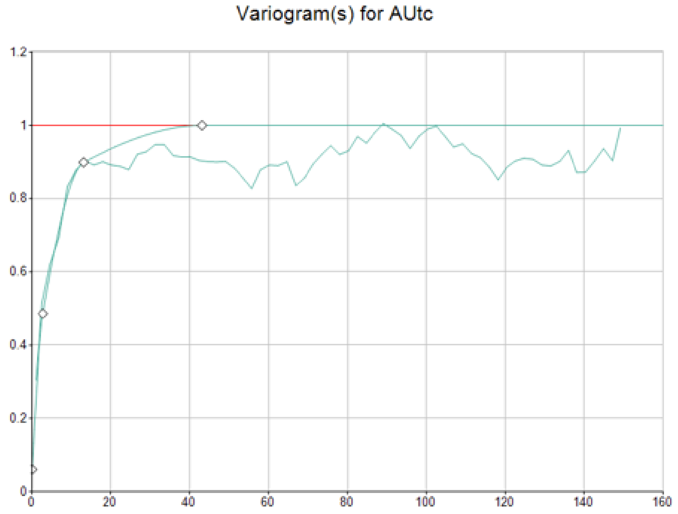
VARIOGRAM PARAMETERS																
Elements	**Datamine Axes Rotations ***			**Nugget**	**Structure 1**				**Structure 2**				**Structure 3**			
	Axis 3 (Z)	**Axis 1 (X)**	**Axis 3 (Z)**	**(C0)**	**Range (X)**	**Range (Y)**	**Range (Z)**	**Sill (C1)**	**Range (X)**	**Range (Y)**	**Range (Z)**	**Sill (C2)**	**Range (X)**	**Range (Y)**	**Range (Z)**	**Sill (C3)**
Gold	-35	-30	90	5.68	3.27	4.00	2.91	41.78	11.18	12.32	11.79	24.45	0	0	0	0
Silver	-35	-30	90	364.70	5.18	4.54	8.80	586.79	21.44	15.56	21.16	444.87	0	0	0	0
Copper	-35	-30	90	0.10	2.85	2.23	2.39	0.27	14.24	13.97	17.32	0.19	0	0	0	0
Zinc	-35	-30	90	2.25	4.41	4.82	4.66	2.66	12.70	13.44	11.66	2.84	0	0	0	0

Gold Variograms

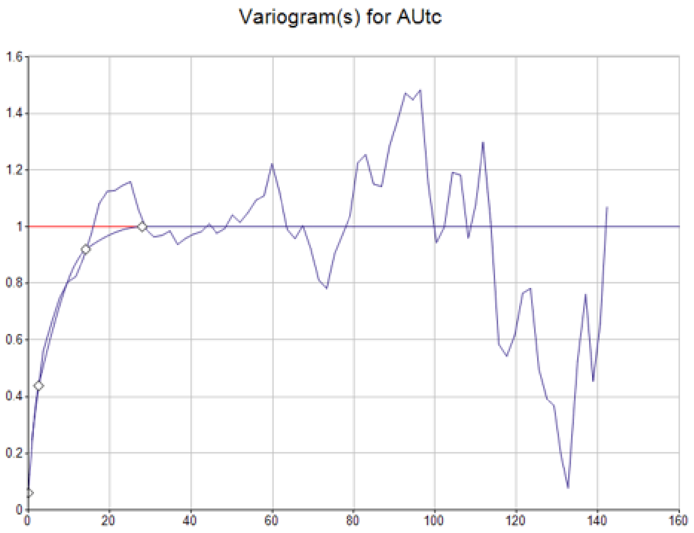
0°/0°



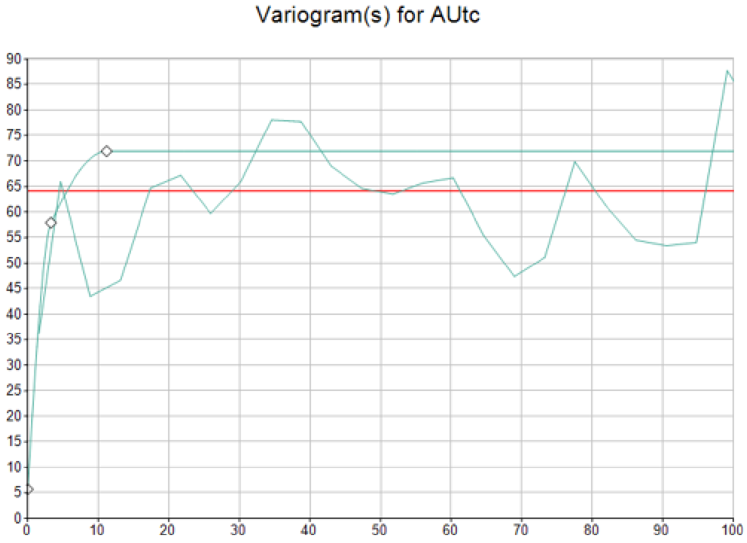
90°/0°



0°/90°

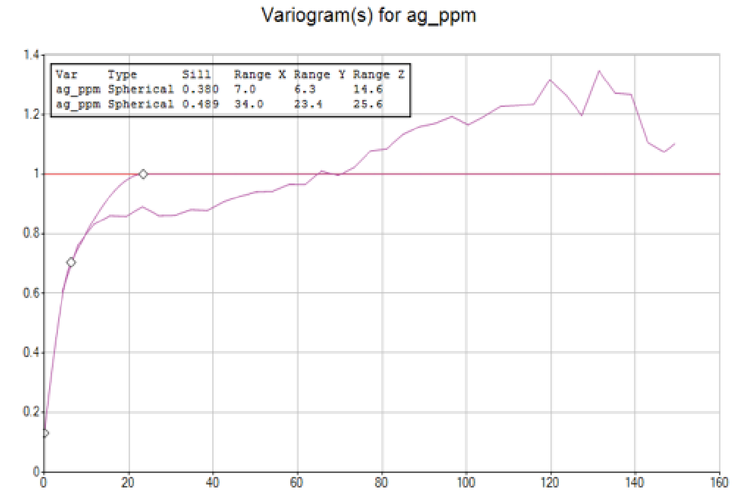


90°/0° - Untransformed Data

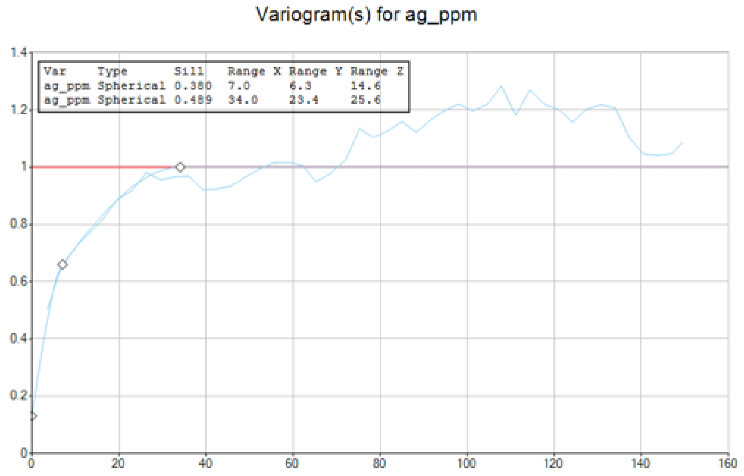


Silver Variograms

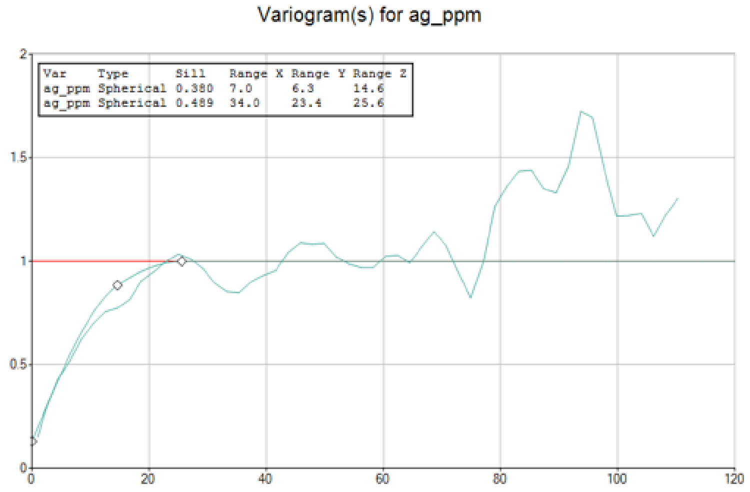
0°/0°



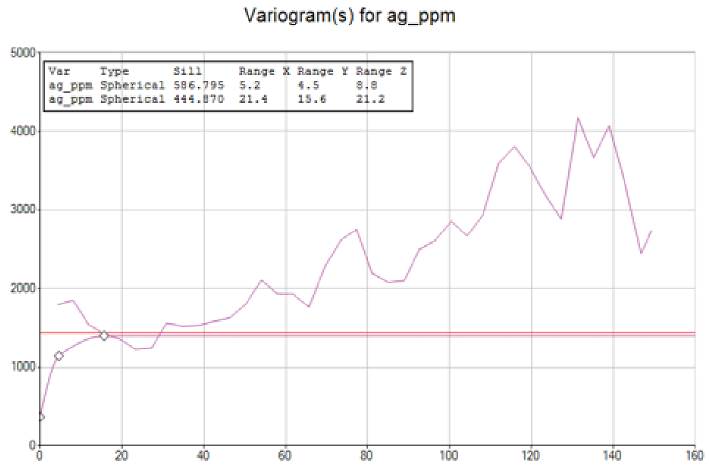
90°/0°



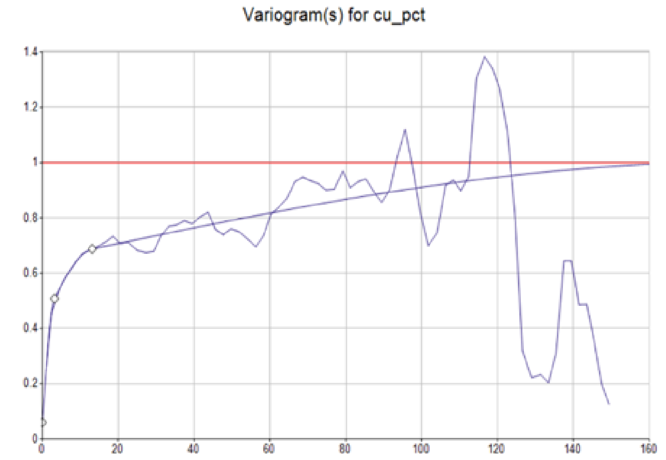
0°/90°



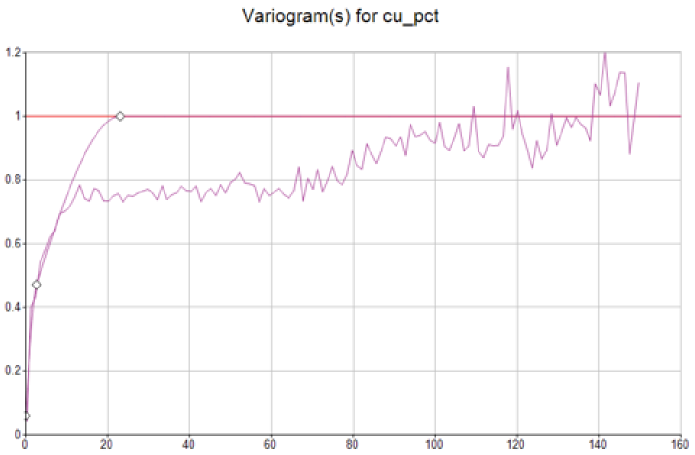
0°/90°- Untransformed Data



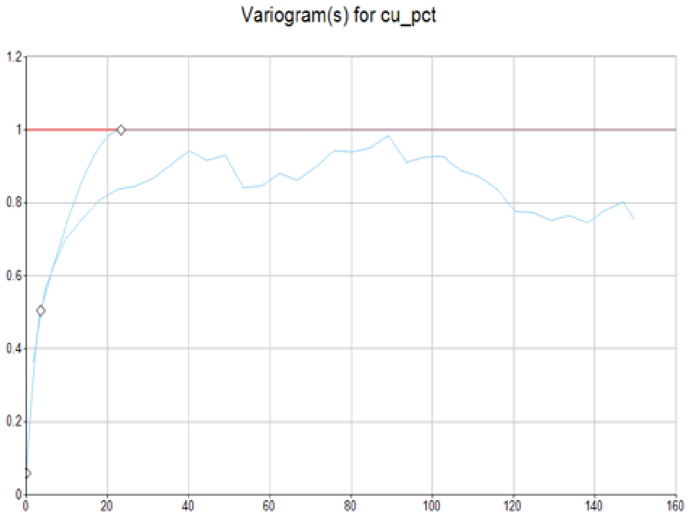
Copper Variograms



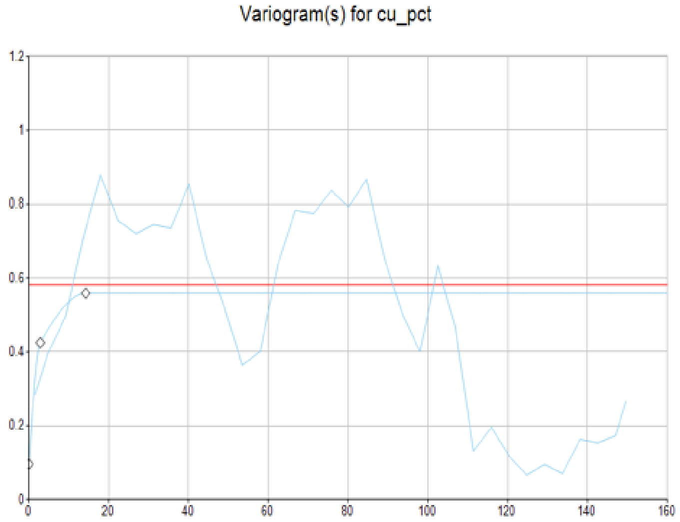
0°/0°



90°/0°

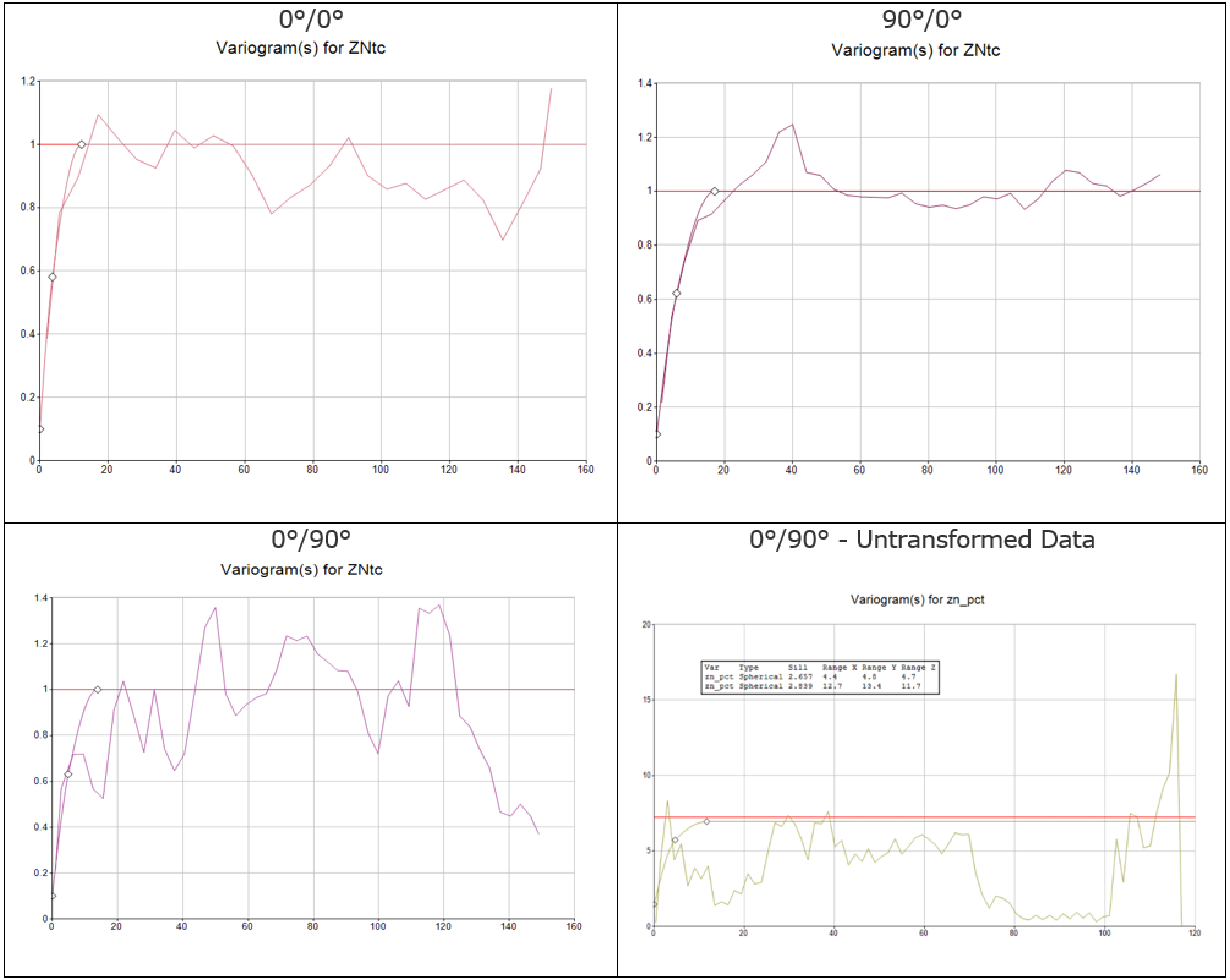


0°/90°



0°/90° - Untransformed Data

<u>Zinc Variograms</u>



Var	Type	Sill	Range X	Range Y	Range Z
zn_pct	Spherical	2.657	4.4	4.8	4.7
zn_pct	Spherical	2.839	12.7	13.4	11.7

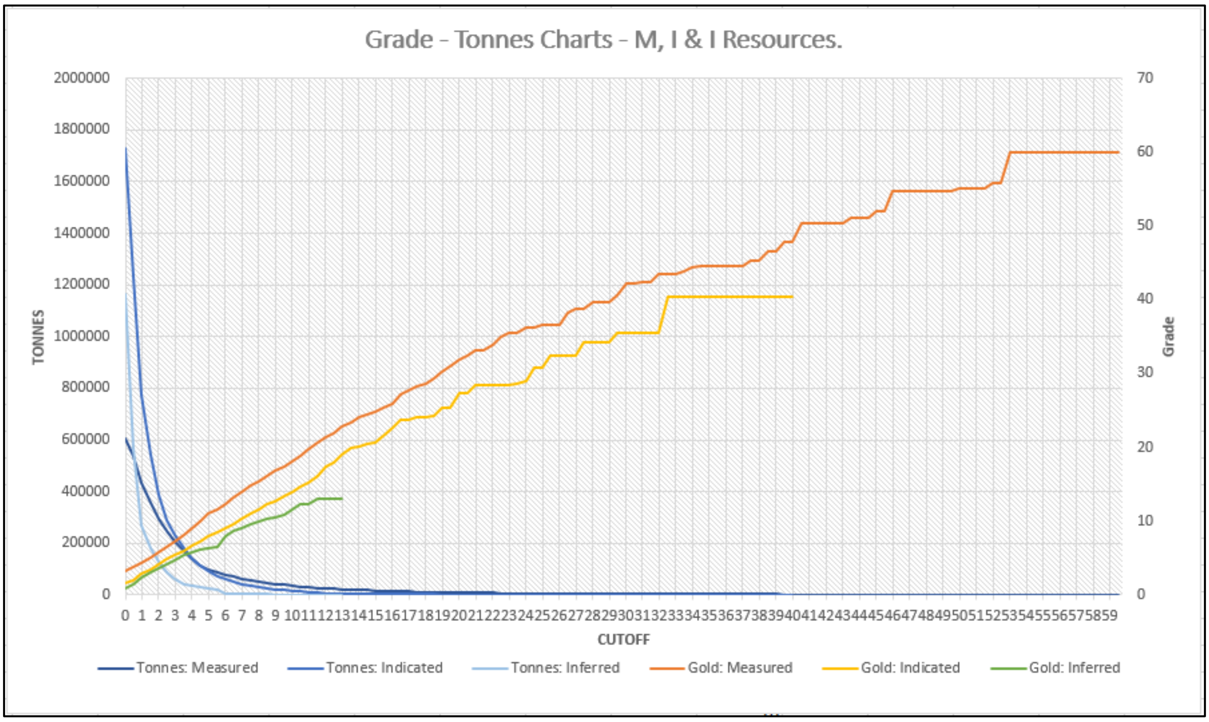
Appendix H: Grade-Tonnage Tables

Gadir Mine August 2018 Mineral Resource Estimate

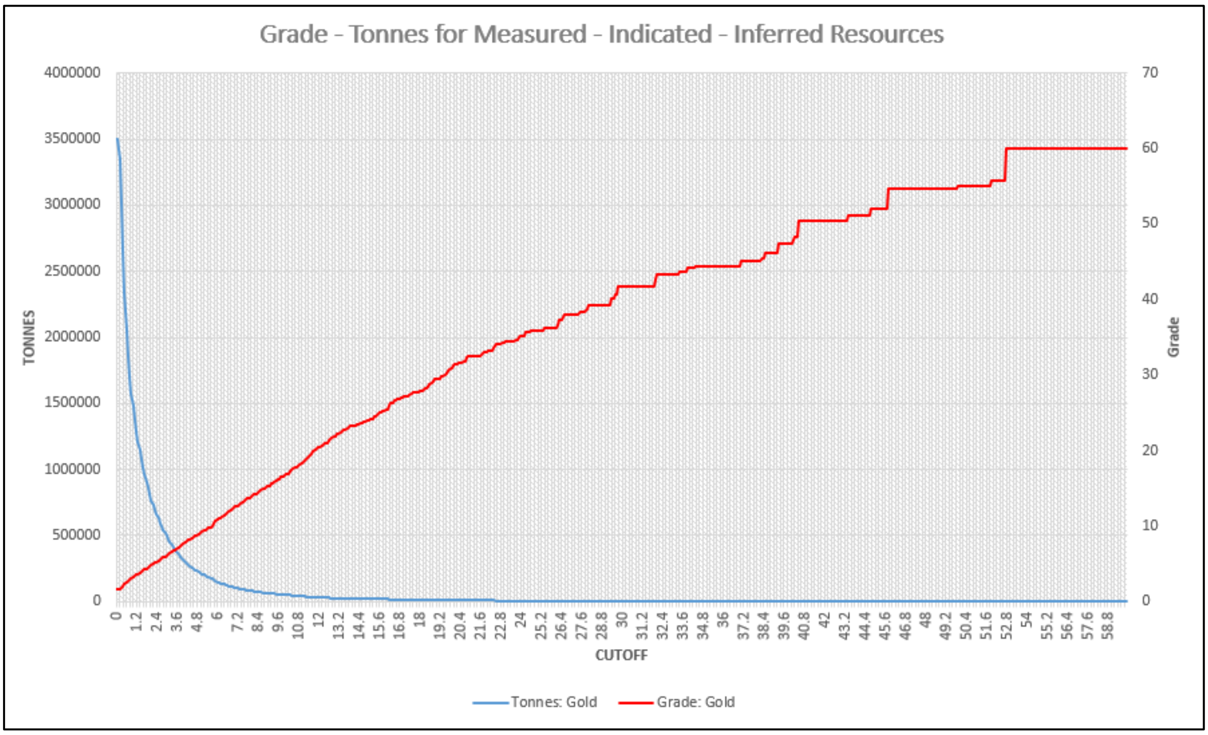
Fresh Material, Reported Above 0.5 g/t Gold Cut-Off,
Ordinary Kriging Estimate Using 1.0m Top-capping Au Composites
Parent Cell Dimensions of 5m EW by 5m NS by 5m RL, Categorised according to JORC [2]

MINERAL RESOURCES	**Tonnage**	**Gold**		**Silver**		**Copper**		**Zinc**	
(Cut-off grade 0.5 g/t Au)	kt	g/t	koz	g/t	koz	%	t	%	t
Measured	540	3.70	64.2	17.49	303.6	0.29	1,566	1.01	5,454
Indicated	1,235	2.04	81.0	10.89	432.4	0.14	1,729	0.73	9,016
Measured + Indicated	**1,775**	**2.54**	**145.2**	**12.90**	**736.1**	**0.21**	**3,295**	**0.84**	**14,470**
Inferred	571	1.48	27.2	5.68	104.4	0.10	571	0.52	2,972
Total	**2,347**	**2.29**	**172.4**	**11.14**	**840.4**	**0.19**	**3,866**	**0.78**	**17,442**
Exploration	5	1.37	0.2	5.94	0.9	0.09	2,470	0.60	7,620

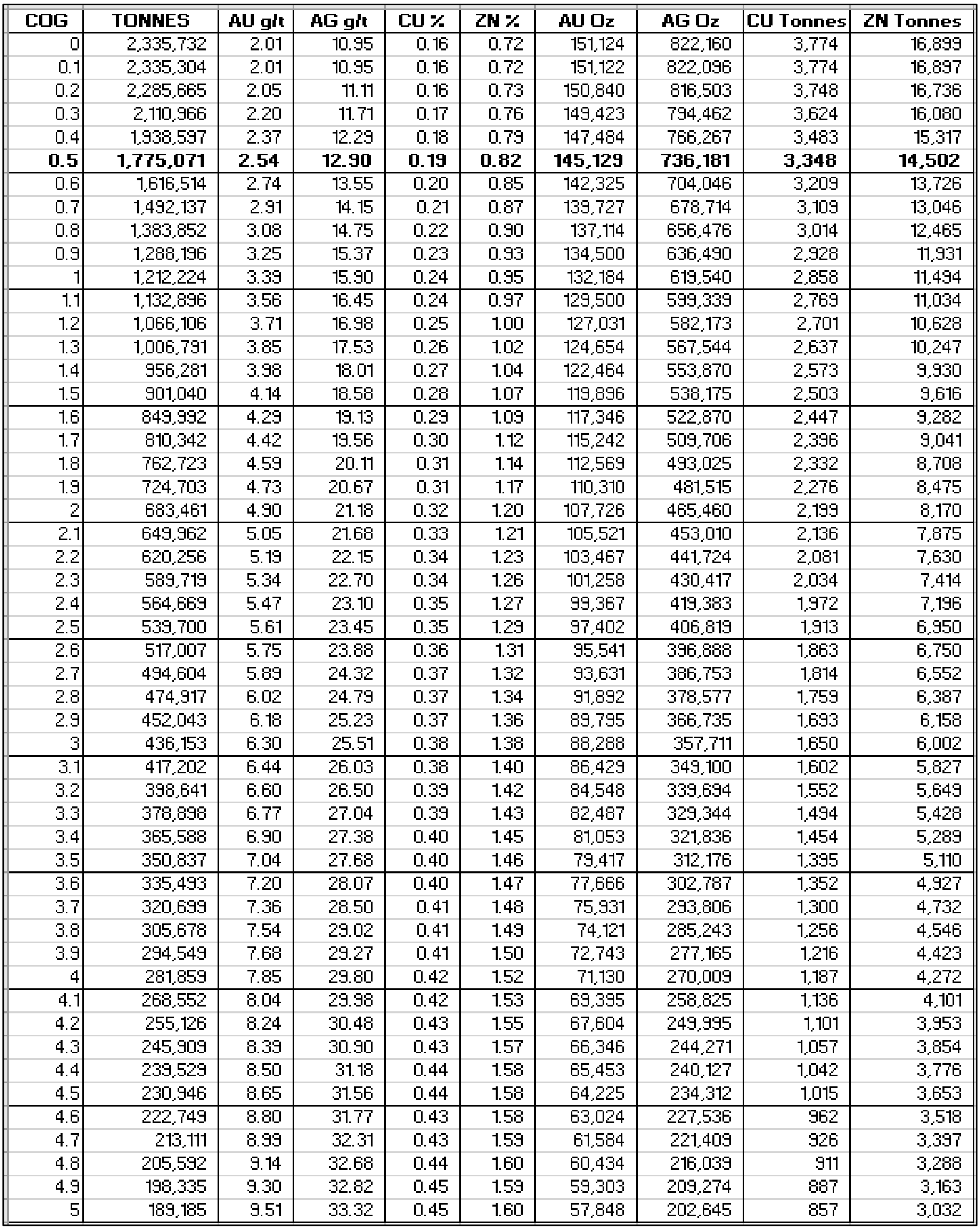
Grade-Tonnage Chart - M, I & I Material



Grade-Tonnage Charts - M, I & I Material - All Resources

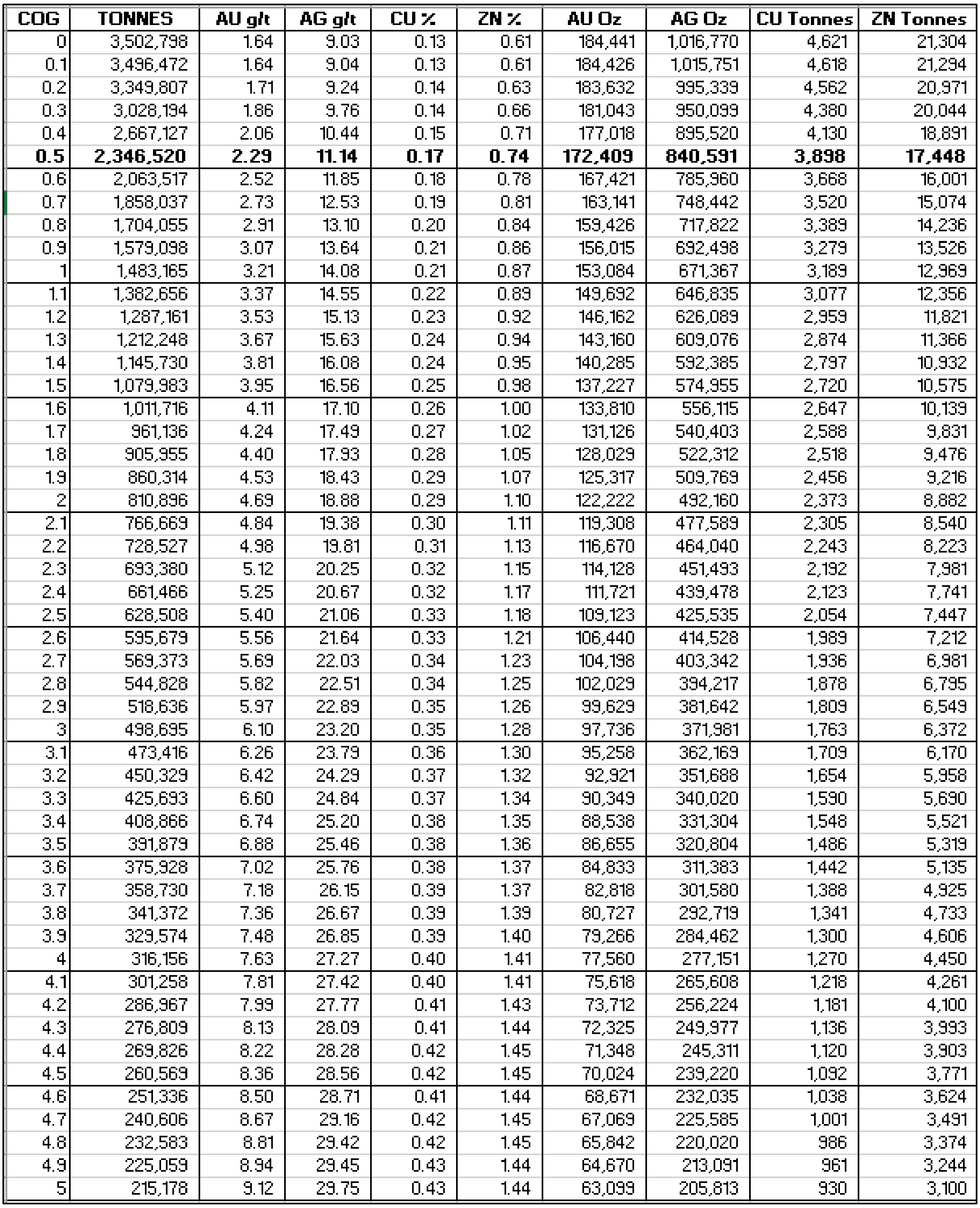


Gadir Mine August 2018 Mineral Resource Estimate (M & I) Output



COG	TONNES	AU g/t	AG g/t	CU %	ZN %	AU Oz	AG Oz	CU Tonnes	ZN Tonnes
0	2,335,732	2.01	10.95	0.16	0.72	151,124	822,160	3,774	16,899
0.1	2,335,304	2.01	10.95	0.16	0.72	151,122	822,096	3,774	16,897
0.2	2,285,665	2.05	11.11	0.16	0.73	150,840	816,503	3,748	16,736
0.3	2,110,966	2.20	11.71	0.17	0.76	149,423	794,462	3,624	16,080
0.4	1,938,597	2.37	12.29	0.18	0.79	147,484	766,267	3,483	15,317
0.5	**1,775,071**	**2.54**	**12.90**	**0.19**	**0.82**	**145,129**	**736,181**	**3,348**	**14,502**
0.6	1,616,514	2.74	13.55	0.20	0.85	142,325	704,046	3,209	13,726
0.7	1,492,137	2.91	14.15	0.21	0.87	139,727	678,714	3,109	13,046
0.8	1,383,852	3.08	14.75	0.22	0.90	137,114	656,476	3,014	12,465
0.9	1,288,196	3.25	15.37	0.23	0.93	134,500	636,490	2,928	11,931
1	1,212,224	3.39	15.90	0.24	0.95	132,184	619,540	2,858	11,494
1.1	1,132,896	3.56	16.45	0.24	0.97	129,500	599,339	2,769	11,034
1.2	1,066,106	3.71	16.98	0.25	1.00	127,031	582,173	2,701	10,628
1.3	1,006,791	3.85	17.53	0.26	1.02	124,654	567,544	2,637	10,247
1.4	956,281	3.98	18.01	0.27	1.04	122,464	553,870	2,573	9,930
1.5	901,040	4.14	18.58	0.28	1.07	119,896	538,175	2,503	9,616
1.6	849,992	4.29	19.13	0.29	1.09	117,346	522,870	2,447	9,282
1.7	810,342	4.42	19.56	0.30	1.12	115,242	509,706	2,396	9,041
1.8	762,723	4.59	20.11	0.31	1.14	112,569	493,025	2,332	8,708
1.9	724,703	4.73	20.67	0.31	1.17	110,310	481,515	2,276	8,475
2	683,461	4.90	21.18	0.32	1.20	107,726	465,460	2,199	8,170
2.1	649,962	5.05	21.68	0.33	1.21	105,521	453,010	2,136	7,875
2.2	620,256	5.19	22.15	0.34	1.23	103,467	441,724	2,081	7,630
2.3	589,719	5.34	22.70	0.34	1.26	101,258	430,417	2,034	7,414
2.4	564,669	5.47	23.10	0.35	1.27	99,367	419,383	1,972	7,196
2.5	539,700	5.61	23.45	0.35	1.29	97,402	406,819	1,913	6,950
2.6	517,007	5.75	23.88	0.36	1.31	95,541	396,888	1,863	6,750
2.7	494,604	5.89	24.32	0.37	1.32	93,631	386,753	1,814	6,552
2.8	474,917	6.02	24.79	0.37	1.34	91,892	378,577	1,759	6,387
2.9	452,043	6.18	25.23	0.37	1.36	89,795	366,735	1,693	6,158
3	436,153	6.30	25.51	0.38	1.38	88,288	357,711	1,650	6,002
3.1	417,202	6.44	26.03	0.38	1.40	86,429	349,100	1,602	5,827
3.2	398,641	6.60	26.50	0.39	1.42	84,548	339,694	1,552	5,649
3.3	378,898	6.77	27.04	0.39	1.43	82,487	329,344	1,494	5,428
3.4	365,588	6.90	27.38	0.40	1.45	81,053	321,836	1,454	5,289
3.5	350,837	7.04	27.68	0.40	1.46	79,417	312,176	1,395	5,110
3.6	335,493	7.20	28.07	0.40	1.47	77,666	302,787	1,352	4,927
3.7	320,699	7.36	28.50	0.41	1.48	75,931	293,806	1,300	4,732
3.8	305,678	7.54	29.02	0.41	1.49	74,121	285,243	1,256	4,546
3.9	294,549	7.68	29.27	0.41	1.50	72,743	277,165	1,216	4,423
4	281,859	7.85	29.80	0.42	1.52	71,130	270,009	1,187	4,272
4.1	268,552	8.04	29.98	0.42	1.53	69,395	258,825	1,136	4,101
4.2	255,126	8.24	30.48	0.43	1.55	67,604	249,995	1,101	3,953
4.3	245,909	8.39	30.90	0.43	1.57	66,346	244,271	1,057	3,854
4.4	239,529	8.50	31.18	0.44	1.58	65,453	240,127	1,042	3,776
4.5	230,946	8.65	31.56	0.44	1.58	64,225	234,312	1,015	3,653
4.6	222,749	8.80	31.77	0.43	1.58	63,024	227,536	962	3,518
4.7	213,111	8.99	32.31	0.43	1.59	61,584	221,409	926	3,397
4.8	205,592	9.14	32.68	0.44	1.60	60,434	216,039	911	3,288
4.9	198,335	9.30	32.82	0.45	1.59	59,303	209,274	887	3,163
5	189,185	9.51	33.32	0.45	1.60	57,848	202,645	857	3,032

Gadir Mine August 2018 Mineral Resource Estimate (M, I & I) Output



COG	TONNES	AU g/t	AG g/t	CU %	ZN %	AU Oz	AG Oz	CU Tonnes	ZN Tonnes
0	3,502,798	1.64	9.03	0.13	0.61	184,441	1,016,770	4,621	21,304
0.1	3,496,472	1.64	9.04	0.13	0.61	184,426	1,015,751	4,618	21,294
0.2	3,349,807	1.71	9.24	0.14	0.63	183,632	995,339	4,562	20,971
0.3	3,028,194	1.86	9.76	0.14	0.66	181,043	950,099	4,380	20,044
0.4	2,667,127	2.06	10.44	0.15	0.71	177,018	895,520	4,130	18,891
0.5	**2,346,520**	**2.29**	**11.14**	**0.17**	**0.74**	**172,409**	**840,591**	**3,898**	**17,448**
0.6	2,063,517	2.52	11.85	0.18	0.78	167,421	785,960	3,668	16,001
0.7	1,858,037	2.73	12.53	0.19	0.81	163,141	748,442	3,520	15,074
0.8	1,704,055	2.91	13.10	0.20	0.84	159,426	717,822	3,389	14,236
0.9	1,579,098	3.07	13.64	0.21	0.86	156,015	692,498	3,279	13,526
1	1,483,165	3.21	14.08	0.21	0.87	153,084	671,367	3,189	12,969
1.1	1,382,656	3.37	14.55	0.22	0.89	149,692	646,835	3,077	12,356
1.2	1,287,161	3.53	15.13	0.23	0.92	146,162	626,089	2,959	11,821
1.3	1,212,248	3.67	15.63	0.24	0.94	143,160	609,076	2,874	11,366
1.4	1,145,730	3.81	16.08	0.24	0.95	140,285	592,385	2,797	10,932
1.5	1,079,983	3.95	16.56	0.25	0.98	137,227	574,955	2,720	10,575
1.6	1,011,716	4.11	17.10	0.26	1.00	133,810	556,115	2,647	10,139
1.7	961,136	4.24	17.49	0.27	1.02	131,126	540,403	2,588	9,831
1.8	905,955	4.40	17.93	0.28	1.05	128,029	522,312	2,518	9,476
1.9	860,314	4.53	18.43	0.29	1.07	125,317	509,769	2,456	9,216
2	810,896	4.69	18.88	0.29	1.10	122,222	492,160	2,373	8,882
2.1	766,669	4.84	19.38	0.30	1.11	119,308	477,589	2,305	8,540
2.2	728,527	4.98	19.81	0.31	1.13	116,670	464,040	2,243	8,223
2.3	693,380	5.12	20.25	0.32	1.15	114,128	451,493	2,192	7,981
2.4	661,466	5.25	20.67	0.32	1.17	111,721	439,478	2,123	7,741
2.5	628,508	5.40	21.06	0.33	1.18	109,123	425,535	2,054	7,447
2.6	595,679	5.56	21.64	0.33	1.21	106,440	414,528	1,989	7,212
2.7	569,373	5.69	22.03	0.34	1.23	104,198	403,342	1,936	6,981
2.8	544,828	5.82	22.51	0.34	1.25	102,029	394,217	1,878	6,795
2.9	518,636	5.97	22.89	0.35	1.26	99,629	381,642	1,809	6,549
3	498,695	6.10	23.20	0.35	1.28	97,736	371,981	1,763	6,372
3.1	473,416	6.26	23.79	0.36	1.30	95,258	362,169	1,709	6,170
3.2	450,329	6.42	24.29	0.37	1.32	92,921	351,688	1,654	5,958
3.3	425,693	6.60	24.84	0.37	1.34	90,349	340,020	1,590	5,690
3.4	408,866	6.74	25.20	0.38	1.35	88,538	331,304	1,548	5,521
3.5	391,879	6.88	25.46	0.38	1.36	86,655	320,804	1,486	5,319
3.6	375,928	7.02	25.76	0.38	1.37	84,833	311,383	1,442	5,135
3.7	358,730	7.18	26.15	0.39	1.37	82,818	301,580	1,388	4,925
3.8	341,372	7.36	26.67	0.39	1.39	80,727	292,719	1,341	4,733
3.9	329,574	7.48	26.85	0.39	1.40	79,266	284,462	1,300	4,606
4	316,156	7.63	27.27	0.40	1.41	77,560	277,151	1,270	4,450
4.1	301,258	7.81	27.42	0.40	1.41	75,618	265,608	1,218	4,261
4.2	286,967	7.99	27.77	0.41	1.43	73,712	256,224	1,181	4,100
4.3	276,809	8.13	28.09	0.41	1.44	72,325	249,977	1,136	3,993
4.4	269,826	8.22	28.28	0.42	1.45	71,348	245,311	1,120	3,903
4.5	260,569	8.36	28.56	0.42	1.45	70,024	239,220	1,092	3,771
4.6	251,336	8.50	28.71	0.41	1.44	68,671	232,035	1,038	3,624
4.7	240,606	8.67	29.16	0.42	1.45	67,069	225,585	1,001	3,491
4.8	232,583	8.81	29.42	0.42	1.45	65,842	220,020	986	3,374
4.9	225,059	8.94	29.45	0.43	1.44	64,670	213,091	961	3,244
5	215,178	9.12	29.75	0.43	1.44	63,099	205,813	930	3,100

Appendix I: JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.* • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* • *Aspects of the determination of mineralisation that are Material to the Public Report.* • *In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• The majority of the geological information for Gadir was obtained from diamond core drilling (DD). Both surface (60 drillholes) and underground (342 drillholes) drilling has been completed, for a drilling total of 37,970 m. • In addition, 8,786 channel samples (CH) have been analysed, with a total length of 8,645 m. Channel sample length is typically 1 m, with a width of 10 cm and a depth of 5 cm. Samples are obtained with use of a grinding machine. • Chip sampling is undertaken for grade control purposes but is not captured in the drillhole database nor databases planned for resource estimation. • Full core was split (HQ and NQ only) longitudinally 50% using a rock diamond saw and half-core samples were taken at typically 1 metre intervals or to rock contacts if present in the core run for both mineralisation and wall rock. The drill core was rotated prior to cutting to maximise structure to core axis of the cut core. BQ material is whole-core sampled. • To ensure representative sampling, diamond drill core was marked considering mineralisation and alteration intensity, after ensuring correct core run marking with regards to recovery. • Sampling of DD and CH material was systematic and unbiased. • Diamond drill sample target weight is 2-3.5 kg prior to laboratory processing. Fire Assay (FA) analysis is carried out at the onsite laboratory by Atomic Absorption Spectroscopy (AAS) – 25 g charges are used for Au analysis whilst 10 g charges are used for Ag, Cu and Zn analysis for underground core. Exploration (i.e. surface) DD core used 50 g charges. • Channel samples typically weigh between 10-20 kg prior to laboratory

Criteria	JORC Code explanation	Commentary
		processing. Charges for Au assaying weigh 25 g whilst 10 g charges are used for Ag, Cu and Zn analysis. • Handheld XRF (model THERMO Niton XL3t) was used to assist with mineral identification during field mapping and core logging procedures.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• DD accounts for 80% of the material drilling used within the Gadir resource and comprises of HQ, NQ and BQ core. During the exploration and development phases, DD was completed from both surface and underground. Infill DD was then completed from underground locations. • The majority of the core drilled from the surface was either HQ (63.5 mm) or NQ (47.6 mm) in diameter. Underground drilling was completed using NQ or BQ (36.5 mm diameter) standard tubes. • Drillcore was not orientated due to technological limitations in-country.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.* • *Measures taken to maximise sample recovery and ensure representative nature of the samples.* • *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Core recovery was recorded at site, verified at the core yard and subsequently entered into the database. Recovery for mineralised sections was generally very good (in excess of 95%) and over the length of the hole was typically > 90%. Recovery measurements were poorer in fractured and faulted rocks, weathered zones or dyke contacts – in these zones average recovery was 85%. • From visual inspection of the data, the consultant deemed the core recovery to be good and not have introduced bias into the subsequent sampling. • Work to date has not identified a relationship between grade and sample or core recovery. However, in core drilling, losses of fines is believed to result in lower gold grades due to washout in fracture zones. This is likely to result in an underestimation of grade, which will be checked during production.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• All historic and current drill core was logged in detail for lithology, alteration, mineralisation, geological structure and oxidation state by AIMC geologists, utilising logging codes and data sheets as supervised by the Competent Person (“CP”). Data was captured on paper and manually entered into the database.

Criteria	JORC Code explanation	Commentary
	- *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.* - *The total length and percentage of the relevant intersections logged.*	- Logging was considered sufficient to support Mineral Resource estimation, mining studies and metallurgical studies. - Rock Quality Designation (RQD) data was recorded for all core drilling for geotechnical purposes. Fracture intensity, style, fracture-fill and fragmentation proportion data was also collected for geotechnical analysis. - An independent geotechnical assessment was completed by the environmental engineering company CQA International Limited to support operations and to provide supplementary information for this resource evaluation. - DD and CH logging was both quantitative and qualitative in nature. - All core was photographed in the core boxes to show the core box number, core run markers and a scale. All channel samples/faces were sketched prior to cutting. - The entire length of each drillhole (DD & CH) was logged in full, so 100% of the relevant intersections were logged.
Sub-sampling techniques and sample preparation	- *If core, whether cut or sawn and whether quarter, half or all core taken.* - *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* - *For all sample types, the nature, quality and appropriateness of the sample preparation technique.* - *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.* - *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.* - *Whether sample sizes are appropriate to the*	- HQ and NQ full core was split longitudinally in half by using a diamond-blade core saw. The core saw is a 'CM501' manufactured by Norton Clipper and the blades from the 'GSW' series manufactured by Lissmac. - Full core of BQ size was sampled and as such, only coarse reject and pulp rejects were retained. - Samples of one half of the HQ/NQ core were taken, typically at 1 metre intervals, whilst the other half was retained as reference core in the tray prior to storage. If geological features or contacts warranted adjustment of the interval, then the intersection sampled was reduced to confine these features. The drill core was rotated prior to cutting to maximise structure to axis of the cut core – cut lines were drawn on during metre-marking. - All underground faces are marked-up by the supervising underground geologist, constrained within geological and mineralised boundaries.

Criteria	JORC Code explanation	Commentary
	grain size of the material being sampled.	Subsequent CH sample acquisition was carried out with a rock hammer (either hand-held or Bosch power tool) and grinding machines. Samples are collected in calico bags as per AIMC's face sampling procedure. Typical sample masses range between 10-20 kg. • The procedure involves cutting a linear channel across the vein or orebody in order to obtain the most representative sample possible for the designated interval. CH samples are collected from the floors of the underground workings. When chip channel sampling is conducted along a rock face, of plastic sheeting is laid out for the material to fall on so as to avoid contamination. Sample intervals are 1-1.5 m, 10 cm in width and 5 cm deep. A face sheet with sketch, sample width, sample number(s) and locality are generated for each sampled face. • Samples are bagged with pre-numbered sample tickets and submitted with a sample submission form to the onsite laboratory. Underground CH samples have been used in the Mineral Resource estimate. Chip samples have not been used in the Mineral Resource estimate and are primarily used to provide guidance for mine-mill reconciliations • No sub-sampling of CH material needs to be carried out as the samples are deemed 'laboratory-ready' at the channel face. Samples were sent to the on-site laboratory for preparation and pulverised ready for routine AAS and check FA. • Both DD and CH samples were prepared according best practice, with initial geological control of the half core or CH samples, followed by crushing and grinding at the laboratory sample preparation facility that is routinely managed for contamination and cleanliness control. • Sampling practice is considered as appropriate for Mineral Resource Estimation. • Sample preparation at the laboratory is subject to the following procedure.

Criteria	JORC Code explanation	Commentary
		○ After receiving samples at the laboratory from the geology department, all samples are cross referenced with the sample order list. Any errors/omissions are to be followed-up and rectified. ○ All samples are dried in an oven at 105-110°C to drive off moisture and volatiles. Samples then head to crushing. ○ Crushing - first stage - to -25mm size ○ Crushing - second stage - to -10mm size ○ Crushing - third stage - to -3mm size ○ After crushing the samples are split and 150-250 g of material is taken for assay preparation (depending upon the drillhole type). The remainder is retained for reference. ○ The material to be assayed is first pulverised to -75 µm prior to delivery to the assaying facility. ○ The performance of the laboratory is monitored daily and at the end of the month when grade control samples are reconciled with mill production. ○ Overall, the sampling practice was deemed by Datamine to be appropriate for Mineral Resource estimation purposes. • Quality control procedures were used for all sub-sampling preparation. This included geological control over the core cutting, and sampling to ensure representativeness of the geological interval. • Petrographic studies have identified the average Au particle size as being in the order of 5 µm. Sample sizes are therefore deemed appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.* • *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in*	• Laboratory procedures, QA/QC assaying and analysis methods employed are industry standard. They are enforced and supervised by a dedicated laboratory team. AAS and FA techniques were utilised and as such, both partial and total analytical techniques were conducted. • Handheld XRF (model THERMO Niton XL3t) was used to assist with mineral

Criteria	JORC Code explanation	Commentary
	determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. • *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	identified during field mapping and core logging procedures. • The onsite laboratory has QA/QC protocols in place and uses an external control laboratory. Calibration of the analytical equipment in the laboratory is considered to represent best practice. • Comparing the grade control results and mill performance is a qualitative index of performance - there was good overall quarterly reconciliation between grade control results and the mill for Gadir material. • All data related to these drillings are located in the relevant drillhole database. Material drillholes include only those completed by DD or CH methods as these impacted on the interpretation of the overall geometry of the resource. Chip samples were not considered material as these were predominantly used for mine-mill reconciliation purposes. The quality of the QA/QC carried out for Gadir was considered to be appropriate for resource and reserve estimation purposes by Datamine. • QA/QC procedures included the use of field duplicates of RC samples, blanks, certified standards or certified reference material (“CRMs”) from OREAS (“Ore Research & Exploration Pty Ltd Assay Standards”, Australia), in addition to the laboratory control that comprised pulp duplicates, coarse duplicates, and replicate samples. This QA/QC system allowed for the monitoring of precision and accuracy of assaying for the Gadir deposit. • A total of 101 pulp duplicates were assayed at varying grade ranges. Fifteen pulp duplicates were assayed for CH samples and 86 for DD samples. • Au grade ranges as assigned to the Gadir deposit:

Criteria	JORC Code explanation	Commentary

Ore Grade Designation	Au (from)	Au (to)
	g/t	g/t
Very Low (VL)	0.00	0.30
Low	0.30	1.00
Medium (MED)	1.00	2.00
High	2.00	5.00
Very High (V HIGH)	5.00	+

- Summary results from the pulp duplicates are presented in the accompanying Gadir Resource Report
- The following CRMs were used for QA/QC control purposes as part of this resource run:

Ore Grade Designation	CRM Description and target grade(s)				
	Name	Au	Ag	Cu	Zn
		g/t	g/t	%	%
Very Low	CRM 22_OREAS 501	0.21	0.44	0.28	0.01
	CRM 30_OREAS 600	0.19	24.31	0.05	0.06
Low	CRM 32_OREAS 905	0.40	0.52	0.16	0.01

Criteria	JORC Code explanation	Commentary					
			CRM 23_OREAS 502c	0.48	0.80	0.78	0.01
			CRM 17_OREAS 502b	0.49	2.01	0.76	0.01
			CRM 20_OREAS 620	0.67	38.40	0.18	3.12
			CRM 2_OREAS 503b	0.69	1.46	0.52	0.01
			CRM 31_OREAS 601	0.77	49.41	0.10	0.13
			CRM 16_OREAS 623	0.80	20.40	1.72	1.01
			CRM 12_OREAS 59d	0.80	-	1.47	-
		Medium	CRM 15_OREAS 701	1.07	1.11	0.48	0.03

Criteria	JORC Code explanation	Commentary					
			CRM 27_OREAS 253	1.22	0.25	0.01	-
			CRM 19_OREAS 621	1.23	68.00	0.37	5.17
			CRM 13_OREAS 604	1.43	492.00	2.16	0.25
			CRM 7_OREAS 504b	1.56	2.98	1.10	0.01
			CRM 3_OREAS 16a	1.81	-	-	-
			CRM 11_OREAS 602	1.95	114.88	0.52	0.41
		High	CRM 24_OREAS 60d	2.43	4.45	0.01	0.00
			CRM 4_OREAS 60c	2.45	4.81	0.01	0.01
			CRM 28_OREAS 254	2.50	0.40	0.01	-

Criteria	JORC Code explanation	Commentary

	CRM 9_OREAS 214	2.92	-	-	-
	CRM 10_OREAS 17c	3.04	-	-	-
	CRM 6_OREAS 61e	4.51	5.37	0.01	0.00
	CRM 25_OREAS 61f	4.53	3.61	0.00	-
Very High	CRM 14_OREAS 603	5.08	292.92	1.01	0.91
	CRM 5_OREAS 62c	9.37	9.86	-	-
	CRM 29_OREAS 257	13.96	2.17	0.01	-

- Comparison of average Au grades between the onsite laboratory and the OREAS CRMs (see Report) showed a general bias towards the onsite laboratory underestimating the grade, notably for 'Very High' material; however, overall the bias fell just outside of 0.1 g/t and so is reasonable.
- The same exercise was also conducted for Ag, Cu and Zn CRM assays and the results can be viewed in the Resource Report.

Criteria	JORC Code explanation	Commentary
		• Production reconciliations between mined grades and assays correlate well and have been used as an additional resource to validate metal content. • The quality of the QA/QC was considered adequate for resource estimation purposes.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.* • *The use of twinned holes.* • *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.* • *Discuss any adjustment to assay data.*	• Significant intersections were verified internally by a number of company personnel within the management structure of the Exploration and Underground Mining Departments of AIMC. Intersections were defined by the geologists and subsequently reviewed and verified by the Exploration Manager. Further independent verification was carried out as part of the due diligence for resource estimation by Datamine personnel. Assay intersections were cross-validated with visual drillcore intersections (i.e. photographs). • No twinning of drillholes was carried out at Gadir however extensive underground development has confirmed the overall grade and geological interpretation based on the drillholes. • Data entry is supervised by a data manager. Verification and checking procedures are in place. The format of the data is appropriate for direct import into Datamine® software. All data is stored in electronic databases within the geology department and backed up to the secure company electronic server that has restricted access. • Four main files are created per hole, relating to its ‘collar’ details, ‘survey’ data, ‘assay’ results and logged ‘geology’. Laboratory data is loaded electronically by the laboratory department and validated by the geology department. Any outliers or anomalous assays are resubmitted. • Prior to commencement of mining at Gadir, all samples from the surface exploration campaign that intersected mineralisation was sent for external assay at ALS-OMAC in Ireland. This laboratory is currently the preferred company to carry out external assaying for AIMC. • Independent validation of the database was carried out as part of the

Criteria	JORC Code explanation	Commentary
		resource model generation process where all data was checked for errors, missing data, misspelling, interval validation and management of zero versus 'no data' entries. • All databases were considered accurate for the Mineral Resource Estimate. • No adjustments were made to the assay data. The quality of the QA/QC is considered adequate for resource estimation purposes.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.* • *Specification of the grid system used.* • *Quality and adequacy of topographic control.*	• The surface mine area was recently (2017) surveyed by a high-resolution drone survey. Five topographic base stations were installed and accurately surveyed using high precision GPS that was subsequently tied into the local mine grid using ground-based total station surveying (utilising the LEICA TS02) equipment. All drillhole collars were then surveyed using the Leica apparatus. • In 2018, new survey equipment was purchased to be used for precision surveying of drill holes, trenches and workings. This apparatus comprises two Trimble R10s, Model 60 and accessories. • Equipment used for underground surveying comprises a Leica TCR407 7" Total Station and a GeoSLAM GS-610090. • Downhole surveying was carried out on HQ and NQ drillholes utilising a Reflex EZ-TRAC magnetic and gravimetric multi-shot instrument, at a downhole interval of 9 m (after an initial collar shot at 3 m). Downhole surveying was not carried out on BQ holes. • The grid system used for the site is Universal Transverse Mercator 84 WGS Zone 38T (Azerbaijan) • The level of topographic and survey control was deemed adequate for the purposes of resource modelling by Datamine.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.* • *Whether the data spacing and distribution is sufficient to establish the degree of geological*	• On surface and underground, collar spacing averaged 20 m over the main mineralised zone and 50 m on the periphery of the resource. Fan-drilling was also carried out around some underground collar sites to test mineralisation

Criteria	JORC Code explanation	Commentary
	and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied. - *Whether sample compositing has been applied.*	at depth. - The data spacing and distribution (20 x 20 metre grid) over the mineralised zones was deemed to be sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedures and classifications applied. The depth and spacing was considered appropriate for defining geological and grade continuity as required for a JORC Mineral Resource estimate. - Extensive underground development has tested and confirmed the existing drillhole data and spacing was sufficient to establish grade and geological continuity. The available drill data spacing represents industry best-practice. - Compositing to 1 metre intervals was applied. Residual intervals (< 0.5 m) were appended to the previous composite interval.
Orientation of data in relation to geological structure	- *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.* - *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	- Detailed surface mapping, subsequent drilling and underground development enabled the deposit characteristics to be understood. - CH samples were obtained where mineralisation was intersected. Orientation of the channels was dependent upon the orientation of the drive and face being sampled. - Overall, orientation of drilling and sampling was as perpendicular to mineralisation as was practicable. - Given the geological understanding and the application of the drilling grid orientation, grid spacing and vertical drilling, no orientation-based sample bias was identified in the data that resulted in unbiased sampling of structures considering the deposit type.
Sample security	- *The measures taken to ensure sample security.*	- Regarding drill core: each drill site was supervised by an experienced geologist. The drill core was placed into wooden or plastic core boxes (sized specifically for the core diameter) at the drill site. Once a box was filled, a wooden/plastic lid was fixed to the box to ensure there was no spillage. Core

Criteria	JORC Code explanation	Commentary
		box number, drillhole I.D. and from/to metres were written on both the box and the lid. The core was then transported to the core storage area and logging facility, where it was received and logged into a data sheet. Core logging, cutting and sampling took place at the secure core management area. The core samples were bagged with labels both in and on the bag, and data recorded on a sample sheet. The samples were transferred to the laboratory, where they were registered as received, for laboratory sample preparation works and assaying. Hence, a chain of custody procedure was followed from core collection to assaying and storage of reference material. • All samples received at the core facility were logged in and registered with the completion of an "act". The act was signed by the drilling team supervisor and core facility supervisor (responsible person). All core is photographed, subjected to geotechnical logging, geological logging, samples interval determinations, bulk density, core cutting, and sample preparation (each size of fragments 3-5 cm). • CH and DD samples were weighed, and a Laboratory Order prepared after cutting was complete (CH samples were prepared underground at the face). This was signed by the core facility supervisor prior to release to the laboratory. On receipt at the laboratory, the responsible person countersigned the order acknowledging full delivery of the samples. • After assaying all reject duplicate samples were received from laboratory to core facility (again recorded on the act). All reject samples were placed into boxes referencing the sample identities and stored in the core facility. • In the event of external assaying, AIMC utilised ALS-OMAC in Ireland. Samples selected for external assay were recorded on a data sheet and sealed in appropriate boxes for shipping by air freight. Communication between the geological department of AIMC and ALS occurs to monitor the shipment from despatch, through customs clearance, and upon receipt of samples. Results were sent electronically by ALS and loaded to the Company database for

Criteria	JORC Code explanation	Commentary
		study.
Audits or reviews	- *The results of any audits or reviews of sampling techniques and data.*	- Reviews on sampling and assaying techniques were conducted for all data internally and externally (by Datamine) as part of the resource and reserve estimation validation procedure. No concerns were raised as to the procedures or the data results. All procedures were considered industry standard and well conducted. Datamine identified no material issues that would prevent Gadir from reporting Measured, Indicated and Inferred Mineral Resources.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.* • *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• The Gedabek open pit project is located within a licence area ("Contract Area") that is governed under a Production Sharing Agreement ("PSA"), as managed by the Azerbaijan Ministry of Ecology and Natural Resources ("MENR"). • The PSA grants the Company a number of 'time periods' to exploit defined Contract Areas, as agreed upon during the initial signing. The period of time allowed for early-stage exploration of the Contract Areas to assess prospectivity can be extended if required. • A 'development and production period' commences on the date that the Company issues a notice of discovery, which runs for 15 years with two extensions of five years each at the option of the Company. Full management control of mining in the Contract Areas rests with AIMC. • The Gedabek Contract Area, incorporating the Gadir underground mine, currently operates under this title. • Under the PSA, AAM is not subject to currency exchange restrictions and all imports and exports are free of tax or other restriction. In addition, MENR is to use its best endeavours to make available all necessary land, its own facilities and equipment and to assist with infrastructure. • The deposit is not located in any national park. • At the time of reporting no known impediments to obtaining a licence to operate in the area exist and the Contract Area agreement is in good standing.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• The Gadir deposit was discovered in 2012 by AIMC geologists. As such, previous exploration has not been carried out by other parties specific to this deposit. • During 2012, exploration carried out by AIMC uncovered an outcrop of rhyolite displaying intense silica and potassic alteration on the northwestern flank of the Gedabek operation (about 400 m from the Gedabek open pit).

Criteria	JORC Code explanation	Commentary
		Samples were assayed and returned grade and so they were followed-up with an exploration drillhole. • A downhole intersection grading 24 m at 2.9 g/t Au was returned for this hole, justifying further exploration and project development. • The following work was further completed to define Gadir: o Detailed geological and structural mapping (1:5,000 and 1:1,000 scale; 2012-2015) o Rock chip sampling (650 samples) o Trenching (5 trenches totalling 200 m length and 160 samples) o Soil geochemistry study (1,473 samples; 2014) o Various HQ & NQ surface drill campaigns (2013 - present day) o Underground NQ & BQ drill campaigns (2015 - present day)
Geology	• *Deposit type, geological setting and style of mineralisation.*	• The Gadir Au-Ag-Cu-Zn deposit is located in the Gedabek Ore District of the Lesser Caucasus in NW Azerbaijan, adjacent to the city of Gedabay and 48 km west of the city of Ganja. Gadir is characterised as a low-sulphidation (LS) epithermal system. • The portal to Gadir was independently located on Google Earth at latitude 40°58'59.21"N and longitude 45°79'03.54"E and tunnelled into the flanks of Yogundag Mountain. • The Gadir ore deposit is located within the large Gedabek-Garadag volcanic-plutonic system. This system is characterised by a complex internal structure indicative of repeated tectonic movement and multi-cyclic activity. Yogundag Mountain is a porphyry-epithermal zone, with known deposits in the area (e.g. Gadir, Gedabek, Umid and Zefer) believed to represent the upper portion of the mineralising system. • The Gadir orebody has a complicated geological structure and hosts intrusive rocks of different ages and compositions. Three sets of regional fault zones controlling mineralisation have been identified and are characterised on the

<table>
<tr><th>Criteria</th><th>JORC Code explanation</th><th>Commentary</th></tr>
<tr><td></td><td></td><td>basis of strike direction and morphological characteristics:
NW-SE striking faults (e.g. Gedabek-Bittibulag Deep Fault, Misdag Fault)
NE-trending faults (e.g. Gedabek-Ertepe Fault, Gerger-Arykhdam Fault, Gadir ore-controlling faults)
Local transverse faults
The drilling identified a series of vertically stacked, shallow-dipping mineralised lenses within an area of approximately 50 x 100 metres over about 150 m height.
Various forms of hydrothermal alteration are found to occur at Gadir. Propylitic alteration (+ chlorite/epidote) is observed in the andesitic tuff formation. Argillic alteration (+ clay minerals) is found in the wall rocks and silicification is common in the volcanic units as well as the central part of the deposit.
Mineralisation primarily exploited at Gadir is Au-Ag from a polymetallic ore, also containing base metals of Cu and Zn. The main ore minerals are sulphides, including pyrite, chalcopyrite, sphalerite and trace galena.</td></tr>
<tr><td><i>Drill hole Information</i></td><td><i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i>
<i>easting and northing of the drill hole collar</i>
<i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i>
<i>dip and azimuth of the hole</i>
<i>down hole length and interception depth</i>
<i>hole length.</i>
<i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent</i></td><td>A summary of the type and metres of drilling completed is shown below. Material drill hole information provided in Appendix B in the Resource Report.
<table><tr><th>Purpose</th><th>Drillhole Type</th><th>Number of Holes</th><th>Total Length (m)</th></tr><tr><td>Surface</td><td>DD</td><td>60</td><td>22,458</td></tr><tr><td>Underground</td><td>DD</td><td>342</td><td>15,512</td></tr><tr><td></td><td>CH</td><td>-</td><td>8,645</td></tr><tr><td>TOTAL DRILLING</td><td></td><td>402</td><td>46,615</td></tr></table>
Chip samples are primarily used to provide guidance for mine-mill reconciliation purposes and have not been included as part of this Mineral Resource estimation.
The database contains information related to geological work up until 20th</td></tr>
</table>

Criteria	JORC Code explanation	Commentary
	Person should clearly explain why this is the case.	August 2018.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	• Drilling results were reported using intersection intervals based on an Au grade > 0.3 g/t and internal waste ≥ 1 m thickness. Grades of both Au and Ag within the intersections were stated and the results presented to 2 decimal places. • No data aggregation methods have been applied to the drillhole data for reporting of exploration results. • No metal equivalent values have been reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Overall orientation of drilling and sampling is as perpendicular to the orebody as is practicable. The geometry of the Gadir orebody has been deemed to be suitably tested and confirmed with surface and underground drilling, as well as underground development. • A good correlation exists between the mineralisation widths, intercept lengths and orebody modelling and this has been tested and proven through development intersections • Given the geological understanding and the application of the drilling grid orientation and grid spacing, along with underground development, no orientation-based sample bias has been identified in the data that resulted in unbiased sampling of structures considering the deposit type. • All intercepts are reported as down-hole lengths. • Grade control drilling is balanced with exploratory and target-testing programmes.
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for*	• Appropriate diagrams and sections have been included in the Mineral Resources report.

Criteria	JORC Code explanation	Commentary
	any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	• Plans and sections are updated regularly onsite to reflect the latest information (e.g. underground development, geological interpretations). The AIMC Survey Department update working headings on a monthly basis in Surpac®.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• Representative reporting of mineralisation styles and intervals has been previously reported by AAM via regulated news service (RNS) announcements on the London Stock Exchange (AIM), on the Company website or at conferences and roadshows. • The report has been deemed balanced and reflects the views of both Datamine and the CP.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• Additional information including photographs of the Gadir area can be viewed on the Anglo Asian Mining website: **www.angloasianmining.com** • An independent geotechnical assessment was completed by CQA to support operations and to provide supplementary information for this resource evaluation. This assessment of Gadir involved carrying out a desk study, completion of fieldwork (e.g. assessing tunnel morphology and existing ground support, estimating water inflows) and then interpretation of the data. The results of this study and a copy of the report can be found in the Gadir Ore Reserves report.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Further exploration and grade control drilling is planned at the Gadir deposit. The targets for this drilling include: o Down-dip extension of the mineralisation o Additional drilling chasing mineralisation along-strike o Exploration drilling between Gadir and Gedabek • No diagrams to show future planned works are presented in this report as the information is commercially sensitive.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.* • *Data validation procedures used.*	• The Gadir database is stored in Access® software. The data used for the Gadir resource was compiled from two different databases: o the 'Exploration Database' – surface DD holes o the 'UG database' – underground CH samples and DD holes • A dedicated database manager has been assigned to monitor all databases. Tasks include checking the data entered against the laboratory report and survey data. • Geological data is entered by a geologist to ensure there is no confusion over terminology whilst laboratory assay data is entered by the data entry staff. • A variety of manual and data checks are in place to check against human error of data entry. • All original geological logs, survey data and laboratory results sheets are retained in a secure location in hard and soft copy format. • It was noted by Datamine that the supplied Gadir database was not subjected to a full independent database audit prior to estimation as it was understood that the data were audited during upload. • All data were imported to Datamine Studio RM® software and further validation processes completed. At this stage, any errors found were corrected. • The validation procedures used include: o Drillhole depths for the geology, survey and assay logs do not exceed the recorded drilled depth o Dates are in the correct format and are correct o Set limits (e.g. for northing, easting, assay values) are not exceeded o Valid geology codes (e.g. lithology, alteration etc.) have been used

Criteria	JORC Code explanation	Commentary
		o Sampling intervals are checked for gaps and overlaps • After the data have been loaded into the database, the following checks are carried out: o Visual checks that collar locations are correct and compared with existing information (e.g. development wireframes) o Visual checks of drillhole traces for unusual traces and comparing the actual drillhole strings against the planned strings • Hence there are several levels of control. This final point was also checked by Datamine prior to modelling.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* • *If no site visits have been undertaken indicate why this is the case.*	• Datamine consultants developed and audited the Gadir Mineral Resource Block Model for the Gadir underground mine. Two Datamine engineers worked on the resources and reserves (one assigned to each project) and were able to verify work practice and procedures. • Yerzhan Uzakbayev (Senior Resource Geologist; Datamine) visited Gadir for 9 days in August 2018 and worked on the Mineral Resources estimation. • Aidar Kairbekov (Senior Mining Consultant; Datamine) visited Gadir for 5 days in October 2018 and worked on the Ore Reserves calculation. • The CP is an employee of the company and as such has been actively in a position to be fully aware of all stages of the exploration and project development. The CP has worked very closely with the independent resource and reserve estimation staff of Datamine, both on site and remotely, to ensure knowledge transfer of the geological situation, to allow geological "credibility" to the modelling process.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.* • *Nature of the data used and of any assumptions made.*	• There is confidence in the overall interpretation of the Gadir mineral deposit. There is some geology and grade distribution uncertainty on the local scale however this is mitigated by close-spaced fan drilling at 15 m collar spacing as well as underground development information.

Criteria	JORC Code explanation	Commentary
	- *The effect, if any, of alternative interpretations on Mineral Resource estimation.* - *The use of geology in guiding and controlling Mineral Resource estimation.* - *The factors affecting continuity both of grade and geology.*	- The geological interpretation is considered robust. Geological data collection has included surface mapping, outcrop sampling, core drilling (surface and underground) and geotechnical assessment. This has amassed a significant amount of information for the deposit. Various software has been used to model the deposit, including Leapfrog®, Surpac® and Datamine® packages. - The geological team have worked in the licence area for many years and the understanding and confidence of the geological interpretation is considered high. Vitaly Khorst (Senior Underground Geologist; AIMC) was involved with geological interpretation and modelling of Gadir with Yerzhan Uzakbayev (Senior Resource Geologist; Datamine). - No alternative geological interpretation of the mineral deposit exists at this time and so the Mineral Resources estimate is unaffected. - The geology has guided the resource estimation, especially the structural control where, for example, faulting has defined “hard” boundaries to mineralisation. This deposit-scale structural orientation was used to control the drilling grid and resource estimation search ellipse orientations. - Grade and geological continuity have been established by the extensive 3D data collection. Gadir has dimensions of about 500 metres by 400 metres and the continuity is well understood, especially in relation to structural effects. - A geological interpretation of the Gadir orebody was completed utilising geological sections typically at spacing of about 5-10 metres. These interpretations were used to form a wireframe solid in Datamine Studio RM® that was subsequently used as the main domain/mineralised zone for resource estimation.
Dimensions	- *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	- The footprint of the whole mineralisation zone is about 500 metres by 400 metres, with about 200 m overall thickness. - The average surface elevation around Gadir is 1717.39 m RL. The maximum local RL is 1799.24 m and the minimum local RL is 1654.24 m.

Criteria	JORC Code explanation	Commentary
		• The elevation of the centre of the block model (within mineralisation) is 1436.89 m RL. The upper elevation of the block model (within mineralisation) is 1537.25 m RL and the lowest elevation is 1316.50 m RL. All measurements taken from the centre of the block. • The elevation of the centre of the block model (including waste) is 1446.72 m RL. The upper elevation of the block model (including waste) is 1796.50 m RL and the lowest elevation is 1202.75 m RL. All measurements taken from the centre of the block. • The initial search orientations applied to the model related to the geometry of the orebody. A bearing of -35° and dip of -30° was applied.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.* • *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.* • *The assumptions made regarding recovery of by-products.* • *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).* • *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	• Estimation was completed using Datamine Studio RM® on a parent cell basis. The Gadir Resource Model is a sub-celled block model controlled by the geological domains. In addition, both hard boundaries and top-capping was used for all variables. • Top-capping was applied to Au, Ag, Cu and Zn assays to minimise the impact of grade outliers/extreme values, reduce the coefficient of variation (“CV”) within the mineralisation boundary and minimise the impact on the ordinary kriging (“OK”) estimation. o Au top-cap: 115.00 g/t o Ag top-cap: 480.00 g/t o Cu top-cap: 8.50% o Zn top-cap: 22.00% • Estimation was conducted via OK using three ‘passes’. Inverse Power Distance (“IPD”) estimation was performed as well in order to validate and compare the two estimations. o Full block estimation was performed, negative kriging weights were set to zero and estimation kriging variances greater than the respective variogram variance were reset to the variogram sill.

Criteria	JORC Code explanation	Commentary
	• *Any assumptions behind modelling of selective mining units.* • *Any assumptions about correlation between variables.* • *Description of how the geological interpretation was used to control the resource estimates.* • *Discussion of basis for using or not using grade cutting or capping.* • *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	○ Initial search orientations were derived from the principal structural orientations of the mineralisation. The principal search ranges for Au were set at 7 x 8 x 7 m. Second and third passes with x2.5 and x3.5 multipliers for the search ranges were applied. Minimum and maximum samples per estimate were: ○ Pass 1 – 16 minimum; 32 maximum ○ Pass 2 – 10 minimum; 32 maximum ○ Pass 3 – 3 minimum; 20 maximum • The search was orientated along the plane of mineralisation. This correlated with the average orientation of the Au, Ag, Cu and Zn variography. • The Mineral Resources Estimate was subsequently depleted for mining to the end of August 2018. • No assumptions regarding the recovery of by-products were applied. • No assumptions relating to deleterious elements or other non-grade variables of economic significance were applied. • The parent cell size of the block model is 5 mX x 5 mY x 5 mZ. This cell size was derived from the extensive underground ore development, infill and grade control drilling, kriging efficiency and slope of regression analysis. A parent cell height of 5 m was deemed optimal for underground planning purposes. • Waste blocking was also set to 5 x 5 x 5 m sizing. • No selective mining unit assumptions were made. • Available testwork indicated possible correlation between grade variables and bulk density data. The grade variables were modelled independently based on the Au domaining (the main revenue for the operation). • Local knowledge of the mining area and the typical structures from exposures provided the bases for interpretation. This was used to create 3D solids. These solids were used to define hard boundaries during estimation, as observed and verified during mining operations.

Criteria	JORC Code explanation	Commentary
		• As part of the mining process, grade control drilling, truck sampling and process reconciliation forms part of the daily management of the operations. As such, extensive production data is available for comparison. The relative accuracy of the estimated resource compares well to the production data and the confidence in the estimate, given the amount of geological data, is considered high. • The OK and IPD estimations were validated by: o Visual comparison of sections and plans with block estimates and composite intervals. o Statistical comparison of grade distributions for block estimates and declustered composites. o Swath plots were created of block model estimates and declustered composites in x,y,z orientations for Au, Ag, Cu and Zn mineralisation. • These validations confirmed that there was a good correlation between declustered composites and declustered block model estimates. Instances of over-estimation was not encountered during analysis. • The estimation method is considered appropriate for the style of mineralisation and geometry of the mineralised zone.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	• Tonnage was estimated on a dry basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	• Grade continuity was assessed at a range of cut-offs between 0.1 g/t and 3.0 g/t Au in 0.1 g/t increments. A tonnage-grade table and graph were prepared based on these variable cut-off grades. Following interrogation of this data, a 0.5 g/t Au cut-off grade was applied for the Gadir deposit.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the*	• This resource estimation was carried out on mineralisation that is currently being mined via underground methods. • The ore body is being worked using overhand stoping in the upper levels

Criteria	JORC Code explanation	Commentary
	process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	where the dip is steeper and room and pillar workings in the lower levels, where the dip is shallower. • The workings are connected to the spiral decline by drifts. Ore intersections along these drives are sampled for grade evaluation. The vertical distance between drifts for both mining methods is 10 m. • Mining dilution and mining dimensions are referenced in Section 4 (Estimation and Reporting of Ore reserves). • The current mining and ore extraction methodologies are appropriate for the geological conditions. The efficiency of extraction may be increased by sub-level stopping where the ore body is sufficiently thick and continuous. • Other mining factors are not applied at this stage. • Mineral Resources are developed by ore drives which are sampled and thereafter the appropriate mining method confirmed.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	• The Company currently operates an agitation leach plant, flotation plant, crushed heap leach pad and a run-of-mine dump leach facility. • Ore is blended with material from other AIMC operations to meet mill production targets. These targets therefore dictate the processing route the material follows. • The various plant operations have been in use since the start of extraction at Gedabek open pit (2009). As such, the basis for assumptions and predictions of processing routes and type of “ores” suitable for each process available are well understood. • Due to the high-grade nature of the ore, Gadir ore is typically processed via AGL. • No metallurgical factor assumptions were used during this estimation however these are discussed in Section 4 (Estimation and Reporting of Ore reserves).

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	• The Gadir underground deposit is located in the Gedabek Contract Area where AIMC currently operates two other mines (both open pit). • Approximately 20% of mine rock waste remains underground to be used primarily as stope-backfill material. The remainder is trucked to the surface waste dump. • As part of the initial start-up, environmental studies and impacts were assessed and reported for Gedabek. This included the nature of process waste as managed in the tailings management facility ("TMF"). Other waste products are fully managed under the AIMC HSEC team, including disposal of mine equipment waste such as lubricants and oils). • CQA has carried out a study of production waste management, in addition to designing and supervising the construction of the TMF and its recent expansion. CQA have permanent representation at Gadir and conduct monitoring of their baseline environmental systems (e.g. in local waterways). • No environmental assumptions were used during this estimation however they are discussed in Section 4 (Estimation and Reporting of Ore Reserves).
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.* • *The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.* • *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	• Bulk density values were analysed and determined. A total of 1,818 samples were tested by AIMC from selected core samples, which comprised both mineralisation and waste rocks. The density was tested by rock type, extent of alteration and depth. The method used was hydrostatic weighing. • Of the 1,818 samples, 292 density measurement samples were used to calculate the average density of the ore. • The samples within the ore material had an average density of 2.8 t/m3 and the waste rock were assigned a density of 2.5 t/m3. These densities have been used for resource calculation. • It should be noted that DD samples were tested for density, not CH samples. • Density data are considered appropriate for Mineral Resource and Mineral

Criteria	JORC Code explanation	Commentary
		Reserve estimation.
Classification	- *The basis for the classification of the Mineral Resources into varying confidence categories.* - *Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).* - *Whether the result appropriately reflects the Competent Person's view of the deposit.*	- The Mineral Resource has been classified on the basis of confidence in the following criteria: o AIMC have been involved with the development of the project, from exploration, construction, production and through to processing, since its discovery in 2012 o The nature and associated confidence in the interpretation of the mineralisation o Proximity to existing underground workings o DD and CH spacing and density o DD and CH sampling density and average distance between samples informing the estimate o The degree of interpolation versus extrapolation, as identified by the estimation pass o The kriging efficiency and slope of regression of the final estimate o The overall extents of the Gadir orebody – for example, areas supported by less than two drillholes (e.g. at the periphery) were reclassified as 'Exploration Potential' - Depending on the estimation parameters (described above), the Gadir resources were classified as Measured, Indicated or Inferred Mineral Resources, as defined by the parameters below. Additional 'Exploration Potential', that fall outside Inferred parameters, have also been considered. o **Measured**: Blocks estimated in search volume 1 with a minimum 16 samples (maximum of 32) and maximum of 5 per drillhole within 25 m of workings. o **Indicated**: Blocks estimated in search volume 2 with a minimum 10 samples (maximum of 32) and maximum of 5 per drillhole within 25 m of workings.

Criteria	JORC Code explanation	Commentary
		- **Inferred**: Blocks estimated in search volume 2 with a minimum 10 samples (maximum of 32) and maximum of 5 per drillhole outside of 25 m of workings ***or*** blocks estimated in search volume 3 with a minimum 5 samples (maximum of 20) and maximum of 5 per drillhole outside of 25 m of workings. - **Exploration Potential**: Blocks estimated in search volume 3 with a minimum 3 samples (maximum of 20) and all the blocks estimated less than 5 samples ***or*** all other material not classified within the Resource Categories and parameters above. • It is anticipated that material classified as 'Inferred' or 'Exploration Potential' may be upgraded with further drilling and sampling. • The results reflect the CP's view of the deposit.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	• Datamine consultants have been involved with other mining projects owned by the Company within the same contract area as the Gadir underground mine and as such are familiar with the processing methods available, value chain of the mining and cost structure. • The data used as part of this project were audited, validated and considered adequate for Mineral Resource estimates - all aspects of the data collection and management were observed and evaluated. • Internal company and external reviews of the Mineral Resources yield estimates that are consistent with the Mineral Resource results.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an*	• The relative accuracy of the Gadir Mineral Resource estimate is reflected in the applied Mineral Resource classification as per the JORC Code, 2012 Edition. • Confidence is high due to successful development and production of the deposit since 2015. There is good reconciliation between mine and mill production grades.

Criteria	JORC Code explanation	Commentary
	approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate. • *The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.* • *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	• The August 2018 Gadir Mineral Resources classified as Measured and Indicated are considered local estimates of tonnage and grade. Areas classified as Inferred are considered to be a global estimate of tonnage and grade. • Regions classified as Exploration Potential contain material that is not considered sufficiently well-defined, at this point in time, to allow mining operations to develop to these areas to extract the material without considerable risk. However, they are considered to be areas for future investigation – further drilling to increase geological confidence and sample/assay density will be able to confirm potential mineralisation. • The Gadir Mineral Resources table (for Au only) is presented below, with an Au cut-off of 0.5 g/t and depleted for mining development and production up until August 2018:

MINERAL RESOURCES (Cut-off grade 0.5 g/t Au)	**Tonnage**	**Gold**	
	kt	g/t	koz
Measured	540	3.70	64.2
Indicated	1,235	2.04	81.0
Measured + Indicated	**1,775**	**2.54**	**145.2**
Inferred	571	1.48	27.2
Total	**2,347**	**2.29**	**172.4**
Exploration	5	1.37	0.2

Note that due to rounding, numbers presented may not add up precisely to totals.

- Resources for Ag, Cu and Zn are presented in the main body of the report.
- Production data is available for block model comparison. The relative

Criteria	JORC Code explanation	Commentary
		accuracy of the estimation compares well to the production data, and the confidence in the estimate given the amount of geological data is considered high. Future extraction of mineralisation, grade control and mining data will continue to be used to compare with the Resource model. • The Mineral Resource Estimate (August 2018) is considered appropriate by the CP. • It is the CP's opinion that the classification has taken into account all relevant factors, local knowledge of the orebody and wealth of information accumulated since the commencement of exploration of Gadir.

Section 4 Estimation and Reporting of Ore Reserves

(Criteria listed in section 1, and where relevant in sections 2 and 3, also apply to this section.)

Estimation and Reporting of Ore Reserves is not applicable to this Statement of Resources (see [6] for Section 4)

Section 5 Estimation and Reporting of Diamonds and Other Gemstones

(Criteria listed in other relevant sections also apply to this section. Additional guidelines are available in the 'Guidelines for the Reporting of Diamond Exploration Results' issued by the Diamond Exploration Best Practices Committee established by the Canadian Institute of Mining, Metallurgy and Petroleum.)

Estimation and Reporting of Diamonds and Other Gemstones is not applicable to this Statement of Resources

GLOSSARY AND OTHER INFORMATION

1. GLOSSARY OF JORC CODE TERMS (as extracted from the JORC Code, 2012 Edition)

Cut-off grade	The lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. May be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification.
Indicated Mineral Resource	An 'Indicated Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape and physical characteristics are estimated with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. Geological evidence is derived from adequately detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to assume geological and grade (or quality) continuity between points of observation where data and samples are gathered. An Indicated Mineral Resource has a lower level of confidence than that applying to a Measured Mineral Resource and may only be converted to a Probable Ore Reserve.
Inferred Mineral Resource	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. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. An Inferred Mineral Resource has a lower level of confidence than that applying to an Indicated Mineral Resource and must not be converted to an Ore Reserve. It is reasonably expected that the majority of Inferred Mineral Resources could be upgraded to Indicated Mineral Resources with continued exploration.
JORC	JORC stands for Australasian Joint Ore Reserves Committee (JORC). The Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the JORC Code) is widely accepted as the definitive standard for the reporting of a company's resources and reserves. The latest JORC Code is the 2012 Edition.
Measured Mineral Resource	A 'Measured Mineral Resource' is that part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and final evaluation of the economic viability of the deposit. Geological evidence is derived from detailed and reliable exploration, sampling and testing gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes, and is sufficient to confirm geological and grade (or quality) continuity between points of observation where data and samples are gathered. A Measured Mineral Resource has a higher level of confidence than that applying to either an Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proved Ore Reserve or under certain circumstances to a Probable Ore Reserve
Mineral Reserves or Ore Reserves	An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined or extracted and is defined by studies at Pre-Feasibility or Feasibility level as appropriate that include application of Modifying Factors. Such studies demonstrate that, at the time of reporting, extraction could reasonably be justified.

Mineral Resource	A 'Mineral Resource' is a concentration or occurrence of solid material of economic interest in or on the Earth's crust in such form, grade (or quality), and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade (or quality), continuity and other geological characteristics of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge, including sampling. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
Modifying Factors	'Modifying Factors' are considerations used to convert Mineral Resources to Ore Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.
Probable Ore Reserve	A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. The confidence in the Modifying Factors applying to a Probable Ore Reserve is lower than that applying to a Proved Ore Reserve.
Proved Ore Reserve	A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. A Proved Ore Reserve implies a high degree of confidence in the Modifying Factors.

2. SOFTWARE USED IN THE MINERAL RESOURCE AND RESERVES ESTIMATE

Datamine "Studio RM®" and "***EPS®***" and "***MSO®***" software was used in the estimation of Mineral Resources and Ore Reserves.

ANGLO ASIAN MINING PLC

Anglo Asian Mining PLC.
7 Devonshire Square
Cutlers Garden
London
EC2M 4YH
United Kingdom

DATAMINE

Datamine International Limited
Unit A, Underwood Business Park
Wookey Hole Road
The Wells
Somerset
BA5 1AF
United Kingdom