



NI 43-101 Technical Report for the Mineral Resources Estimate on the Omagh Gold Project, County Tyrone, Northern Ireland

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# 1.0 SUMMARY

# 1.1 INTRODUCTION

Micon International Co Limited (Micon) was contracted by Galantas Gold Corporation (Galantas or the Client) to provide a NI 43-101 compliant technical report (the Report) on the Mineral Resource estimate (MRE) of the Omagh Gold Project (the Project), located in County Tyrone, Northern Ireland.

The Omagh Gold Project, also known as the Cavanacaw Mine, was initially an open pit operation between 2006 and 2012, exploiting the Kearney and Joshua narrow vein gold systems. Following the granting of planning permission, development of the Kearney vein system moved underground in March 2017. Over 2.5 km of ore and waste development have been completed and the first series of production stopes were opened in July 2022.

The Report was prepared to support disclosure of an updated NI 43-101 compliant MRE for the Omagh Gold Project, effective 22<sup>nd</sup> June 2023 (the 2023 MRE).

The MRE, prepared by Micon, includes the main Kearney and Joshua vein systems which have been updated on the basis of 42 additional drill holes and a complete review of the previous vein wireframe interpretations.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM, 2014) and were prepared using the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019).

# **1.2 PROPERTY DESCRIPTION AND LOCATION**

The Omagh Gold Project is located 5 km west southwest of Omagh in County Tryone, Northern Ireland (Figure 1.1). The coordinates of the Project mine site are at approximately latitude 54 35' 00" N and longitude 70 22' 60" W, or 639,863E and 870,734N in the Irish National Grid which is the coordinate system used for the Project. Flintridge Resources Limited, a wholly owned subsidiary of Galantas Gold Corporation, holds an estimated 220 acres of freehold land.

Galantas through its wholly owned subsidiary, Flintridge Resources Limited, has exclusive exploration rights for gold, silver, base metals, and other minerals over the licences (options) OM1 and OM4 (Figure 4.2). The Omagh Gold Project is located within licence OM1. The CEC has granted a Mines Royal Mining Lease to Flintridge Resources Limited, commencing 23<sup>rd</sup> June 2015 for a term of 15 years. The Mining Lease covers the Omagh Gold Project and freehold land owned by wholly owned Galantas subsidiaries. Details of the licence and leases are listed in Table 1.1.

Royalties, where a Mining Lease has been granted, are fixed by individual agreement. Galantas has an agreement of a 4% royalty on net smelter return payable to the Crown Estate.



# Oragh Gold Point Coole Landow Coole Landow Coole Landow

#### Figure 1.1: Location of the Omagh Gold Project

Source: Modified from Google Earth imagery, Micon (2023).

Licence (Option)	lssuer	Tenant Name	Area (ha)	Start Date	End Date
OM 1	CEC	Flintridge Resources Ltd.	18,200	19/07/2015	18/07/2025
OM 4	CEC	Flintridge Resources Ltd.	25,200	01/01/2015	31/12/2024
OM 1	DfE	Flintridge Resources Ltd.	18,200	19/07/2016	30/09/2028
OM 4	DfE	Flintridge Resources Ltd.	25,200	08/05/2019	07/05/2025
Mining Lease	CEC	Flintridge Resources Ltd.	196	23/06/2015	22/06/2030

#### **Table 1.1: Galantas Licence Details**

Note: CEC – Crown Estate Commission, DfE – Department for the Economy. Flintridge Resources Limited is a wholly owned subsidiary of Galantas.

A planning application for an underground mine, updated processing plant, and the export of a limited quantity of waste rock was granted on the 27<sup>th</sup> July 2015. The planning permission permits underground mining at the Omagh Gold Project and includes the Kearney, Joshua, and Kerr veins. The planning permission expires on the 27<sup>th</sup> July 2030. This may be extended with a new planning application.

Discharge consents are held by Galantas for mine waters from the Department of the Environment for Northern Ireland (DoE NI), via the Northern Ireland Environment Agency (NIEA). Other required operating permits are in operation, such as that issued by the Industrial Pollution and Radiochemical Inspectorate (IPRI).



# 1.3 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The county town of Omagh and the mine area are easily accessible by paved road from Belfast. The road distance is less than 100 km and takes approximately 1.5 hours. Belfast is served by two airports with domestic and international flights. Situated some 5 km from Omagh, the mine site is accessible by public paved roads. The mine site contains a concreted road to the processing plant and various unpaved roads.

The principal prospecting licence and option (OM1) is situated on the south-western fringe of the Sperrin Mountains in glaciated terrain. Topography ranges from 140 m to 160 metres above sea level with rounded hills up to 330 m. Glacially derived till in thicknesses up to 18 m, provides generally low-quality grazing, except where techniques such as drainage and fertility have been carried out to improve grazing quality for farming. There are some small coniferous plantations for commercial forestry and one is situated on the mine site.

The climate is temperate with about 1,500 mm of rainfall per annum. The usual pattern of mild winters has been disrupted in recent years by severe falls in temperature. The disruption has been short lived, and the mine and processing plant can operate year-round.

Omagh is a county town and hosts schools, colleges and is a local administrative centre. Operators of mobile plant are available in the local workforce and there is local knowledge of crushing and screening. Operators of the flotation plant have been trained. A number of skilled, small and medium size, engineering companies exist in the local region and the out-sourcing of a wide range of engineering and maintenance work is available.

Two power lines (33 kV and 11 kV) traverse close to or on the site, however, power to the mill is generated with diesel on site. There is a mains water connection to the Omagh Gold Project which predominantly serves the office and welfare facilities. All water usage for underground mining and processing is pumped form the polishing pond which has a plentiful supply.

Galantas and its wholly owned subsidiaries have acquired significant freehold land holding over a number of years. It now holds approximately 220 acres of freehold land which is sufficient to operate its underground mining operation, processing plant, and waste disposal areas.

# 1.4 HISTORY

Aware of the potential for Dalradian rocks to host precious metals, The Geological Survey of Northern Ireland carried out mapping and geochemical surveys across the Sperrins in the 1970s (Arthurs, 1976). Following the Curraghinalt gold discovery in the mid-1980s by Ennex International, Riofinex North Limited (Riofinex) commenced exploration on the Lack Inlier. The Kearney structure was discovered early in the exploration programme.

In 1990 Omagh Minerals Ltd. (OML) acquired the project from Riofinex. The CEC entered into a Mining Lease with OML, conditional planning consent was granted in 1995. In 1997, European Gold Resources (EGR) of Ontario acquired OML. In 2000 and 2001, OML carried out selective mining trials and produced a high grade, sulphidic ore. The planning conditions were fulfilled in 2001, solidifying the consent.

In 2003 EGR commissioned ACA Howe to analyse Landsat satellite imagery and to integrate with other exploration data leading to the identification of 24 exploration targets.

EGR was renamed Galantas Gold Corporation in 2004. Following a financing in early 2005, Galantas commenced open pit development.

In the summer of 2005, Galantas contracted an airborne time domain electromagnetic (VTEM) and magnetic survey over the Lack Inlier. The results identified new geophysical targets and helped prioritise existing targets.

Galantas started to build the ore processing plant in November 2005 and commenced mining development in early 2006. Mining continued until 2012, over 30,000 troy ounces of gold was produced during the open pit phase.

Significant exploration took place within licence OM1 between 2011 and 2016, including diamond drilling and detailed channel sampling programmes completed over the Joshua, Kerr and Kearney vein systems.

A seven-month drill programme was initiated in September 2015 to target the Johsua vein at depth. This programme also identified a new vein, Kestrel, running 100 m west of Joshua. The underground development phase began in March 2017, throughout this stage detailed geological face and plan maps were created, leading to a better understanding of the geometry of the Kearney vein system. A new 4-month surface drilling programme began in July 2021, and a longer underground drilling exploration phase began in September 2021.

# 1.5 GEOLOGICAL SETTTING AND MINERALISATION

The Omagh Gold Project lies within the Caledonian orogenic belt. The principal host rocks of gold mineralisation in the region belong to the late Neoproterozoic to Cambrian aged Dalradian Supergroup. Gold mineralisation can be characterised as Palaeozoic orogenic type.

Mineral exploration during the past 30 years has identified a number of significant deposits in the Caledonian orogenic belt including Curraghinalt and Cavanacaw (the Omagh Gold Project) in Northern Ireland, and Cononish in Scotland. The along-strike extensions of the Caledonian belt into Scandinavia and North America are known to host a number of major mineral deposits in a similar geological environment.

The Omagh Gold Project is hosted in the Sperrin Nappe, an SSE-verging overturned limb of an isoclinal nappe within the Lack Inlier. The metamorphic grade exposed at surface is greenschist to lower amphibolite grade. The deposit itself is hosted by the Mullaghcarn Formation that is composed of fine grained clastic meta-sedimentary rocks including psammites, semi-pelites and chlorite-rich pelites, interbedded with basic metavolcanics.

The Lack Inlier is bounded by the Cool Fault in the north and the Omagh Thrust-Castle Archdale faults in the south. Deformed graphitic schists are well developed along the Omagh Thrust, south of the Omagh Gold Project. Several ENE-trending steeply dipping faults and shear zones dissect the inlier. The NNE-trending Omagh Lineament, one of three major, parallel, basement lineaments in the region, crosses the eastern part of the Lack Inlier, in the area underlain by the north trending Omagh Gold Project vein swarm.



The Omagh Gold Project vein swarm comprises 17 named vein structures in an area of about 6 km<sup>2</sup>. The most important of those vein structures are the Kearney and Joshua vein systems, which are the focus of the MRE described in this technical report.

The Kearney vein system is the largest mineralised vein system. It is comprised of 22 modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 8.0 m. The Kearney vein system has a strike length of approximately 850 m and a maximum vertical extent proved by drilling is 337 m, it remains open at depth down plunge. The three largest veins are continuous for between 400 m and 800 m along strike. Smaller discontinuous veins may only extend for less than 80 m along strike.

The Joshua vein system is the second largest mineralised vein system. It is comprised of seven modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 5.0 m. The Joshua vein system for the purpose of this report includes the closely sited Kestrel vein which is approximately 100 m to the west of the Joshua vein system. The Joshua vein system has a strike length of approximately 1 km and a maximum vertical extent proved by drilling is 200 m, it remains open at depth down plunge. The largest vein is continuous for the entire strike length of the Joshua vein system. Smaller discontinuous veins may only extend for less than 50 m along strike.

Mineralisation consists of centimetre-to-metre-scale wide brecciated quartz veins with disseminated to massive auriferous sulphides, predominately pyrite and galena with some accessory arsenopyrite and chalcopyrite. Quartz veins pinch and swell from stringers to widths greater than a metre over distances of several metres. The veins are commonly fringed by varying widths of clay gouge. Wall rock alteration in the form of sericitisation and bleaching may extend several metres into quartz-feldspar schist host rocks, depending on the degree of fracturing. The vein systems of the Omagh Gold Project are structurally controlled complex zone of quartz-sulphide mineralisation and associated alteration, along which there has clearly been tectonic movement, resulting in an irregular brecciated lattice-work of mineralised veins.

Mineralisation is primarily hosted in massive sulphides, quartz veins within the quartz breccia unit, and clay gouge. Altered wall rock may also host mineralisation depending on the degree of fracturing. Gold values are closely correlated with sulphide content.

Digitised maps of Riofinex trenches from the Kearney open pit, and underground geological maps from Galantas illustrate a complex high strain shear zone with the main tabular vein occasionally splitting into narrower veins before merging again along strike. The N to NNW trending Kearney and Joshua veins are generally at high angles to the host rock foliation, although it can vary significantly and become parallel with the veins (Shaw et al., 2022). The veins do show variations from the broad N to NNW-trend at a local scale. Notwithstanding the complexity of the shear zone, the Kearney vein system is mapped to be continuous along strike.

The Kearney vein also shows a classic pinch and swell geometry which is most evident in the underground geological map on a scale of 40 m to 60 m. The map also illustrates how thicker "swell" zones of massive sulphide and quartz breccia are connected by thinner "pinch" veins and zones of black clay fault gouge. Galantas have identified similar pinch and swell structures in the Joshua vein.

The pinch and swell structures have been described by Galantas as potential dilation zones. Dilation zones have potential for wider intervals of mineralisation and are believed to be linked on shallow



N-dipping planes related to the regional SE directed thrusting. Conversely, Shaw et al. (2022) link the pinch and swell structures to continuous deformation with the narrow clay gouge rich shear zones accommodating the majority of the counter-shearing during rotation, whereas the more competent quartz breccia and massive sulphide buckled during the same rotation. They describe the shallowly N-dipping faults as post-dating mineralisation.

# 1.6 EXPLORATION

Exploration activities on the Omagh Gold Project, other than drilling, have included geological mapping, geochemical sampling (stream sediment, soil, grab, and pionjar deep overburden sampling), trenching and surface channel sampling, underground face sampling, geophysical surveys, and topographic surveys. These activities have been conducted in order to better understand the geology and to identify new mineral occurrences or targets across the Project area.

The underground geological maps and surface channel samples were used to inform the geological models of the Kearney and Joshua vein systems and representative surface channel samples were used in the MRE.

A number of surface topographic surveys are available for the Omagh Gold Project, these include final pit surveys of the Kearney pit and a 2012 high resolution survey of the whole Project area. Survey string files showed that excavated areas had not been captured in these topographic surveys. Micon constructed a composite topographic wireframe from the available data that best represents the limit of open pit mining.

Underground surveys of development and stopes are regularly captured by Galantas using 3D and laser scanning. These are used to construct 3D wireframes.

#### 1.7 DRILLING

Drilling was completed by two companies: Riofinex between 1987 and 1990, and Galantas between 2006 and 2022. All drilling of the Kearney and Joshua vein systems is diamond drill core. The Galantas drilling can be split into four separate drill campaigns: 2006 to 2007, 2011 to 2013, 2015 to 2016, and 2021 to 2022. All drilling prior to the 2021 to 2022 drill campaign was completed from surface. With the underground development at the Kearney vein, all Kearney drill holes in 2021 to 2022 campaign were completed from underground. In total 237 holes have been drilled, totalling 3,432 m. Of the core drilled 60% has been logged and 7% assayed.

Recovery data is unavailable for the Riofinex drill holes. However, it is recorded that in general, core recoveries were in excess of 90% including most vein intersections, even where quartz and sulphide were hosted by soft clays. The average core recovery for Galantas drill hole is greater than 92%.

A grid transformation was applied to Riofinex drill holes by Galantas due to discrepancies between collars and georeferenced historical maps. It is noted that the discrepancy is likely due to a previous grid transformation applied in 2008.

The majority of drill holes were down hole surveyed. In total 23 drill holes lack surveys and the majority of these are less than 100 m deep. It is recommended that paper records are checked to ensure all the down hole survey data has been digitised.



Drill intercepts intersect the vein structures at variable angles and therefore do not always represent the true vein thickness. However, the true thickness is easily calculated due to the consistent strike and dip of the vein structures, and this is supported by observations from the underground ore development.

In the opinion of the QP, the drill methods, core recovery, collar survey, and downhole survey data collected in the drill programmes are sufficient to support the MRE. There are some factors that could affect the reliability of the results, but Micon is of the opinion that they will not have a material impact on the Mineral Resources. These include missing down hole survey and recovery data.

# 1.8 SAMPLE PREPARATION, ANALYSES AND SECURITY

The assay grades used in the MRE are from drill core samples collected from Riofinex drilling between 1987 and 1989, and Galantas drilling between 2006 and 2022. Assay grades from a limited number of Galantas surface channel samples were also used in the MRE.

There is limited information on the logging, sampling, sample preparation, and assay of the Riofinex drill core. All drill core was logged, with an additional detailed alteration and mineralogical log for all sampled and analysed drill core. The drill core was selectively sampled based on the logged mineralisation. Sampled drill core was split in half with a diamond core saw and submitted to the laboratory for analysis. Further preparation of the half core sample including crushing, grinding, and sub-sampling are not described in the available documentation. The sample laboratory is unknown. The samples were analysed for gold and silver by fire assay and lead by AAS.

The logging and sampling, sample preparation, and assaying methodology is generally consistent for the different Galantas drilling and sampling campaigns. The drill core is logged to capture the necessary geological and structural information. Geological logging captures the lithology, alteration, structure, quartz vein characteristics, sulphide content, and rock quality designation (RQD) data. Galantas undertook a work program in 2022 to align the logging codes from the historical and recent drill campaigns. Drill core is selectively sampled with sampled intervals based on the logged mineralisation and lithology. The core is cut in half with a circular diamond bench saw, bagged, and dispatched via courier or driven by Galantas to the laboratory.

The accredited laboratory has changed ownership during the drilling. Prior to 2011 it was known as OMAC Laboratories Limited (OMAC) and in 2011 it became part of ALS Limited (ALS). The samples are prepared by the laboratory and comprises of drying the samples, jaw crushing to 70% <2 mm, sample splitting of a 1 kg sub sample using a riffle or rotary splitter, and homogenisation and pulverisation to  $85\% < 75 \,\mu$ m. Samples are analysed for gold by a 30 g fire assay with AAS (atomic absorption spectroscopy) or ICP-AES (inductively coupled plasma atomic emission spectroscopy), and samples returning grades > 100 Au ppm are with a gravimetric finish.

Density measurements were collected by Galantas from grab samples in 2008 and drill core samples in 2022. The density was calculated by weighing the sample in air and suspended in water.

Quality Assurance Quality Control (QAQC) data for the Riofinex drilling campaign was not available to Micon. It is likely that QAQC samples were submitted as part of the drilling campaign based on available reports. QAQC data for the Galantas drilling campaigns include standards, blanks, and duplicates. Micon is of the opinion that the QAQC procedures and available results are acceptable for use of the sample data in the MRE. In general, the procedures are at, or close to, industry



standards. However, there is room for improvement and Micon has made a number of recommendations.

# 1.9 DATA VERIFICATION

Liz de Klerk (QP) and Dr Ryan Langdon visited the Omagh Gold Project for two days from 15<sup>th</sup> to 16<sup>th</sup> November 2022. The purpose of the site visit was to visit the current underground and historical open pit operations, the processing plant, to meet key technical staff, and to review and observe all aspects of the geology, exploration, drilling, sampling and assaying, data collection, database compilation, deposit modelling and QAQC programme.

Micon reviewed the drill rig, core logging, sampling and sample preparation on site and they are to current industry standards. Micon also compared and verified the drill hole logs and assay results to the remaining half drill core for selected holes.

The historical drill hole data from Riofinex was compared with the Galantas data as part of the verification. This was done because the QAQC samples for the Riofinex drill holes are not available and the documentation on the drilling is limited. Mineralised intercepts from the twin holes that were drilled by Galantas were not spatially close enough to be directly compared. However, the drill hole pairs do intersect the same vein structures and show continuity of the mineralisation. A comparison of gold grades and thicknesses of Riofinex and Galantas mineralised intercepts did not show any clear bias, but variability in the results is likely due to the small number of data points and the distance between them of up to 20 m. The veins are observed to pinch and swell over short distances, with similar variations in gold grade are also observed. Micon considered the inclusion of the Riofinex data in the MRE as reasonable based on the comparison and the observation that a large number of mineralised Riofinex drill hole intercepts have been mined out in the Kearney open pit or intercepted in the underground development.

The sample collection, analytical methodologies and drill hole database are to current industry standards and permit a meaningful investigation of the mineralisation at the Omagh Gold Project for the purpose of resource estimation under the 2019 CIM Guidelines and provide the basis for the conclusions and recommendations reached in this Report.

# 1.10 MINERAL PROCESSING AND METALLURGICAL TESTING

The Omagh Gold Project processing plant has been operational since 2007 and is located on the mine site, approximately 0.8 km by road from the underground portal. The processing plant processed all the ore from the open pit mining operation between 2006 and 2012 when approximately 30,000 oz of gold was produced. Underground ore from the ore development and initial stopes has been periodically processed through the plant. The ore extracted from the open pit and underground is considered to be equivalent in terms of mineral processing.

The generalised mineral processing route in the plant is crushing, single stage grinding, and flotation to produce a concentrate which is sent offsite for smelting and refining in the Netherlands. The process plant recovery generally varies between 85 and 95% and the approximate concentrate gold grade is 100 Au ppm. Planned process plant upgrades include a new crushing circuit to improve throughput.



Initial froth flotation test work was carried out by Lakefield in 1992 and 1998. The plant that currently operates is based upon the results of that test work. Further tests on tailored reagents have been carried out during operation of the plant, and improvements made. Additional test work is planned, including particle size distribution (PSD), bulk modal analysis (BMA), particle liberation study (PLS), and target phase search (TPS).

# 1.11 MINERAL RESOURCE ESTIMATES

The MRE, prepared by Micon, includes the main Kearney and Joshua vein systems only. The database includes drill hole and channel sample data collected between 1987 and 2022 by Riofinex and Galantas. Some surface channel samples, and all underground channel samples were not included in the MRE database because of uncertainties in the true vein width and grades, and unconstrained vein boundaries. The samples were only used to inform the general trend of the vein wireframes.

A total of 310 density measurements were collected by Galantas from grab samples in 2008 and drill core samples in 2022. The different ore types are present in varying proportions within individual Kearney and Joshua veins. Density determination of individual mineralised intercepts was not possible because not all vein intercepts have been logged. As such, the length weighted average density of all logged mineralised intercepts was calculated using the average density values for each ore type. An average density value was assigned to the veins and waste blocks of 2.98 t/m<sup>3</sup> for veins and 2.70 t/m<sup>3</sup> for waste.

A complete review and remodelling of the vein wireframe interpretations was undertaken for the Kearney and Joshua vein systems. Assay grades at a cut-off of 1.0 Au ppm were primarily used to select mineralised intervals for wireframing and the lithology data was used as supporting secondary data. Underground mapping at Kearney gave additional spatial constraints on the vein hangingwall and footwall surfaces in the form of polylines. The inclusion of internal waste was kept to a minimum. No minimum thickness was used for the assigned intervals, the vein wireframe is a 3D representation of the mineralised ore body. The vein systems were modelled with a minimum thickness of 0.1 m. Pinch outs were manually digitised using polylines and the vein wireframes were clipped to ensure that they did not extend significantly beyond the drill data. The clipping boundary was limited to within 70 m of drill hole data for the largest most continuous veins and within 50 m for the smaller more discontinuous veins. For the Kearney and Joshua vein systems there are major veins that make up majority of the modelled wireframes. At Kearney, vein\_3, vein\_9, and vein\_19 represent 73%, and at Joshua vein\_1 represents 86%, of the respective total vein volume.

Outlier grades were capped before compositing interpolation to limit their influence. Based on the log probability plots a cap or 80 Au ppm was used for vein structures that contained outlier values.

The MRE was interpolated using two-dimensional (2D) approach. As such, the length weighted gold grade of each vein intercept was calculated for all the modelled Kearney and Joshua veins. The true thickness of the vein intercepts were interpolated from the modelled vein wireframes.

A 2D method of interpolation was preferred because of the narrow tabular shape of the veins. The veins have been sampled on intervals of varying length which makes compositing for threedimensional (3D) estimation problematic. Furthermore, the full vein width is likely to be mined within a single stope. Each modelled vein structure was estimated individually using hard boundaries. The block models utilised a block size of 5.0 m (X) by 5.0 m (Y). The accumulation was



interpolated into the block model using inverse distance to the power of 3 (ID<sup>3</sup>), as was the vein thickness. The gold grades were calculated on a block-by-block basis as the ratio of accumulation to vein thickness. After interpolation the 2D interpolated values were transferred to the 3D block models for Kearney and Joshua.

In order to assess the quality of the block model estimate multiple methods of validation were performed, including visual inspection, statistical comparison, decluster plots, and swath plots. All the model validations were satisfactory, and the estimates were considered appropriate for Mineral Resource reporting.

The MRE was classified in accordance with National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects and as defined in the CIM Definition Standards, 2014. Mineral Resources were classified as Measured, Indicated, and Inferred. The Mineral Resource classification is based on the following:

- **Measured** within 20 m of closely spaced surface channel samples used in the MRE. Or, volumes where the average distance to the nearest drill hole is generally <20 m and the majority of intercepts are from recent underground drill holes where there has been underground development;
- Indicated volumes where the average distance to the nearest drill hole is generally <40 m; and,
- Inferred all other interpolated blocks inside the vein wireframes.

By definition, a Mineral Resource has reasonable prospects for eventual economic extraction or RPEEE (CIM Definition Standards, 2014). Only ore that meets RPEEE were considered in the Mineral Resource Statement, assuming inputs derived from metallurgical test work and similar operations. In accordance with the recommendation of the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines 2019 a Mineable Shape Optimiser (MSO) was used to identify spatially continuous mineralisation within potentially mineable shapes using reasonable assumptions based on the current operation and long-term price trends. For the MSO a minimum stope width of 1.2 m optimised to a cut-off of 2.25 Au ppm was used.

The Mineral Resources for the Joshua and Kearney veins have an effective date of 22<sup>nd</sup> June 2023. The Mineral Resources were constrained to the topographic surface that represents the limit of open mining from the available data and depleted for the underground development and stope wireframes that were correct as of the 31<sup>st</sup> December 2022.

A cut-off of 2.25 Au ppm was used in the MSO optimisation process and diluted tonnages and grades are reported based on the optimised stopes. Waste blocks within individual optimised stopes were assigned to Measured, Indicated, or Inferred on a proportional basis.

The Mineral Resource statement is presented in Table 1.2 for the Kearney and Joshua vein systems.



Classification	Vein	Tonnage (t)	Gold Grade (Au ppm)	Contained Gold (oz)
Measured	Kearney	94,131	6.73	20,371
measured	Joshua	18,381	6.59	3,897
Indicated	Kearney	402,924	6.50	84,258
indicated	Joshua	247,217	7.39	58,730
	Kearney	497,055	6.54	104,629
Measured + Indicated	Joshua	265,598	7.33	62,627
	Total	762,653	6.82	167,256
	Kearney	402,479	5.33	69,020
Inferred	Joshua	283,925	6.21	56,648
	Total	686,404	5.69	125,668

# Table 1.2: Mineral Resources of the Kearney and Joshua Vein Systems Effective 22<sup>nd</sup> June 2023

Notes:

- 1. The Mineral Resource Estimate has been prepared in accordance with National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects with an effective date of 22<sup>nd</sup> June 2023.
- 2. The database was closed on the 31<sup>st</sup> December 2022 and the underground development surveys are correct as of the 31<sup>st</sup> December 2022.
- 3. To demonstrate RPEEE underground Mineral Resources were constrained by MSO shapes of 1.2 m minimum stope width optimised to a cut-off of 2.25 Au ppm.
- 4. Economic parameters for cut-off grade determination: US\$1,800 oz gold price, 92% process recovery, 90% payability, 4% royalty, US\$120 t mining cost, US\$30.72 t processing cost, US\$13 t general and administration.
- 5. Diluted tonnages and grades are reported based on the optimised stopes.
- 6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the estimated Mineral Resources will be converted into Mineral Reserves.
- 7. Average density values: mineralised veins =  $2.98 \text{ t/m}^3$ , waste = $2.70 \text{ t/m}^3$ .
- 8. Grade interpolation by 2D inverse distance cubed (ID<sup>3</sup>) using a block size of 5 m (X) by 5 m (Y), with grade capping for outliers at 80 Au ppm.
- 9. Mineral Resource Classification:
- 10. Measured within 20 m of channel samples used in the Mineral Resource estimate or volumes where the average distance to the nearest drill hole is <20 m and the majority of intercepts are from recent underground drill holes.
- 11. Indicated volumes where the average distance to the nearest drill hole is <40 m.
- 12. Inferred all other interpolated blocks inside the vein wireframes.
- 13. Mineral Resources figures have been rounded to reflect that they are estimates.

The 2023 MRE for the Omagh Gold Project is set out Table 1.3. It includes the results of the MRE for the Kearney and Joshua vein systems by Micon, effective 22<sup>nd</sup> June 2023 (Table 1.2). All other veins were not updated during the process and therefore remain unchanged from the 2014 MRE (Galantas Gold Corporation, 2014).



Classification	Vein	Tonnage (t)	Gold Grade (Au ppm)	Contained Gold (oz)
	Kearney	94,131	6.73	20,371
	Joshua	18,381	6.59	3,897
	Kerr	6,848	4.63	1,019
	Elkins	-	-	-
Measured	Gormleys	-	-	-
	Princes	-	-	-
	Sammy's	-	-	-
	Kearney North	-	-	-
	Total	119,360	6.59	25,287
	Kearney	402,924	6.50	84,258
	Joshua	247,217	7.39	58,730
	Kerr	12,061	4.34	1,683
	Elkins	68,500	4.24	9,000
Indicated	Gormleys	-	-	-
	Princes	-	-	-
	Sammy's	-	-	-
	Kearney North	-	-	-
	Total	730,702	6.56	153,671
	Kearney	497,055	6.55	104,629
	Joshua	265,598	7.33	62,627
	Kerr	18,909	4.45	2,702
	Elkins	68,500	4.24	9,000
Measured + Indicated	Gormleys	-	-	-
	Princes	-	-	-
	Sammy's	-	-	-
	<b>Kearney North</b>	-	-	-
	Total	850,062	6.56	178,958
	Kearney	402,479	5.33	69,020
	Joshua	283,925	6.21	56,648
	Kerr	23,398	3.20	2,405
	Elkins	20,000	5.84	3,800
Inferred	Gormleys	75,000	8.78	21,000
	Princes	10,000	38.11	13,000
	Sammy's	27,000	6.07	5,000
	Kearney North	18,000	3.47	2,000
	Total	859,802	6.24	172,873

#### Table 1.3: Mineral Resources of the Omagh Gold Project

Notes:

1. Updated MRE for the Kearney and Joshua veins were completed by Micon, effective date 22<sup>nd</sup> June 2023.

2. All other veins were not updated by Micon in 2023, and therefore remain unchanged from the 2014 MRE by Galantas as stated in the technical report, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, dated 26<sup>th</sup> July 2014 and filed on 4<sup>th</sup> September 2014.

3. The 2014 MRE has incorporated a different level of rounding to the current estimate, resulting in the reported contained ounces for the veins being approximated.



# 1.12 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

A detailed Environmental Statement was submitted with the underground mine planning application on the 6<sup>th</sup> July 2012. A report in 2019, reviewing whether this baseline data was up to date and accurate, concluded that most habitats were accurately reflected in the Environmental Statement.

A study of the potential for acid rock drainage in January 2013, concluded that mine waste rock is not acid forming and some waste rock may be potentially acid neutralising. In compliance with the 2016 planning consent, a number of rock samples have been taken at varying depths in the mine and found to be non-acid forming.

Reviews by the Northern Ireland Environment Agency (NIEA) in 2017 and 2018 of the ground water discharge report that the groundwater has detectable concentrations of some metals, but no other indication of pollution. There was no evidence that activities at the Omagh Gold Project had a detrimental effect on the chemical quality of the Kerr Burn, the main water discharge site of the mine.

The permitting requirements are set out in Planning Application K/2012/0373/F issued by the DoE NI. The planning application was submitted on the 6<sup>th</sup> July 2012 and expires on the 27<sup>th</sup> July 2030, upon which an extension may be granted with a new planning application. The permitting requirements include mention of the collection of baseline water level data, protection of the aquatic environment, retainment of trees and habitats, control of traffic levels on the local road network, implementation of a noise and dust management plans, and restoration requirements.

Environmental liabilities associated with the Omagh Gold Project include restoration requirements that exist under agreements made with regulating authorities. The CEC hold a restoration bond of £300,000 to ensure the requirements for site restoration are met.

Waste and tailings facilities are regularly monitored and inspected according to the site Waste Management Plan and dust and noise are effectively managed through a Dust Management Plan and a Noise Management Plan. Water is managed via a Monitoring and Action Plan for Controlled Water which lists detailed mitigation measures and procedures.

Within six months of the completion of the operations, the mine entrance will be made secure and all ground infrastructure, vehicles and buildings will be removed from the site compound. Progressive restoration of the site will be carried out and completed within one year from the cessation of operations. There will be a 5-year landscape and restoration aftercare period.

# 1.13 INTERPRETATIONS AND CONCLUSIONS

The Omagh Gold Project vein swarm comprises 17 named vein structures in an area of about 6 km<sup>2</sup>. The most important of those vein structures are the Kearney and Joshua vein systems, which are the focus of the MRE described in this technical report.

Mineralisation consists of centimetre-to-metre-scale wide brecciated quartz veins and clay gouge with disseminated to massive auriferous sulphides, predominately pyrite and galena with some accessory arsenopyrite and chalcopyrite.



The Kearney vein system is the largest mineralised vein system. It is comprised of 22 modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 8.0 m. The Kearney vein system has a strike length of approximately 850 m and a maximum vertical extent proved by drilling is 337 m, it remains open at depth down plunge. The Joshua vein system is the second largest mineralised vein system. It is comprised of seven modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 5.0 m. The Joshua vein system has a strike length of approximately 1 km and a maximum vertical extent proved by drilling is 200 m, it remains open at depth down plunge.

The exploration, drilling and sampling, and analysis described in this report, alongside the operational experience and observations from open pit mining and underground development permit a meaningful investigation of the mineralisation at the Omagh Gold Project for the purpose of resource estimation under the 2019 CIM Guidelines.

There are some factors that could affect the reliability of the results, but Micon is of the opinion that they will not have a material impact on the mineral resources. These include missing down hole surveys, core recovery data, and QAQC analyses. Furthermore, the pinch and swell geometry is not fully captured in the vein wireframes where data is widely spaced. This could lead to potential uncertainty in the vein volumes and tonnages and is reflected in the mineral resource classification.

There is potential to increase the Mineral Resources and the confidence in them. The Joshua and Kearney veins remain open at depth and down plunge. Drilling is ongoing at the Joshua vein system with the aim of testing predicted dilation zones. Further exploration of other Omagh Gold Project vein systems not modelled as part of this report, but reported in previous MREs, could also lead to increased mineral resources.

Micon recommends that both silver and lead are included in the next MRE update as this could have potential economic benefits for the Project.

# **1.14 RECOMMENDATIONS**

Micon made a number of recommendations, including:

- All recovered drill core is logged in detail before selecting samples for assay, and any drill core that is potentially mineralised should be sampled;
- Multiple samples are taken per underground channel sample according to geological or alteration contacts;
- All historical data (e.g. reports, maps, logs, assay certificates) are digitised so that a secure record of the data can be archived, and all data can be easily accessed by the QP in future;
- All sample data is collated into a central geological database for the Project; and,
- Silver and lead are included in the next MRE update as this could have potential economic benefits for the Project.



In general, QAQC procedures are at, or close to, industry standards. However, there is room for improvement and Micon recommends the following:

- All QAQC data from previous and future drill campaigns is located, digitised, and combined into a single QAQC database;
- No less than 5% of the total number of assays submitted should be submitted for any of the QAQC sample types;
- Analytical duplicates (pulp re-assays) should be submitted independently by Galantas;
- Standard samples submitted should be Certified Reference Materials, with known standard deviations and performance gates;
- For better representativity, a minimum of three standards should be used for gold assayed; one of these standards should approximate the Q1 assay value, one the median assay value, and another the Q3 assay value of the grade distribution; and,
- A certified blank material should be used for submitted blanks to ensure it contains no trace gold.



# 2.0 INTRODUCTION

Micon International Co Limited (Micon) was contracted by Galantas Gold Corporation (Galantas or the Client) to provide a NI 43-101 compliant technical report (the Report) on the Mineral Resource estimate (MRE) of the Omagh Gold Project (the Project), located in County Tyrone, Northern Ireland.

The Omagh Gold Project, also known as the Cavanacaw Mine, was initially an open pit operation between 2006 and 2012, exploiting the Kearney and Joshua narrow vein gold systems. Following the granting of planning permission, development of the Kearney vein system moved underground in March 2017. Over 2.5 km of ore and waste development have been completed and the first series of production stopes were opened in July 2022.

Galantas Gold Corporation is a publicly listed company on the TSX Venture and AIM exchanges under symbol GAL, and on the OTCQX under symbol GALKF.

# 2.1 PURPOSE AND SCOPE OF REPORT

The Report was prepared to support disclosure of an updated NI 43-101 compliant MRE for the Omagh Gold Project, effective 22<sup>nd</sup> June 2023 (the 2023 MRE).

The MRE, prepared by Micon, includes the main Kearney and Joshua vein systems which have been updated on the basis of 42 additional drill holes and a complete review of the previous vein wireframe interpretations.

Mineral Resources and Mineral Reserves are reported in accordance with the Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM, 2014) and were prepared using the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019).

#### 2.2 CAPABILITY AND INDEPENDENCE

Micon is an independent consultancy firm established over 30 years ago with senior geologists, mining engineers, metallurgists, and environmental specialists. The company has offices in the United Kingdom and Canada and full-time consultants in Moscow and France. All of Micon's professionals have extensive mining experience working with international mining companies and leading consulting firms.

Micon offers a broad range of consulting services to clients involved in the mining industry. The firm maintains a substantial practice in the geological assessment of prospective properties, the independent estimation of resources and reserves, the compilation and review of feasibility studies, the economic evaluation of mineral properties, due diligence reviews and the monitoring of mineral projects on behalf of financing agencies.

Micon's practice is worldwide and covers all of the precious and base metals, the energy minerals (coal and uranium) and a wide variety of industrial minerals. The firm's clients include major mining companies, most of the major United Kingdom and Canadian banks and investment houses, and a large number of financial institutions in other parts of the world. Micon's technical, due diligence and valuation reports are typically accepted by regulatory agencies such as the London Stock



Exchange, the US Securities and Exchange Commission, the Ontario Securities Commission, the Toronto Stock Exchange, and the Australian Stock Exchange.

Micon is internally owned and is entirely independent of Galantas Gold Corporation and their affiliated companies. The personnel responsible for this review and the opinions expressed in this technical report are Micon's full-time employees or Micon associates. For its services in preparing this technical report, Micon is receiving payment based upon time and expenses and will not receive any capital stock from Galantas Gold Corporation or any of their affiliated companies. Micon is reimbursing its associates based upon time and expenses.

# 2.3 PERSONNEL

The principal consultants responsible for the MRE and the preparation of this technical report have extensive experience in the mining industry and have appropriate professional qualifications:

- Liz de Klerk, M.Sc., Pr.Sci.Nat., FIMMM, Micon Managing Director, Senior Geologist, and Project Manager and Qualified Person;
- Dr. Ryan Langdon, PhD., MCSM, MEarthSci, CGeol, FGS., Micon Senior Resource Geologist;
- Matt Ball, MSci, AusIMM, Micon Junior Geologist, and,
- Sandra Stark, B.Sc., FGS, Micon Geologist.

Liz de Klerk, M.Sc., Pr.Sci.Nat., FIMMM who is a professional registered with the South African Council for Natural Scientific Professionals (SACNASP) has over 20 continuous years of exploration and mining experience in a variety of mineral deposit styles. Mrs. de Klerk has sufficient experience which is relevant to the style of exploration, mineralisation and type of deposit under consideration and to the activity which she is undertaking to qualify as a Qualified Person under the terms of NI 43-101.

# 2.4 SITE VISIT

Liz de Klerk, M.Sc., Pr.Sci.Nat., FIMMM, and Dr Ryan Langdon, PhD., MCSM, MEarthSci, CGeol, FGS. visited the Omagh Gold Project for two days from 15<sup>th</sup> to 16<sup>th</sup> November 2022.

The objectives of the site visit were to conduct a tour of the mine and associated infrastructure, view the underground drilling and drill core, to gather existing technical information, and to discuss crucial aspects of the deposit and operation with the Galantas staff. Further details of the site visit are described in Section 12.0.

# 2.5 SOURCES OF INFORMATION

The main sources of information for this technical report are the previous technical reports listed below, all other sources referenced are listed in Section 27.0.

- ACA Howe, 2008. Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008;
- ACA Howe, 2012. Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 10<sup>th</sup> August 2012;



- Galantas Gold Corporation, 2013. Technical Report on the Omagh Gold Project, Country Tyrone, Northern Ireland, July 2013;
- Galantas Gold Corporation, 2014. Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014;
- Galantas Gold Corporation, 2020. Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020; and,
- Riofinex North Limited, 1989. Project Report: Lack Gold Project, Northern Ireland, September 1989.

# 2.6 **DISCLAIMER**

Whilst Micon has reviewed the exploration and mining licences, permits and entitlements of the Project in so far as these may influence the investigation and development of the mining assets, Micon has not undertaken legal due diligence of the asset portfolio described in this report. The reader is therefore cautioned that the inclusion of exploration and mining properties within this report does not in any form imply legal ownership.

# 2.7 USE OF THIS REPORT

This report is intended to be used by Galantas subject to the terms and conditions of its agreement with Micon. That agreement permits Company Name to file this report as an NI 43-101 technical report with the CSA pursuant to provincial securities legislation. Except for the purposes legislated under provincial securities laws, any other use of this report, by any third party, is at that party's sole risk.

The conclusions and recommendations in this report reflect the authors' best judgment in light of the information available to them at the time of writing. The authors and Micon reserve the right, but will not be obliged, to revise this report and conclusions if additional information becomes known to them subsequent to the date of this report. Use of this report acknowledges acceptance of the foregoing conditions.

#### 2.8 UNITS OF MEASUREMENT

Quantities are generally stated in SI units, as utilised by international mining companies. These include metric tonnes (t), million metric tonnes (Mt), kilograms (kg) and grammes (g) for weight; kilometres (km), metres (m), centimetres (cm) and millimetres (mm) for distance; cubic metres (m<sup>3</sup>), litres (l), millilitres (ml) and cubic centimetres (cm<sup>3</sup>) for volume, square kilometres (km<sup>2</sup>) and hectares (ha) for area, weight percent (%) for potash grades and tonnes per cubic metres (t/m<sup>3</sup>) for density. All currency amounts are stated either in US dollars (US\$) or Euros (EUR).

A glossary and list of abbreviations are provided in Section 29.0.



# 3.0 RELIANCE ON OTHER EXPERTS

Micon has reviewed and analysed data provided by Galantas, its consultants and previous operators of the property, and has drawn its own conclusions therefrom, augmented by a direct field examination. Micon has not carried out any independent exploration work, drilled any holes, or carried out any sampling and assaying programmes.

While exercising all reasonable diligence in checking, confirming, and testing it, Micon has relied upon Galantas' presentation of the project data from previous operators and from Galantas' mining and exploration experience at the Omagh Gold Project in formulating its opinion.

Micon has not reviewed any of the documents or agreements under which Galantas holds title to the Project or the underlying mineral concessions and Micon offers no opinion as to the validity of the mineral titles claimed. A description of the properties, and ownership thereof, is provided for general information purposes only. The existing environmental conditions, liabilities and remediation have been described where required by NI 43-101 regulations. These statements also are provided for information purposes only and Micon offers no opinion in this regard.

The descriptions of geology, mineralisation, and exploration are taken from reports prepared by Galantas or their contracted consultants. The conclusions of this report rely on data available in published and unpublished reports, available information from other companies that have conducted exploration on the property, and information supplied by Galantas. The information provided to Galantas was supplied by reputable companies and Micon has no reason to doubt its validity.

Some figures and tables for this report were reproduced or derived from reports written by Galantas. Where the figures and tables are derived from sources other than Micon, the source is acknowledged below the figure or table.



# 4.0 PROPERTY DESCRIPTION AND LOCATION

The information in the Section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020 and Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014. Any text directly quoted from these reports is stated.

# 4.1 LOCATION

The Omagh Gold Project is located 5 km west southwest of Omagh in County Tryone, Northern Ireland (Figure 4.1). The coordinates of the Project mine site are at approximately latitude 54 35' 00" N and longitude 70 22' 60" W, or 639,863E and 870,734N in the Irish National Grid which is the coordinate system used for the Project. Flintridge Resources Limited, a wholly owned subsidiary of Galantas Gold Corporation, holds an estimated 220 acres of freehold land.



#### Figure 4.1: Location of the Omagh Gold Project

Source: Modified from Google Earth imagery, Micon (2023).

# 4.2 MINERAL LEGISLATION AND LICENSING

Two licensing (options) regimes are in place in Northern Ireland. The first is administered by the Crown Estate Commissioners (CEC) for gold and silver. The second is administered by the Department for the Economy (DfE) of the devolved Government of Northern Ireland and covers base metals and other minerals.

Under the Mineral Development Act (Northern Ireland) 1969, minerals, other than gold and silver and some minor exceptions, are vested with DfE, enabling it to grant prospecting licences and



mining licences for exploration and development of minerals (DfE, no date). This licensing system is based on the provisions of the 1969 Act and on subsequent subordinate legislation. The provisions relating to prospecting for minerals are quite separate and distinct from those relating to the development of minerals. There is no automatic continuity between exploration and development work.

The legislation covers all minerals with three main exceptions related to the scheduled substances:

- 1. Gold and Silver belong to the Crown Estates and were not vested in the DfE;
- 2. The few mineral deposits (mainly salt) which were being worked at the time of the 1969 Act were not vested in the DfE, and,
- 3. Common substances including crushed rock, sand and gravel and brick clays are excluded.

Prospecting licences, from DfE and Options (formerly Crown Exploration Licences), from CEC, require agreed work programmes. The terms of the different prospecting licences and Options are described below:

- CEC Option agreements are allocated for up to 10 years and are reported on five times during that period; and,
- DfE prospecting licences are allocated for six years and can be renewed thereafter. They are reported on every year, and three months after the end date. Exploration reports show that spending requirements have been met and agreed work programs completed.

Generally, drilling and other forms of exploration do not require planning consent but are regulated by statutory rules in Section 16 of the Planning (General Development) Order (Northern Ireland) 1993. Bonding arrangements are required. Mining operations need a separate Mining License and Planning Consent is required to enable the application to be made. In Northern Ireland, DfE collects royalties for base metals, where appropriate and precious metals royalties are payable to the Crown Estate.

# 4.3 LICENCES

Galantas through its wholly owned subsidiary, Flintridge Resources Limited, has exclusive exploration rights for gold, silver, base metals, and other minerals over the licences (options) OM1 and OM4 (Figure 4.2). The Omagh Gold Project is located within licence OM1. The CEC has granted a Mines Royal Mining Lease to Flintridge Resources Limited, commencing 23<sup>rd</sup> June 2015 for a term of 15 years. The Mining Lease covers the Omagh Gold Project and freehold land owned by wholly owned Galantas subsidiaries Figure 4.3.

Details of the licence and leases are listed in Table 4.1. Galantas has legal land access to the licences (options) and always gains landowners permission before doing so.



#### Table 4.1: Galantas Licence Details

Licence (Option)	lssuer	Tenant Name	Area (ha)	Start Date	End Date
OM 1	CEC	Flintridge Resources Ltd.	18,200	19/07/2015	18/07/2025
OM 4	CEC	Flintridge Resources Ltd.	25,200	01/01/2015	31/12/2024
OM 1	DfE	Flintridge Resources Ltd.	18,200	19/07/2016	30/09/2028
OM 4	DfE	Flintridge Resources Ltd.	25,200	08/05/2019	07/05/2025
Mining Lease	CEC	Flintridge Resources Ltd.	196	23/06/2015	22/06/2030

Note: CEC – Crown Estate Commission, DfE – Department for the Economy. Flintridge Resources Limited is a wholly owned subsidiary of Galantas.

# 4.3.1 Royalties

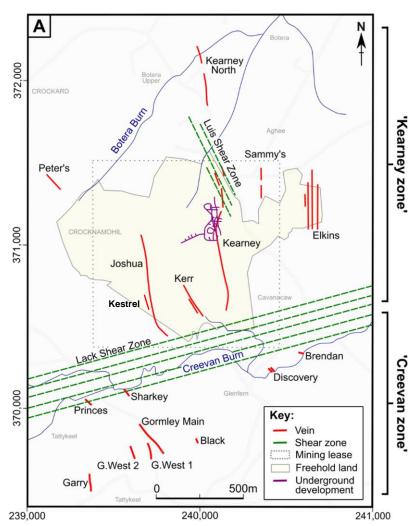
Royalties, where a Mining Lease has been granted, are fixed by individual agreement. Galantas has an agreement of a 4% royalty on net smelter return payable to the Crown Estate.



#### Figure 4.2: Galantas Gold Corporation Licence Locations

Source: Modified from Google Earth imagery, Micon (2023).





### Figure 4.3: Galantas Mining Lease and Freehold Land Locations

Source: Modified after Shaw et al. (2022) by Micon. Note: Mining lease and freehold land held by Flintridge Resources Limited a wholly owned subsidiary of Galantas.

# 4.4 PERMITS

The Department of the Environment for Northern Ireland (DoE NI) granted planning permission for the open pit mining of gold, silver, and associated minerals on specific areas of Galantas' freehold land through its wholly owned subsidiary, in May 1995. The open pit was mined out and that planning permission has since expired.

A separate planning application for an underground mine, updated processing plant, and the export of a limited quantity of waste rock was submitted to the DoE NI Planning Service, alongside a detailed Environmental Impact Assessment (EIA), on the 6<sup>th</sup> July 2012 and was granted on the 27<sup>th</sup> July 2015. The planning permission permits underground mining at the Omagh Gold Project and includes the Kearney, Joshua, and Kerr veins. The planning permission expires on the 27<sup>th</sup> July 2030. This may be extended with a new planning application.



Discharge consents are held by Galantas for mine waters from DoE NI, via the Northern Ireland Environment Agency (NIEA). A detailed compliance check on the consent conditions relating to ground waters and surface waters from the property was passed by NIEA on the 14<sup>th</sup> September 2011 and a similar study, carried out in June 2013 also concluded compliance in all respects. The company and NIEA monitor flows from the mine and the discharge consents are renewed annually. Other required operating permits are in operation, such as that issued by the Industrial Pollution and Radiochemical Inspectorate (IPRI).

# 4.5 ENIVIRONMENTAL LIABILITIES

Environmental liabilities associated with the Omagh Gold Project include restoration requirements that exist under agreements made with regulating authorities. The CEC hold a restoration bond of £300,000 to ensure the requirements for site restoration are met.

## 4.6 OTHER RISKS

There are no known factors or risks that may affect access, title, or the right or ability to perform work on the property.



## 5.0 ACCESSIBILITY, CLIMATE, LOCAL RESOURCES, INFRASTRUCTURE AND PHYSIOGRAPHY

The information in the Section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020 and Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014. Any text directly quoted from these reports is stated.

# 5.1 ACCESSIBILITY

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020:

The county town of Omagh and the mine area are easily accessible by paved road from Belfast. The road distance is less than 100 km and takes approximately 1.5 hours. Belfast is served by two airports with domestic and international flights. Situated some 5 km from Omagh, the mine site is accessible by public paved roads. Some local roads have been recently improved, at the Company's expense, with additional passing bays, in order to improve a surplus rock haulage route. The mine site contains a concreted road to the processing plant and various unpaved roads. One upland section of the mine site is only reachable on foot.

# 5.2 CLIMATE

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020:

The climate is temperate with about 1500 mm of rainfall per annum. The usual pattern of mild winters has been disrupted in recent years by severe falls in temperature. The mine has experienced some production difficulties during very cold temperatures, but the disruption has been short lived.

The mine and processing plant are operational year-round.

### 5.3 LOCAL RESOURCES AND INFRASTRUCTURE

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020:

Omagh is a county town and hosts schools, colleges and is a local administrative centre. The standard of education locally is good, housing costs are modest compared to many areas of the UK and unemployment is a local issue following the closure of several large employers. Operators of mobile plant are available in the local workforce. There is local knowledge of crushing and screening and local manufacturing of such equipment. Operators of the flotation plant have been trained. A number of skilled, small and medium size, engineering companies exist in the local region and the out-sourcing of a wide range of engineering and maintenance work is available.



Two power lines (33 kV and 11kV) traverse close to or on the site, however, power to the mill is generated with diesel on site.

Wind farms have been developed in the region, including one on an upland area within the western part of OM1, part of the mine site might be suitable for such a purpose. The opportunity exists on site, subject to planning permission, to generate power from wind and solar sources.

There is a mains water connection to the Omagh Gold Project which predominantly serves the office and welfare facilities. All water usage for underground mining and processing is pumped form the polishing pond which has a plentiful supply.

Galantas and its wholly owned subsidiaries have acquired significant freehold land holding over a number of years. It now holds approximately 220 acres of freehold land which is sufficient to operate its underground mining operation, processing plant, and waste disposal areas.

# 5.4 PHYSIOGRAPHY

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020:

The principal prospecting licence and option (OM1) is situated on the south-western fringe of the Sperrin Mountains in glaciated terrain. Topography ranges from 140 m to 160 metres above sea level with rounded hills up to 330 m. Glacially derived till in thicknesses up to 18 m, provides generally low quality grazing, except where techniques such as drainage and fertility have been carried out to improve grazing quality. Farming, which is the principal local economic activity is dominated by small / medium sized operations that rely on raising cattle and sheep. Upland hills and hollows in the landscape, support peat bogs which have a history of small scale cutting for domestic fuel use. There has been some urbanisation of housing closer to the county town of Omagh, although it is understood that planning policy has in recent years restricted outwards growth further from the town. There are some small coniferous plantations for commercial forestry and one is situated on the mine site.



## 6.0 HISTORY

## 6.1 **PROJECT HISTORY**

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020:

Aware of the potential for Dalradian rocks to host precious metals, The Geological Survey of Northern Ireland carried out mapping and geochemical surveys across the Sperrins in the 1970s (Arthurs, 1976). Following the Curraghinalt gold discovery in the mid-1980s by Ennex International, Riofinex North Limited (Riofinex) commenced exploration on the Lack Inlier, a geologically uplifted block of Dalradian metasediments. The Kearney structure was discovered comparatively early in the exploration programme, the author has been told that it was concentrated upon partly because of ease of access.

A number of exploration and resource definition methodologies were employed. These included geological mapping, which is not readily achieved given the paucity of local rock exposures. Stream sediment was panned for gold and sulphide evidence. Loose boulders were sampled. Soil samples and deep overburden samples (Pionjar) were also taken. Induced polarisation geophysical work was deployed and core drilling (size NQ) carried out. The Kearney vein was stripped and an intense channel sampling programme resumed, backed by vein mapping. A resource was assessed, and a mining project scoped. Environmental baseline studies were commenced.

In 1990 Omagh Minerals Ltd. (OML) acquired the project from Riofinex and engineering studies from Kilborn Engineering Ltd, Knight Piesold and Lakefield Research. Wardell Armstrong carried out an Environmental Impact Assessment, which was completed in late 1992. The CEC entered into a Mining Lease with OML, conditional on planning consent. Following a public enquiry in 1993 and 1994, conditional planning consent was granted in 1995. The planning conditions were fulfilled in 2001, crystallising the consent. Further engineering studies were carried out by Kilborn in 1995. In 1997, European Gold Resources (EGR) of Ontario acquired OML. OML excavated a section of the Kearney structure, to the north of the Riofinex trench, and mapped and sampled in a similar manner to Riofinex. ACA Howe carried out stream sediment sampling they also digitised and consolidated the resulting geochemical data.

In 1998, Lakefield Research completed further metallurgical and environmental studies. In 2000 and 2001, OML carried out selective mining trials and produced a high grade, sulphidic ore. Following specialist laboratory treatment to separately recover the gold, the bullion was made into 18 ct jewellery with accreditation of the Irish gold source and test marketed under the Galantas brand name. In 2003 EGR commissioned ACA Howe to analyse Landsat satellite imagery over the whole of the Lack Inlier and to integrate with other exploration data using MapInfo software. Resulting reconnaissance sampling, mapping, data compilation and interpretation was carried out subsequently. Twenty-four exploration targets were identified. European Gold Resources was renamed Galantas Gold Corporation in 2004. Following a financing in early 2005, Galantas commenced open pit development. During the summer of 2005, Galantas contracted Geotech Airborne Ltd to carry out an airborne time domain electromagnetic (VTEM) and magnetic survey over the Lack Inlier. The results identified new geophysical targets and helped prioritise existing targets. In December 2005, ACA Howe studied the resource potential of all targets and ranked them. Eight vein structures, including Kearney and Joshua veins were ranked as having good potential for upgrading of the reserves and resources previously enumerated. Galantas started to build the ore processing



plant in November 2005 and commenced mining development in early 2006. Mining continued until 2012, over 30,000 troy ounces of gold was produced during the open pit phase.

Significant exploration took place within licence OM1 between 2011 and 2016, with a total of 20,950 m of diamond drilling and detailed channel sampling programmes completed over the Joshua, Kerr and Kearney vein systems. The drilling campaigns were designed to increase the known extent of the Joshua vein to the north and test the depth of the Joshua and Kearney veins.

A seven-month drill programme was initiated in September 2015 to target the Johsua vein at depth. This programme also identified a new vein, Kestrel, running 100 m west of Joshua. The underground development phase began in March 2017, throughout this stage detailed geological face and plan maps were created, leading to a better understanding of the geometry of the Kearney vein system. A new 4-month surface drilling programme began in July 2021, and a longer underground drilling exploration phase began in September 2021.

# 6.2 PREVIOUS MINERAL RESOURCE AND RESERVE ESTIMATES

## 6.2.1 Mineral Resources

Historical MREs were completed in 1995, 2004, 2008, and 2012 by ACA Howe, details of which can be found in Galantas Gold Corporation (2014). The most recent MRE was carried out by Galatas were reported in a technical report dated 26<sup>th</sup> July 2014 (Galantas Gold Corporation, 2014). The reported mineral resources are shown in Table 6.1.

The mineral resource was prepared in accordance with PERC (Pan European Reserves and Resources Reporting Committee) reporting standards. The standards for classification of PERC and NI 43-101 compliant Mineral Resources (Measured, Indicated, and Inferred) can be considered equivalent based on the recommended definitions in use at the time PERC (2013) and CIM (2005).

The 2014 MRE did not take into account the guidelines for reasonable prospects for eventual economic extraction (RPEEE) guidelines as outlined CIM (2019), and only considered an economic cut-off of 2 g/t Au on a block-by-block basis. The guidance states that Mineral Resource statements for underground mining scenarios must satisfy RPEEE by demonstration of the spatial continuity of the mineralisation within a potentially mineable shape. In cases where this potentially mineable volume contains smaller zones of mineralisation with grades or values below the stated cut-off this material must be included in the Mineral Resource estimate (CIM, 2019). Typically, a mineable shape optimiser (MSO) is used to identify spatially continuous mineralisation within potentially mineable shapes using reasonable assumptions based on the current operation.

The initial CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines were published in 2016 after the 2014 Mineral Resource were declared. In 2014, the CIM (2005) definition standards did not prescribe the use of potentially mineable shapes and stated that the phrase RPEEE implies a judgement by the Qualified Person (QP) in respect of the technical and economic factors likely to influence the prospect of economic extraction.

The fact that no mineable shapes were used to constrain the 2014 MRE should be taken in account when considering the relevance and reliability of the MRE. The reliance of an economic cut-off on a block-by-block basis alone may lead to selective reporting bias.

The 2014 Mineral Resources (Galantas Gold Corporation, 2014) for the Kearney and Joshua veins are superseded by the 2023 Mineral Resources presented in Section 14.0.

	Resource Tonnage		Gold Grade	Contained Gold	
Vein	Category	(t)	(g/t Au)	(oz)	
	Measured	76,936	7.48	18,490	
Kearney	Indicated	383,220	6.66	82,055	
	Inferred	909,277	6.61	193,330	
	Measured	54,457	7.25	12,693	
Joshua	Indicated	216,211	7.92	55,046	
	Inferred	291,204	10.74	100,588	
	Measured	6,848	4.63	1,019	
Kerr	Indicated	12,061	4.34	1,683	
	Inferred	23,398	3.20	2,405	
	Measured	-	-	-	
Elkins	Indicated	68,500	4.24	9,000	
	Inferred	20,000	5.84	3,800	
	Measured	-	-	-	
Gormleys	Indicated	-	-	-	
	Inferred	75,000	8.78	21,000	
	Measured	-	-	-	
Princes	Indicated	-	-	-	
	Inferred	10,000	38.11	13,000	
	Measured	-	-	-	
Sammy's	Indicated	-	-	-	
	Inferred	27,000	6.07	5,000	
	Measured	-	-	-	
Kearney North	Indicated	-	-	-	
	Inferred	18,000	3.47	2,000	
	Measured	138,241	7.25	32,202	
TOTAL	Indicated	679,992	6.78	147,784	
F	Inferred	1,373,879	7.71	341,123	

#### Table 6.1: 2014 PERC Compliant Mineral Resource Estimate by Galantas

Note: Mineral Resources were reported at a cut-off of 2 g/t Au on a block-by-block basis. Source: Galantas Gold Corporation (2014).

# 6.2.2 Mineral Reserves

No known code complaint mineral reserves have been reported to any recognised Committee for Mineral Reserves International Reporting Standards (CRIRSCO) or national reporting codes.

A non-code compliant mineral reserve used in an economic mining study was reported in the Galantas Gold Corporation (2014) technical report, Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014. The issuer is not treating this estimate as current mineral reserves. The reported mineral reserves are shown in Table 6.2 for the Kearney and Joshua veins.

The mineral reserves were not classified using the CIM (2014) terminology for mineral reserves (proven or probable). The mineral resources classified according to PERC (Section 6.2.1) were subject to an economic mining study and any material included in the Life of Mine (LoM) production plan was included in the mineral reserves and reported with the respective PERC Mineral Resource classification. Diluted tonnages and grades were reported based on the stope and development shape wireframes.



Measured, indicated, and inferred mineral resources were used in the economic mining study. The study was based on an underground mine design, mining methods, and mining equipment to produce 30,000 gold oz/a to 40,000 gold oz/a with a mine production rate of 1,250 t/a. Stope dimensions used were a maximum of 30 m length, 35 m height, and 3 m width for sublevel longhole stoping and shrinkage stoping, with dilution of 20% and mining recovery of 95%. A cut-off of 2 g/t Au was used in the study, no detailed cost breakdown used to determine the cut-off grade was included in the report.

Vein	Resource Category	Tonnage (t)	Gold Grade (g/t Au)	Contained Gold (oz)
Kearney	Measured	41,485	5.08	6,773
	Indicated	294,021	5.32	50,292
	Inferred	239,364	5.33	41,527
Joshua	Measured	51,581	4.89	8,112
	Indicated	232,753	5.27	39,450
	Inferred	86,044	6.21	19,109
Total	Measured	93,066	4.97	14,885
	Indicated	526,744	5.30	89,742
	Inferred	325,404	5.69	60,636

## Table 6.2: 2014 Non-code Compliant Mineral Reserve Estimate by Galantas

Note: Mineral reserves were reported at a cut-off of 2 g/t Au. Diluted tonnages and grades were reported based on the stope and development shape wireframes.

Source: Galantas Gold Corporation (2014).

The reader should be aware that the non-code compliant mineral reserve includes the use of inferred mineral resources and therefore do not conform with the CIM definition of a Mineral Reserve which therefore impacts the relevance of the historical estimate. Furthermore, there is no detailed cost breakdown in the technical report to support the use of a 2 g/t Au cut-off which affects the reliability of the estimate. To verify the historical estimate as current mineral reserves they should only be calculated using measured and indicated mineral resources and the cost breakdown to determine the cut-off grade should be reviewed.

# 6.3 **PRODUCTION HISTORY**

The following text in italic is taken from Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014:

Open pit mining (other than bulk sampling) commenced in 2006. By May 2012, mining was largely restricted to the northern end of the Kearney pit, mining in other parts of the pit having reached economic limits as dictated by stripping ratio, by the property boundary and road to the east, and by rock stockpiles to the west. The movement of the rock stockpile was prevented when OML's planning permission to do so was quashed by judicial review, following procedural failings of Planning Service, DoE NI, sterilising surface access to the deeper part of the northern section of the Kearney open pit.

Over 30,000 troy ounces of gold was produced during the open pit phase.

No production data was available to Micon for the underground development and small-scale stoping.



# 7.0 GEOLOGICAL SETTING AND MINERALISATION

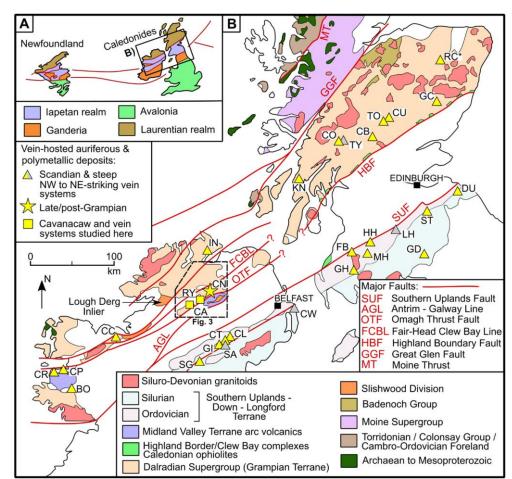
The information in the Section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014, and ACA Howe (2012), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 10<sup>th</sup> August 2012. Any text directly quoted from these reports is stated alongside supporting information from other sources.

# 7.1 REGIONAL

The Omagh Gold Project, located in the west of Northern Ireland, lies within the Caledonian orogenic belt (Figure 7.1). The principal host rocks of gold mineralisation in the region belong to the late Neoproterozoic to Cambrian aged Dalradian Supergroup. They comprise a thick sequence of metamorphosed biotite to garnet grade clastic marine sediments with minor volcanic units, deposited in a passive-margin rift basin during the breakup of the supercontinent of Rodinia. The subsequent convergence of Laurentia with Baltica and Avalonia occurred during the Caledonian-Appalachian Orogeny and can be divided into the Grampian (Early– Middle Ordovician) and Scandian events (Silurian–Early Devonian) (Shaw et al., 2022). The Dalradian Supergroup is structurally bounded to the south by the Highland Boundary Fault in Scotland and its western extension in Northern Ireland known as the Omagh Thrust.

Mineral exploration during the past 30 years has identified a number of significant deposits in the Caledonian orogenic belt including Curraghinalt and Cavanacaw (the Omagh Gold Project) in Northern Ireland, and Cononish in Scotland. The along-strike extensions of the Caledonian belt into Scandinavia and North America are known to host a number of major mineral deposits in a similar geological environment. These include the Silurian hosted, shear-zone gold deposit of Kolsvik (Bindal) in Norway, the Upper Proterozoic, sandstone and porphyry hosted, high-sulphidation, epithermal gold deposit of Hope Brook in Newfoundland and the Ridgeway gold deposit in the Upper Proterozoic Slate Belt of South Carolina.





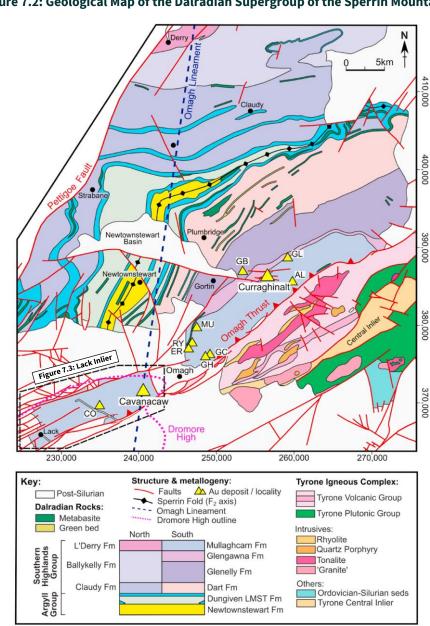
### Figure 7.1: Simplified Geological Map of Northern Ireland and Scotland

Source: Shaw et al. (2022). Note: Deposit/ locality abbreviations from SW to NE: CR: Cregganbaun; CP: Croagh Patrick; BO: Bohaun; CC: Cloonacool; SG: Slieve Glah; GI: Glenish; SA: South Armagh; CT: Clontibret; CL: Clay Lake; CA:
Cavanacaw (Omagh Gold Project); RY: Rylagh; CN: Curraghinalt; IN: Inishowen; CW: Clonlig – Whitespots; KN: Knapdale; FB: Fore Burn; GH: Glenhead; CO: Cononish; TY: Tyndrum; HH: Hare Hill; MH: Moorbrock Hill; LH: Leadhills; CB: Coire Buidhe; TO: Tombuie; CU: Calliachar-Urlar; GD: Glendinning; ST: Stobshiel; GC: Glen Clova; RC: Rhynie Chert; DU: Duns

# 7.2 LOCAL GEOLOGY

Shaw et al. (2022) and references therein provide a detailed overview of the local geology that is summarised below. During the Grampian event of the Caledonian-Appalachian Orogeny the Tyrone igneous complex, an island-arc ophiolite complex, was accreted on to the margin of Laurentia known as the Tyrone Central Inlier during NW-SE convergence. Subsequently the continued convergence resulted in folding of the Dalradian Supergroup into recumbent SE- to SSE-verging isoclinal nappes and thrusting of the nappes over the over the Tyrone Igneous Complex and Central Inlier along the Omagh Thrust (Figure 7.2, Figure 7.3). The Omagh thrust dips at 40° to the NW to NWW. The Omagh Gold Project is hosted in the Sperrin Nappe, an SSE-verging overturned limb of an isoclinal nappe. The metamorphic grade exposed at surface is greenschist to lower amphibolite grade.

The later Scandian event involved crustal-scale sinistral strike-slip movement ensued along orogenparallel NE- to ENE-striking faults and shear zones within the Dalradian Supergroup of the Grampian Terrane.



#### Figure 7.2: Geological Map of the Dalradian Supergroup of the Sperrin Mountains

mineral

industry consultants

LIMITED

INTERNATIONAL

Source: Shaw et al. (2022). Note: gold locality abbreviations: CO: Cornavarrow; ER: Erganagh; RY: Rylagh; GH: Glenhordial; GC: Glencurry; MU: Mullaghcarn; GB: Golan Burn; AL: Alwories; GL: Glenlark. Cavanacaw is the Omagh Gold Project.

# 7.3 **PROPERTY GEOLOGY**

# 7.3.1 Lack Inlier

The Omagh Gold Project mostly overlies rocks of the Upper Dalradian, part of the Southern Highland Group, exposed in the Lack Inlier, including the Glengawna Formation and the Mullaghcarn Formation. The Lack Inlier is a fault-bounded block of the Dalradian Supergroup (Shaw et al., 2022), in faulted contact with Carboniferous sedimentary rocks. The deposit itself is hosted by the Mullaghcarn Formation that is composed of fine grained clastic meta-sedimentary rocks including psammites, semi-pelites and chlorite-rich pelites, interbedded with basic metavolcanics (Figure

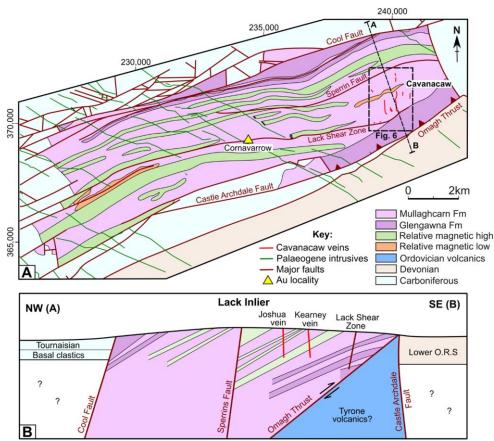


7.3). The amphibolite facies metavolcanics form pronounced regional strike parallel magnetic highs as can be seen in Figure 7.3.

Generally, foliation is sub-parallel to bedding and strikes ENE, dipping moderately to the NNW (Shaw et al., 2022). The Lack Inlier is bounded by the Cool Fault in the north and the Omagh Thrust-Castle Archdale faults in the south (Figure 7.3). Deformed graphitic schists are well developed along the Omagh Thrust, south of the Omagh Gold Project. Several ENE-trending steeply dipping faults and shear zones dissect the inlier, including the Sperrin fault and Lack shear zone (also known as the Creevan Burn shear) (Figure 7.3).

A major positive bouguer gravity anomaly known as the Dromore High is centred 10 km south of the centre of the Lack inlier. Shaw et al. suggest that it may indicate the presence of the Tyrone Igneous Complex at depth (Figure 7.3). A swarm of later Palaeogene dolerite dykes are mapped across the inlier that strike NW to WNW.

The rocks of the Lack Inlier are variably covered by several metres of Quaternary glacial till and less extensive hill peat up to a few metres thick.



### Figure 7.3: Geological Map and Cross-Section of the Lack Inlier

Source: Shaw et al. (2022). Note: Cavanacaw is the Omagh Gold Project.



# 7.3.2 Omagh Lineament

The NNE-trending Omagh Lineament, one of three major, parallel, basement lineaments in the region, crosses the eastern part of the Lack Inlier, in the area underlain by the north trending Omagh Gold Project vein swarm (Figure 7.2).

The lineament is predicted to have a zone of influence up to several kilometres wide and likely has a significant control on the location and orientation of the mineralised veins, based on the distribution of gold and arsenic anomalies and the north trending orientation of mineralised veins in the vicinity of the Lack Inlier (Parnell et al., 2000).

Shaw et al. (2022) relate the Omagh Lineament to the West Sperrin Knee Bend, where there is a change in orientation of the Cool Fault and Omagh Thrust-Castle Archdale faults that bound the Lack Inlier.

## 7.3.3 Mineralisation and Mineralisation Extents

The Omagh Gold Project vein swarm comprises 17 named vein structures in an area of about 6 km<sup>2</sup> (Figure 7.4). The most important of those vein structures are the Kearney and Joshua vein systems, which are the focus of the MRE described in this technical report.

The Kearney vein system is the largest mineralised vein system. It is comprised of 22 modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 8.0 m. The Kearney vein system has a strike length of approximately 850 m and a maximum vertical extent proved by drilling is 337 m, it remains open at depth down plunge. The three largest veins are continuous for between 400 m and 800 m along strike. Smaller discontinuous veins may only extend for less than 80 m along strike.

The Joshua vein system is the second largest mineralised vein system. It is comprised of seven modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 5.0 m. The Joshua vein system for the purpose of this report includes the closely sited Kestrel vein which is approximately 100 m to the west of the Joshua vein system. The Joshua vein system has a strike length of approximately 1 km and a maximum vertical extent proved by drilling is 200 m, it remains open at depth down plunge. The largest vein is continuous for the entire strike length of the Joshua vein system. Smaller discontinuous veins may only extend for less than 50 m along strike.



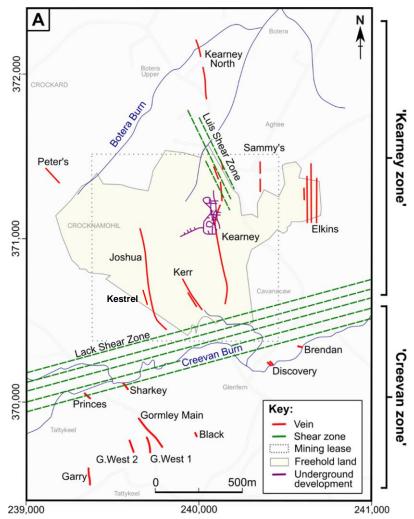


Figure 7.4: Map of the Omagh Gold Project Showing the Mineralised Veins and Main Geological Structures

Source: Modified after Shaw et al. (2022) by Micon. Note: Vein depiction is schematic with only the major vein structures identified.

Gold mineralisation can be characterised as Palaeozoic orogenic type and is one of several orogenic structurally controlled, mesothermal gold bearing quartz and quartz-sulphide vein systems located in the Caledonian basement rocks.

Mineralisation consists of centimetre-to-metre-scale wide brecciated quartz veins with disseminated to massive auriferous sulphides, predominately pyrite and galena with some accessory arsenopyrite and chalcopyrite (Figure 7.5). Quartz veins pinch and swell from stringers to widths greater than a metre over distances of several metres. The veins are commonly fringed by varying widths of clay gouge. Wall rock alteration in the form of sericitisation and bleaching may extend several metres into quartz-feldspar schist host rocks, depending on the degree of fracturing. The vein systems of the Omagh Gold Project are structurally controlled complex zone of quartz-sulphide mineralisation and associated alteration, along which there has clearly been tectonic movement, resulting in an irregular brecciated lattice-work of mineralised veins.

Mineralisation is primarily hosted in massive sulphides, quartz veins within the quartz breccia unit, and clay gouge. Altered wall rock may also host mineralisation depending on the degree of



fracturing. Gold values are closely correlated with sulphide content, such that the tenor of mineralisation can be estimated visually in drill core and during open pit mining. Visible gold has not been reported in core and the low nugget effect is consistent with this and with the assumed presence of gold in very fine particle sizes.

Pyrite and arsenopyrite are usually brecciated with infill or replacement by undeformed galena and chalcopyrite (Shaw et al., 2022). This has been interpreted by Galantas to indicate two distinct mineralising events, pre-breccia pyrite-arsenopyrite mineralisation and post-breccia galena mineralisation. Gold mineralisation is primarily associated with the first stage with possible remobilisation or mineralisation during the second stage. The gold, silver, and lead content are correlated in mineralised rocks.



### Figure 7.5: Typical Mineralised Drill Core from the Kearney Vein System

Note: Ruler is in centimetres (cm). Source: Micon (2023).

Digitised maps of Riofinex trenches from the Kearney open pit, and underground geological maps from Galantas illustrate the complexity of the deposit (Figure 7.6, Figure 7.7). The trench maps in Figure 7.6 shows a complex high strain shear zone with the main tabular vein occasionally splitting into narrower veins before merging again along strike. The N to NNW trending Kearney and Joshua veins are generally at high angles to the host rock foliation, although it can vary significantly and become parallel with the veins (Shaw et al., 2022). The veins do show variations from the broad N to NNW-trend at a local scale (Figure 7.6, Figure 7.7). Notwithstanding the complexity of the shear zone, the Kearney vein system is mapped to be continuous along strike.

The Kearney vein also shows a classic pinch and swell geometry which is most evident in the underground geological map on a scale of 40 m to 60 m (Figure 7.7). The map also illustrates how thicker "swell" zones of massive sulphide and quartz breccia are connected by thinner "pinch" veins and zones of black clay fault gouge. Shaw et al. (2022) identified a subtle difference in orientation of



the N-trending swell and NW to NNW-tending pinch zones which leads to a low amplitude right stepping geometry (Figure 7.7). Galantas have identified similar pinch and swell structures in the Joshua vein.

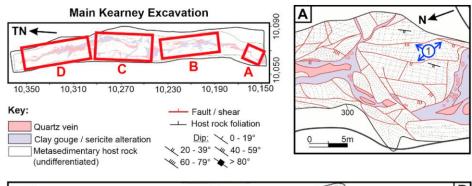
Shaw et al. (2022) describe WNW to N-trending and generally NE dipping mineralised faults in the Kearney vein that relate to the Luis Shear Zone (Figure 7.4, Figure 7.6D). These syn-mineralisation faults are generally sulphide rich and can displace the vein by up to 1.0 m. A series of post mineralisation dextral reverse faults have also been identified by the same authors that trend NE and shallowly dip to the NW. The faults cross-cut and entrain the mineralised veins. A series of WNW-trending sub-vertical faults also displace the Kearney vein by up to 1.0 m.

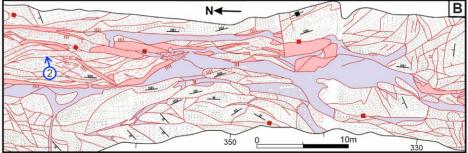
The pinch and swell structures have been described by Galantas as potential dilation zones. Dilation zones have potential for wider intervals of mineralisation and are believed to be linked on shallow N-dipping planes related to the regional SE directed thrusting. Dilation zones are predicted to occur at the intersection of the N to NNW-trending Kearney and Joshua veins and the shallow N-dipping planes. Conversely, Shaw et al. (2022) link the pinch and swell structures to continuous deformation with the narrow clay gouge rich shear zones accommodating the majority of the counter-shearing during rotation, whereas the more competent quartz breccia and massive sulphide buckled during the same rotation. They describe the shallowly N-dipping faults as post-dating mineralisation.

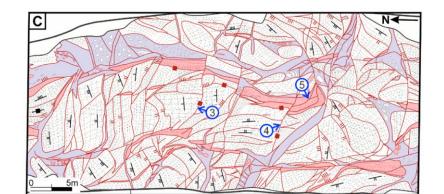
The mineralisation model proposed by Galantas and described in Parnell et al. (2000) is a two-stage deformation event with NW-SE compression during the Caledonian-Appalachian Orogeny (Au-Py-Apy mineralisation and synchronous brecciation) and subsequent Carboniferous compression (Gn mineralisation). Shaw et al. (2022) however, link mineralisation of the complex structural vein system at the Omagh Gold Project to progressive deformation and sinistral transpressional shearing along ENE–WSW-striking transcurrent deformation zones during the Scandian event of the Caledonian-Appalachian Orogeny.

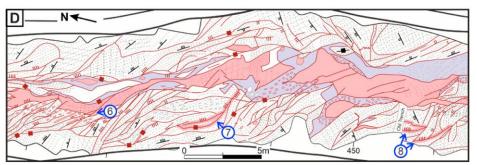


#### Figure 7.6: Detailed Trench Excavation Maps of the Kearney Vein System by Riofinex



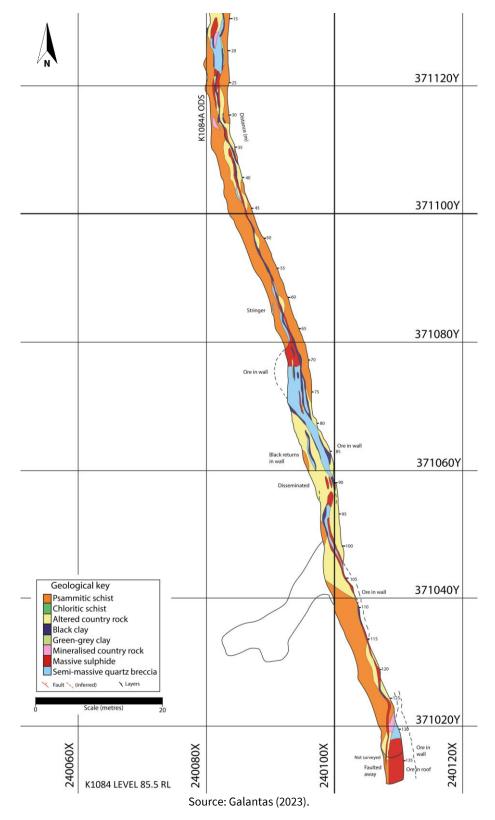






Source: Shaw et al. (2022). Note: Blue numbers and arrows do not relate to this technical report.





### Figure 7.7: Underground Geological Map of the Kearney Vein for the 1,084 m Level



# 8.0 **DEPOSIT TYPES**

The information in the Section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014, and ACA Howe (2012), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 10<sup>th</sup> August 2012. Any text directly quoted from these reports is stated alongside supporting information from other sources.

# 8.1 OROGENIC GOLD DEPOSITS

Gold mineralisation can be characterised as Palaeozoic orogenic type and is one of several orogenic structurally controlled, mesothermal gold bearing quartz and quartz-sulphide vein systems located in the Caledonian basement rocks.

Mineral exploration during the past 30 years has identified a number of significant deposits in the Caledonian orogenic belt including Curraghinalt and Cavanacaw (the Omagh Gold Project) in Northern Ireland, and Cononish in Scotland. The along-strike extensions of the Caledonian belt into Scandinavia and North America are known to host a number of major mineral deposits in a similar geological environment. These include the Silurian hosted, shear-zone gold deposit of Kolsvik (Bindal) in Norway, the Upper Proterozoic, sandstone and porphyry hosted, high-sulphidation, epithermal gold deposit of Hope Brook in Newfoundland and the Ridgeway gold deposit in the Upper Proterozoic Slate Belt of South Carolina.

In metamorphic belts, orogenic gold deposits are the predominant gold deposit type. They formed broadly synchronous with deformation, metamorphism, and magmatism in compressional to transpressional regimes at convergent plate margins in accretionary or collisional origins.

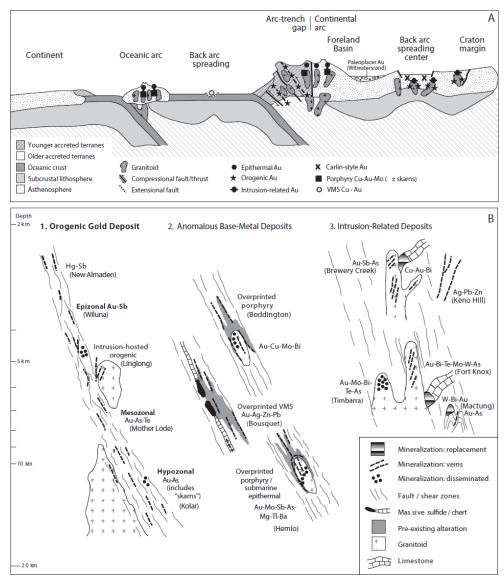
# 8.1.1 Structural Controls

Gold deposits are typically located adjacent to first order crustal scale fault zones. Although first order faults act as the major conduits for auriferous fluid flow they rarely host the deposits. Second and third order faults are the main sites of gold deposition (Goldfarb et al., 2005). Fluids are commonly focussed into these structures in areas of jogs, fault intersections, or changes in strike of first order structures (Groves et al., 2000). Focussed fluid pathways form during the deformation of geologically complex areas due to the development of dilatational, low mean stress, permeable areas.

At a deposit scale, a variety of structures host ore bodies. These include simple quartz veins and quartz vein systems, brittle faults, brittle-ductile shear zones, and strongly ductile shear zones (Goldfarb et al., 2005). Brittle structures predominate at sub-greenschist facies conditions and brittle-ductile hosting structures at greenschist facies conditions. In amphibolite to granulite facies rocks ductile structures and disseminated ore bodies dominate (Groves, 1993).



### Figure 8.1: Schematic Diagram Showing the Tectonic Setting of Orogenic Gold Deposits and Other Gold Deposit Types



Source: Goldfarb et al. (2005).

# 8.1.2 Timing of Mineralisation

The majority of orogenic gold deposits are thought to have formed late in the orogenic process. They form post accretion and collision, towards the end of the deformation cycle during uplift and exhumation of the orogen (Groves et al., 2000). Most deposits formed syn- to post-peak regional metamorphism (Groves et al., 2000; Goldfarb et al., 2005).

# 8.1.3 Host Rocks

Orogenic gold deposits occur in sub-greenschist to granulite facies rocks, but are most common in greenschist facies rocks (e.g. Groves, 1993; Groves et al., 1998; Groves et al., 2003). Goldfarb et al. (2005) summarised that the gold-greenschist facies association is the result of a number of factors. Large volumes of fluid are generated by dehydration reactions at the amphibolite greenschist transition which is just below the structurally favourable brittle-ductile zone. Fluid focussing and



phase separation occurs as fluids migrate to areas at greenschist facies P-T conditions where gold solubility rapidly decreases.

Orogenic gold deposits are hosted in a variety of lithologies, including, but not limited to metavolcanics, felsic to mafic intrusives, turbidites, slate formations, and carbonaceous pelites (Groves et al., 1998, 2003).

# 8.1.4 Ore Mineralogy

The ore mineralogy of orogenic gold deposits is consistent among most deposits. Sulphide mineral content is typically 3% to 5% (Eilu & Groves, 2001). Deposits are dominated by pyrite, arsenopyrite, and pyrrhotite assemblages at low metamorphic grades, and pyrrhotite and arsenopyrite, or pyrrhotite, arsenopyrite, and löllingite at high metamorphic grades, (Groves, 1993; Goldfarb et al., 2005).

Arsenopyrite is more abundant in metasedimentary rocks, whereas pyrite and pyrrhotite are more common in metaigneous rocks. Tellurium and bismuth bearing minerals are found in many deposits (Goldfarb et al., 2005).

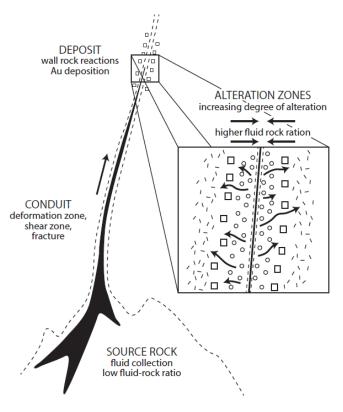
# 8.1.5 Hydrothermal Fluids and Alteration

The interaction of gold bearing, low salinity, near neutral  $H_2O + CO_2 + H_2S \pm CH_4 \pm N_2$  fluids with host rocks forms laterally zoned silicate alteration assemblages (Figure 8.2), (Ridley & Diamond, 2000; Groves et al., 2003). Proximal wall rock alteration assemblages in ore zones vary systematically with the metamorphic grade of host rocks (Groves, 1993; Eilu et al., 1999).

Low P-T assemblages at sub greenschist to mid-greenschist facies conditions are characterised by ankerite, dolomite, white mica, and chlorite. In addition, phlogopite and albite are common at mid greenschist to greenschist-amphibolite transition facies conditions. At low to mid amphibolite grade, amphibole, biotite, calcite, and plagioclase assemblages dominate; whereas diopside, orthopyroxene, biotite, garnet, and K-feldspar assemblages occur at mid amphibolite to lower granulite facies.

Proximal alteration haloes are usually much wider in greenschist facies rocks (<50 m) compared to granulite facies rocks (<5 m), (Eilu et al., 1999). Intermediate and distal alteration zones are characterised by more stable metamorphic minerals such as albite, chlorite, and calcite at greenschist facies conditions, and biotite at upper amphibolite to granulite facies conditions (Goldfarb et al., 2005). Overall fluid-wall rock interaction involves the addition of SiO<sub>2</sub> + K + Large Ion Lithophile Elements (LILE) + CO<sub>2</sub> + S  $\pm$  Na  $\pm$  Ca (McCuaig & Kerrich, 1998; Ridley & Diamond, 2000).





### Figure 8.2: Schematic Diagram Showing the Formation of an Orogenic Gold Deposit

Source: McCuaig & Kerrich (1998).



# 9.0 **EXPLORATION**

The information in the Section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014, ACA Howe (2012), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 10<sup>th</sup> August 2012, and ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008. Any text directly quoted from these reports is stated.

# 9.1 INTRODUCTION

Exploration activities on the Omagh Gold Project, other than drilling, have included geological mapping, geochemical sampling (stream sediment, soil, grab, and piojar deep overburden sampling), trenching and surface channel sampling, underground face sampling, geophysical surveys, and topographic studies. These activities have been conducted in order to better understand the geology and to identify new mineral occurrences or targets across the Project area. The descriptions in this Section relate to the Kearney and Joshua vein systems that are the focus of this report. For more details on the exploration of the other 15 named vein structures (see Figure 7.4) the reader is referred to the technical reports listed in Section 2.5.

### 9.2 INITIAL DISCOVERY

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020:

Aware of the potential for Dalradian rocks to host precious metals, The Geological Survey of Northern Ireland carried out mapping and geochemical surveys across the Sperrins in the 1970s (Arthurs, 1976). Following the Curraghinalt gold discovery (in the 1980s), Riofinex commenced exploration on the Lack Inlier, a geologically uplifted block of Dalradian metasediments.

Riofinex began reconnaissance work started in mid-1984 leading to the discovery of anomalous gold and lead in stream anomalies. The exploration rights were awarded in July 1985.

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008:

*Riofinex discovered the gold-bearing Kearney vein structure and the surrounding swarm of gold veins* (including the Joshua vein structure) *during the course of an exploration and resource delineation programme which included:* 

- Geological mapping;
- Sampling of
  - o Stream sediment
  - o Soil



- Loose boulders of mineralisation known as "float"
- Deep overburden using a petrol driven, hammer sampling tool known as a Pionjar
- o Bedrock

Exploration results from this initial discovery phase are unavailable and only the high-level descriptions in the sources listed in Section 2.5 were available to Micon.

## 9.3 **GEOLOGICAL MAPPING**

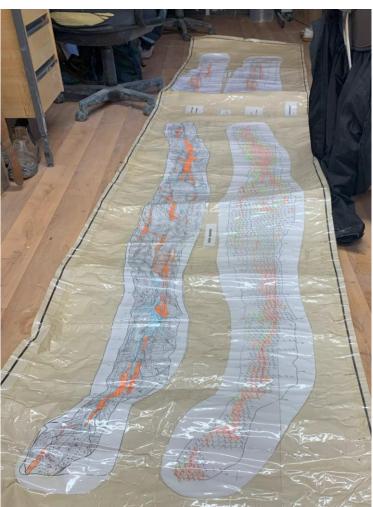
### 9.3.1 Surface

Detailed geological maps were made by Riofinex during the overburden stripping and trench excavation of the Kearney vein system. Concurrent with the geological mapping, extensive channel sampling of the exposed veins was undertaken (Section 9.4). Digitised examples of the geological maps are shown in Figure 7.6, and a photograph of the original paper map in Figure 9.1. The geological maps illustrate the complexity of the deposit and show a complex high strain shear zone with the main tabular vein occasionally splitting into narrower veins before merging again along strike. Notwithstanding the complexity of the shear zone, the Kearney vein system is mapped to be continuous along strike. The dimensions of the geological map are approximately 210 m along strike for the northern trench and 105 m for the southern trench.

# 9.3.2 Underground

Underground geological maps are constructed by Galantas geologists of all underground development that is on vein in the Kearney vein system. A total of 2310 m of development have been mapped to date. The geological maps show the host rock lithology, hydrothermally altered host rock, and the mineralised lithologies. They also include structural measurements of faults and host rock foliation. An example of an underground geological map is shown in Figure 7.7. The geological maps show the classic pinch and swell geometry on a scale of 40 to 60. The maps illustrate how thicker "swell" zones of massive sulphide and quartz breccia are connected by thinner "pinch" veins and zones of black clay fault gouge.





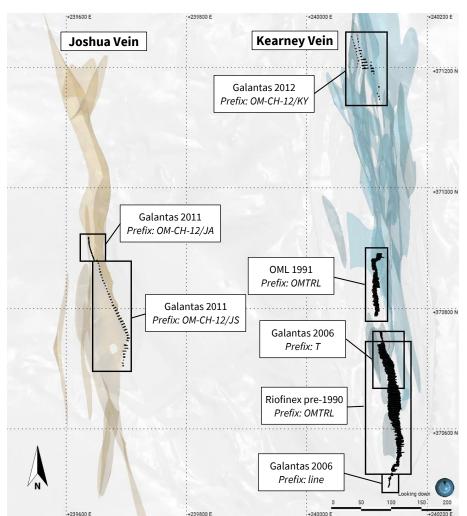
## Figure 9.1: Photograph of Original Riofinex Trench Excavation Geological Maps

Source: Photo Micon; map - Riofinex. Note: Lefthand map is the geological map and righthand map is the assay results from the channel sampling.

# 9.4 SURFACE CHANNEL SAMPLES

During the initial overburden stripping and trench excavation of the Kearney and Joshua veins, and throughout the open pit mining operations, channel samples of the mineralised veins and wall rock were sampled. Both Riofinex and Galantas have carried out surface channel sampling campaigns between 1988 and 2011. Details of the channel sampling campaigns for which data is available are listed in Table 9.1 and are shown in Figure 9.2.





### Figure 9.2: Plan View Location Map of Surface Channel Samples

Note: Prefix = sample prefix. See Figure 9.4 for examples of gold grades of the channel samples. Source: Micon (2023).

# 9.4.1 Riofinex and OML

The Riofinex and OML samples used the same sampling methodology. The channels are concentrated in the southern half of the historical Kearney open pit (Figure 9.2). The southern Riofinex grouping extends for 212 m along strike and the northern OML grouping for 105 m. The channels were cut perpendicular to the N to NNW strike of the vein at 1 m intervals with an average sample length of 1.2 m and 1.3 m. Two parallel, 4 cm deep channels, were cut 10 cm apart and sampled. The average sample weight was 7 kg.

It is understood that the strategy of Riofinex and OML was to bulk mine the veins associated mineralised wall rock. Therefore, large sample lengths were used to define a broad envelope of mineralisation with a grade of > 1 g/t Au. Samples were broadly determined by geology and lithological boundaries. Due to this sampling methodology, there was limited sample selection to delineate separate vein structures and high-grade intersections. There is the possibility that the large samples may have smeared the gold grades over wider intervals than the true vein intersection and may not be representative. The sample laboratory is unknown, and the samples were analysed for gold and silver by fire assay and lead by atomic absorption spectroscopy (AAS). It is detailed in Riofinex North Limited (1989) that field duplicate samples were collected, and laboratory duplicates



were submitted at a rate of 10%. A small umpire assay programme was also completed. However, no known Quality Assurance Quality Control (QAQC) data is now available.

The channel sampling show that the Kearney vein is continuous for the entire sampled strike length. There are multiple veins that split and coalesce, and the assay data shows a complex vein geometry supporting the geological map observations (Figure 9.4). The true vein width and grades is unclear due to the large sample lengths that may have included both mineralised and unmineralised rock. This should be taken into consideration when using this data.

# 9.4.1.1 Grid Transformation

In 2008, ACA Howe merged historical Riofinex data for the Kearney vein on a local mine grid with more recent exploration data captured in the regional Ordnance Survey of Ireland (OSI) coordinate system. They performed a grid transformation of the historical Riofinex data in Micromine based on two know historical drill hole collar locations to convert to the Ordnance Survey of Ireland gird system (ACA Howe, 2008).

Galantas noted discrepancies between the transformed collars and georeferenced historical maps. Drill hole collars were situated on the wrong side of roads compared to the historical maps, and the roads have not moved position since the 1980s. As such, the georeferenced historical map was used to update the collar locations. The difference between the channel collars located by ACA Howe and the collars located using the georeferenced maps appears to be due to a rotation around a point located along the Kearney vein system (Figure 9.3). The elevation value was unchanged as the trench were generally excavated to a similar elevation and there was minimal offset in terms of easting and northing.

Micon has reviewed the methodology used by Galantas and the updated collar locations and is satisfied that they represent the true location of the data.



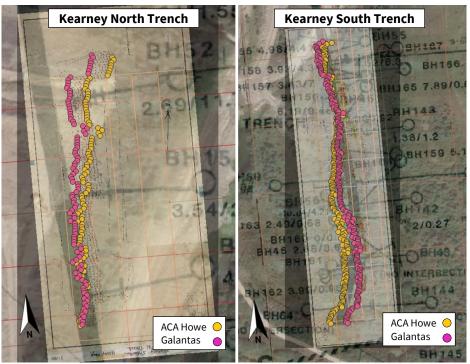


Figure 9.3: ACA Howe Collar and Galantas Surface Channel Sample Collar Locations

Source: Galantas (2023).

# 9.4.2 Galantas

### 9.4.2.1 2006

The two 2006 sampling campaigns were concentrated at the southern end of the Kearney open pit (Figure 9.2). The first campaign with sample prefix "line", extend for 24 m along strike. The channels were cut perpendicular to the N to NNW strike of the vein at 1 m intervals with an average sample length of 0.5 m. The channels were 2 inches wide and 2 inches deep. Samples were taken at intervals according to geological or alteration contacts and the minimum sample width was 0.1 m.

The sample are generally continuous across the vein sampling both ore and waste to define the vein boundaries, however for some veins all sampled material is > 1 g/t Au. The reports indicate that samples were according to geological or alteration contacts but the lithology data is unavailable. Overall, the channel sampling shows that the Kearney vein is continuous for the sampled strike length and continues south from the Riofinex and OML samples. Length-weighted average vein widths and grades considering a cut-off of 1 g/t Au, a maximum of 1.0 m internal waste, 0.5 m of continuous waste, and unassayed samples assigned a grade of 0.005 g/t Au are 1.0 m and 16.23 g/t Au, respectively. The lack of lithology data and unconstrained vein boundaries should be taken into consideration when using this data.

The second campaign with sample prefix "T", extend for 145 m along strike. The channels were cut perpendicular to the N to NNW strike of the vein at 2 m or 5 m intervals with an average sample length of 0.7 m. The channels were 10 cm wide and 10 cm deep and 1 kg to 2 kg of rock was collected for each sample. Samples were taken at intervals according to geological or alteration contacts and the minimum sample width was 0.2 m.

The sample data in the drillhole database is discontinuous and is mainly of ore grade intervals, as such the boundaries of the veins are poorly defined (Figure 9.4). The reports indicate that samples



were selected according to geological or alteration contacts, but the lithology data is unavailable. Overall, the channel sampling which are 1 m to 3 m lower in elevation than the Riofinex samples show broadly similar data. However, the true vein width and grades is unclear due to the selective sampling and lack of lithology data. This should be taken into consideration when using this data.

Samples for both sets of samples were analysed at OMAC Laboratories Limited (OMAC), County Galway by 30 g fire assay for gold and multi-element by ICP-AES (inductively coupled plasma atomic emission spectroscopy) using a strong oxidising digest for high sulphide samples. Any QAQC data related to the sampling campaigns is described in Section 11.3.

## 9.4.2.2 2011 to 2012

The 2011 sampling campaign sampled the Joshua vein and the 2012 campaign the northern end of the Kearney open pit (Figure 9.2). The same sampling methodology was used for both campaigns.

The Joshua vein samples extend for approximately 215 m along strike. The channels were generally cut perpendicular to the regional N to NNW strike of the vein but locally the orientation varied to follow the vein. Channels were cut at 1 m or 5 m intervals and were 10 cm wide by 5 cm deep (Figure 9.4). A sample length of 10 cm was used, and most samples were extended 0.2 m to 0.4 m into the waste wall rock. Length-weighted average vein widths and grades considering a cut-off of 1 g/t Au, a maximum of 1.0 m internal waste, 0.5 m of continuous waste, and unassayed samples assigned a grade of 0.005 g/t Au are 1.1 m and 8.92 g/t Au, respectively.

The channel sampling show that the Joshua vein is continuous for the entire sampled strike length and is mainly comprised of one main mineralised vein with some smaller veins that that split and coalesce with the main vein (Figure 9.4). The samples did not take into account geological or alteration contacts when sampling but used a small sample length of 0.1 m and mostly sampled across the vein boundaries. It is therefore considered that the sample represent the true vein width and grades. Care should be taken with the most northerly samples as the waste wall rock was not always sampled in along the western margin of the main vein and the true thickness of the vein remains unconstrained.

The Kearney vein samples targeted four separate veins and each set of samples extended for approximately 20 m to 62 m along strike (Figure 9.4). The channels were generally cut perpendicular to the regional N to NNW strike of the vein. Channels were cut at 5 m intervals and were 10 cm wide by 5 cm deep. A sample length of 10 cm was used, and most samples were extended 0.2 m to 0.4 m into the waste wall rock. Length-weighted average vein widths and grades considering a cut-off of 1 g/t Au, a maximum of 1.0 m internal waste, 0.5 m of continuous waste, and unassayed samples assigned a grade of 0.005 g/t Au are 0.4 m and 3.46 g/t Au, respectively.

The channel sampling show that the Joshua vein is continuous for the entire sampled strike length, but the vein widths are thinner than in the south of the open pit. It is also comprised of multiple, parallel, thinner veins (Figure 9.4). The samples did not take into account geological or alteration contacts when sampling but used a small sample length of 0.1m and mostly sampled across the vein boundaries. It is therefore considered that the sample represent the true vein width and grades.

Samples for both campaigns were analysed at OMAC County Galway or ALS Limited (ALS) County Galway by 30 g fire assay for gold, and multi-element by ICP-AES using a strong oxidising digest for high sulphide samples. Any QAQC data related to the sampling campaigns is described in Section 11.3.

Vein	Sample I.D.				No. of	No. of	Average	Total Length	
	Start	End	Company	Year	Channels	Samples	Sample Length (m)	(m)	Lab
Kearney	OMTRL288	OMTRL500	Riofinex	pre-1990	213	2,188	1.3	2,796	Unknown
Kearney	OMTRL544	OMTRL647	OML	1991	104	685	1.2	819	Unknown
Kearney	line01	line23	Galantas	2006	23	125	0.5	57	OMAC
Kearney	T375	T522	Galantas	2006	38	135	0.7	88	OMAC
Kearney	OM-CH-12/KY-01	OM-CH-12/KY-32	Galantas	2012	32	997	0.1	102	ALS
Joshua	OM-CH-11/JA-01	OM-CH-11/JA-39	Galantas	2011	39	792	0.1	79	OMAC
Joshua	OM-CH-11/JS-01	OM-CH-11/JS-38	Galantas	2011	38	1,479	0.1	148	OMAC

### Table 9.1: Summary of Surface Channel Samples

Note: See Figure 9.2 for the location of the surface channel samples.

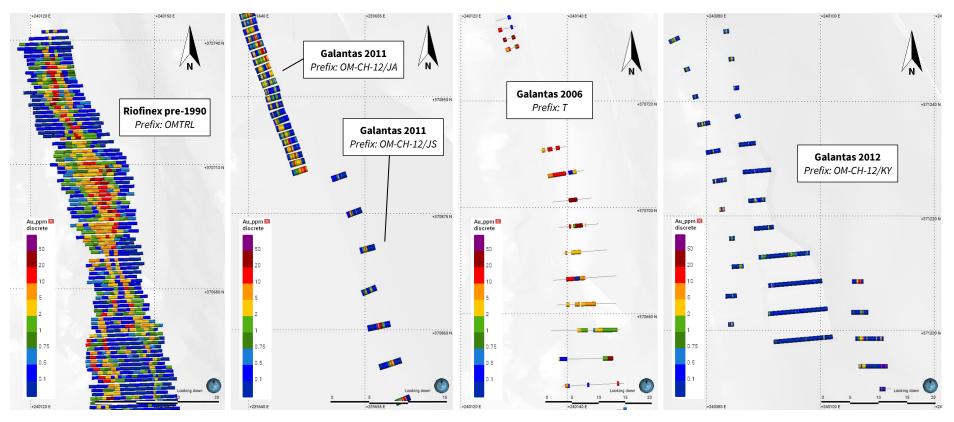
### Table 9.2: Summary of Underground Face Samples

	Sample I.D.				No. of	No. of	Average	Total Length	
Vein	Start	End	Company	Year	Channels	Samples	Sample Length (m)	(m)	Lab
Kearney	GAL-18-KYM-CH2	GAL-18-KYM-CH4	Galantas	2018	3	22	0.33	7	ALS/Wheal Jane
Kearney	GAL-19-KYM-CH1	GAL-19-KYM-CH69	Galantas	2019	66	72	2.9	211	ALS/Wheal Jane

Note: See Figure 9.5 for the location of the underground face samples.



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#### Figure 9.4: Plan Views Showing Examples of Channel Sample Gold Grades from Different Campaigns

Note: Prefix = sample prefix. See Figure 9.2 for overview of channel sample locations. Width of sample cylinders are 0.4 m. Source: Micon (2023).



## 9.5 UNDERGROUND FACE SAMPLES

Underground development at the Kearney vein gave access to faces for sampling in the ore drives. Details of the underground face sampling campaigns for which data is available are listed in Table 9.2.

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020, and describes the sampling protocol for the underground face samples:

For approximately every second face in each of the underground ore drives (approximately 5 m strike interval) chipped samples were collected along 1.5 m high channel lines. The horizontal lines were marked with spray paint and spanned the entire 3 m wide section of each drill face, regardless of mineralisation observed. A hammer was used to chip across this channel with a consistent collection of material in labelled sample bags. Approximately 3 kg of rock and clay was taken at each of the sampled faces. This 'chip channel sampling' is a practical and efficient means of collecting material used for grade control applications. In collecting a sample that spans the entire width of the drive, a realistic and reliable grade is ascertained for each mined block in the model.

Samples were logged in a diary and analysed using the on-site laboratory, which is not independent. Material was crushed using a small mill crusher and placed under heat lamps until dried thoroughly, typically this took 1.5 to 2 hours. Samples were then pulverised and sieved through 300 um and 75 um sieves until at least 120 g of material was retrieved. The sub-sample was placed in a labelled bag. A standard fire assay procedure was followed. Fire assays were carried out on four 30 g samples. Prills were measured and recorded for gold grade at the end of the assay procedure and the average was reported. Sample prills were always labelled and retained for future records.

The samples were taken for grade control purposes and not intended for resource estimation. As such, they have not been subject to the usual duplication, verification procedures and independent testing that is usually applied where the samples are taken for resource estimation purposes.

The in-house laboratory carries out analyses on a range of sample types, such as run-of-mine feed, tailings, concentrate and grade control samples. Standard practice is to minimise errors by carrying out multiple assays on the same sample. In-house assays are periodically compared with those carried out by outside independent laboratories.

The face samples were spaced between 1.5 m to 10.0 m along strike and in all but two instances were a single channel across the face (Figure 9.5). Of the 69 face channels made, only four were comprised of multiple individual samples with an average sample length of 0.35 m. All the other channels were a single sample taken from the face with no delineation of ore and waste based on geological or alteration contacts. The average channel length was 3.2 m. The true vein width and grades are therefore unclear due to the whole face samples that may have included both mineralised and unmineralised rock. This should be taken into consideration when interpreting the data.

Notwithstanding the sampling of both ore and waste, the underground face samples show that the main Kearney vein is continuous along the strike length of the development.



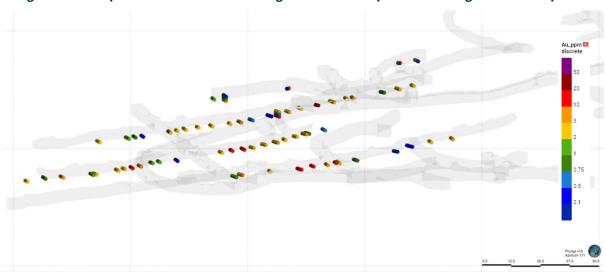


Figure 9.5: Oblique View to the ENE of Underground Face Samples and Underground Development

Note: Width of sample cylinders are 0.8 m. Underground development in light grey. Source: Micon (2023).

Since the Galantas Gold Corporation (2020) report was written all of the samples have been independently analysed at ALS County Galway or Wheal Jane Laboratory Cornwall by 30 g fire assay for gold, and some samples for multi-element by ICP-AES using a strong oxidising digest for high sulphide samples. This was completed to verify the internal Galantas laboratory data. The sample preparation was still conducted internally at the Galantas onsite laboratory.

It is understood that since the 2019 underground face sampling campaign, Galantas updated their sampling methodology in 2021. Two samples are collected across the face, one of barren waste rock and one for the mineralised vein. The length of the waste rock and mineralised vein samples are recorded. Both samples are individually analysed and then normalised to produce a single gold grade result for the entire width of the face.

Micon recommends that multiple samples are take per underground channel sample according to geological or alteration contacts. This will allow a better understanding of the true vein width and grade. A length-weighted average grade can then be calculated for the entire width of the channel to inform mining. It is recommended that samples are sent to an accredited laboratory with regular QAQC samples (standards, blanks, and duplicates). If the analyses are of suitable quality, they could be used in future geological models and MREs.

# 9.6 GEOPHYSICAL SURVEYS

### 9.6.1 IP

Riofinex performed an induced polarisation (IP) geophysical survey between May 1985 and March 1989. There is limited information regarding the survey in the available reports listed in Section 2.5.

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008, and describes the results of the IP survey:

- Kearney (No. 31) has IP geophysical anomalies over 300 m of strike at the south end and over 400 m of strike at the north end of a total 1000 m of IP extended strike; and,
- Joshua's (No. 32) has IP geophysical anomalies over 200 m of strike within a total of 600 m.



## 9.6.2 Regional Magnetic Survey

Riofinex conducted a magnetometer test survey in September 1987, and a detailed survey between November 1987 and January 1989. It showed the existence of magnetic horizons parallel to the regional strike and discontinuities were thought to be caused by faulting. One occurred at the northern end of the Kearney vein system, close to the Luis shear zone. Another, coincident with the northern extension of the Joshua vein.

## 9.6.3 VTEM

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008, and describes the geophysical survey undertaken:

Airborne time-domain electromagnetic (VTEM) and magnetic surveys were flown by helicopter over most of the exploration licence including the Dalradian rocks of the Lack inlier in the summer of 2005. The main objective was to locate electromagnetic anomalies which may be due to conductive mineralised structures. The results have also been used to improve the quality of geological mapping of this poorly exposed area.

The surveys were carried out by independent geophysical survey contractors, Geotech Airborne Ltd of St. Michael, Barbados, under contract to Galantas Gold Corporation.

During the period June 24<sup>th</sup> to July 12<sup>th</sup>, 2005, Geotech Airborne Limited carried out a helicopter-borne geophysical survey for Galantas Gold Corporation over one survey block covering the Dalradian Lack inlier. The survey was flown using an Astar B2 helicopter, registration G-PLMH, operated by PDG Helicopters. The principal geophysical sensors included a time domain electromagnetic system (VTEM) and a cesium magnetometer. Ancillary equipment included a GPS navigation system and a radar altimeter. A total of 1501.2 line-kilometres were flown at nominal traverse line spacing of 100 metres. Tie lines were flown perpendicular to traverse lines at 500 m spacing. Where possible, the helicopter maintained a mean terrain clearance of 75 m, which translated into an average height of 30 meters above ground for the bird-mounted VTEM system and 60 meters above ground for the magnetic sensor.

Data processing involved quality control and compilation of data collected during the acquisition stage, using the in-field processing centres established at Omagh and Enniskillen, Northern Ireland. Preliminary and final data processing, including generation of final digital data products were carried out at the office of Geotech Limited in Aurora, Ontario. The processed survey results are presented as maps of total magnetic field colour contours and logarithmic scale stacked profiles at a scale of 1:20,000. Digital data includes all electromagnetic and magnetic products plus positional, altitude and raw data.

A number of EM anomaly groupings were identified which Geotech Airborne recommended for ground follow-up if favourably supported by other geoscientific data.

Galantas geologists carried out ground inspections to identify apparent cultural VTEM anomalies associated with farm buildings and other man-made conductors.

Kearney is associated with weak VTEM anomalies over the north half of the strike.



## 9.7 SATELLITE IMAGERY

In 2003, ACA Howe analysed available Landsat 7 over the Lack Inlier. The objective was to use the imagery to characterise the structural setting of known mineralisation around the established Kearney structure and other deposits and derive a satellite imagery signature of the mineralisation.

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008, and describes the results of the satellite interpretation:

Inspection of satellite imagery around the Kearney vein swarm showed distinct linear patterns in close correlation with the known north-south and north by north-easterly gold/sulphide deposits, in particular the Kearney and Joshua structures which are known to be fault controlled. Several strong lineaments, never before identified, were observed within the vein swarm, one lying between the Kearney and Joshua deposits which are 500 m apart. In addition, there are regional north-east trending cross structures that appear to bound the Kearney vein swarm area and which may have important metallogenetic significance. These have been provisionally interpreted as bounding shears which caused the structural dilation which allowed mineralising fluids to permeate the Dalradian host rocks.

The Landsat 7 imagery interpretation was extended over the whole Prospecting Licence. Lineaments of similar north-south orientation have been identified throughout the area; some of them coinciding with the north-easterly trending cross structures as at the Kearney deposit. In addition, areas with particularly high lineament density were identified.

### 9.8 TOPOGRAPHIC SURVEYS

### 9.8.1 Surface

A number of topographic surveys are available for the Omagh Gold Project, these include:

- kearney\_final\_pit\_survey; and,
- DTM\_Coastway\_2012

The high resolution kearney\_final\_pit\_survey is confined to the boundaries of the open pit and is the best representation of the final pit topography before any back filling occurred. It is clear from the channel samples elevations that there is a small area in the NE corner of the pit that was extracted after the survey date.

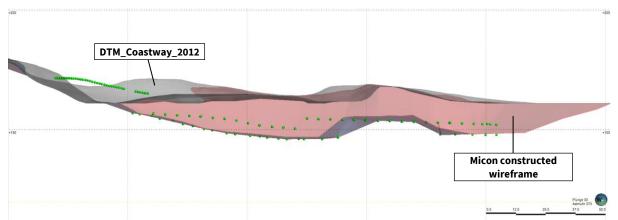
The high resolution DTM\_Coastway\_2012 covers the Kearney and Joshua vein systems and is the best available topography for the Project. It was surveyed after backfilling had occurred in the south of the Kearney open pit and the majority of the Joshua open pit. As such, a digital elevation model (DEM) is not available for the final topography of the Joshua pit. However, there are 35 survey points over a strike length of 202 m of the extracted vein indicating the final pit bottom.

Micon constructed two wireframes to account for the extracted or backfilled areas in the Kearney and Joshua pits that are not captured in the available surveys (Figure 9.6). The extents of the wireframes were based on the Joshua survey points or the Kearney channel samples, and the pit



face angle on the exposed pit walls in the respective areas. These constructed wireframes were merged with the kearney\_final\_pit\_survey and the DTM\_Coastway\_2012 wireframes to create a wireframe that best represents the limit of open pit mining from the available data.





Note: Survey points in green, lowest elevation points show the final pit bottom. Face angles of Micon constructed wireframe was based on the exposed pit walls. Source: Micon (2023).

# 9.8.2 Underground

## 9.8.2.1 Development

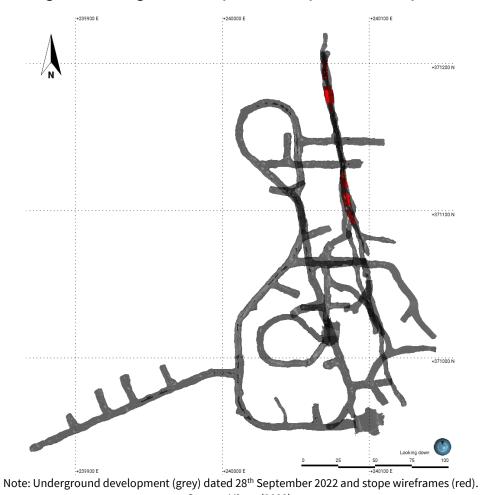
The frequency of underground surveys depends on the number of metres developed. The underground is surveyed every six weeks at a minimum. The floor of the development is surveyed using a Trimble S5 robotic total station. The total station uses control points/stations of known coordinates underground and a pole with a reflector prism atop. The total station has an accuracy of 1 mm to 2 mm. The mine has been 3D scanned and the scan is updated every 6 months. The 3D scan is captured by a Geoslam ZEB Revo RT scanner. The data is high resolution, and the scanner has an accuracy of up to 6 mm.

Micon received an underground development string (floor) dated 20<sup>th</sup> December 2022. When compared to the available 3D wireframe of the underground development it was clear that there had been significant development that was not captured in the 3D wireframe. Micon updated the 3D wireframe to account for this by using the floor string geometry and creating a roof string with the same geometry at a height equivalent to the 3D wireframe in that area. The updated 3D wireframe is shown in Figure 9.7.

# 9.8.2.2 Stope

Every stope that is taken is surveyed. The stopes are surveyed using a handheld RS Pro RSLDM-50H laser distance meter. It has an accuracy of 1.5 mm. A surveyor marks the northing every metre on the walls of both the top and bottom development tunnels. To survey the stope, a distance is taken from a northing line using the laser. The start and the end of the open stope is measured on each level. The width of the stope is approximately measured from a distance due to ground stability. The stopes that have been mined and surveyed are shown in Figure 9.7. The stope wireframes were received from Galantas on 6<sup>th</sup> January 2023 and show the stopes mined until 31<sup>st</sup> December 2023.





#### Figure 9.7: Underground Development and Stopes at the Kearney Vein

Source: Micon (2023).



## 10.0 DRILLING

Information in this section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014, ACA Howe (2012), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 10<sup>th</sup> August 2012, and ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008. Any text directly quoted from these reports is stated alongside supporting information from other sources.

The drilling discussed in this Section is limited to drill holes targeting the Kearney and Joshua vein systems only. All drilling of the Kearney and Joshua vein systems is diamond drill core. A summary of the drill holes is provided in Table 10.1 and a drill plan showing the collars and traces relative to the vein wireframes in Figure 10.1. A list of drill holes collars including the location, azimuth, and dip are shown in Table 30.1 in the Appendix. A summary of mineralised drill hole intercepts within the modelled vein wireframes are shown in Table 30.2 in the Appendix.

Drilling was completed by two companies: Riofinex between 1987 and 1990, and Galantas between 2006 and 2022. The Galantas drilling can be split into four separate drill campaigns: 2006 to 2007, 2011 to 2013, 2015 to 2016, and 2021 to 2022. All drilling prior to the 2021 to 2022 drill campaign was completed from surface. With the underground development at the Kearney vein, all Kearney drill holes in 2021 to 2022 campaign were completed from underground.

The database was closed on 31<sup>st</sup> December 2022 and no new data from the 2021 to 2022 drill campaign was added after this date. A small number of assays were outstanding at the time the database was closed but the impact of incorporating this new data in an estimate is expected to be insignificant.

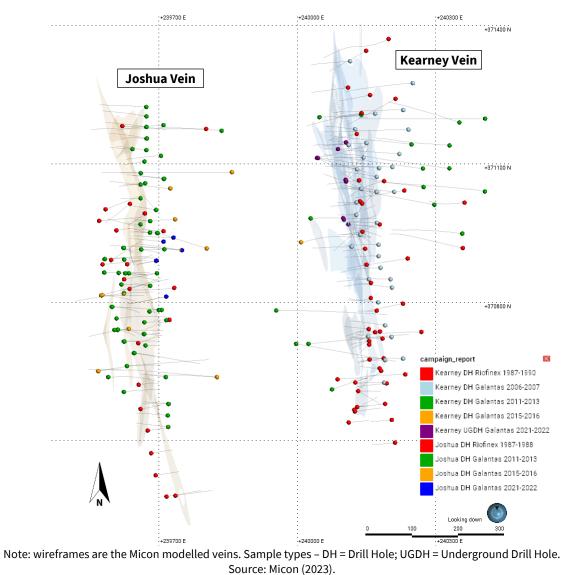
Details of logging, sampling, QAQC, and analytical methods for the different drill campaigns are described in Section 11.0.

Vein Ty	Type	Company	Year	Count	Length (m)				Assayed Gold	Logged
vein	Туре	Company	fear	Count	Total	Min.	Max.	Av.	(Au %)	(%)
	DH	Riofinex	1987-1990	50	5,189	28	355	104	10%	100%
	DH	Galantas	2006-2007	35	4,875	38	329	139	16%	99%
Kearney	DH	Galantas	2011-2013	18	5,599	85	449	311	4%	38%
	DH	Galantas	2015-2016	1	354	-	-	-	3%	0%
	UGDH	Galantas	2021-2022	22	3,016	61	252	137	9%	40%
	DH	Riofinex	1987-1988	23	2,332	43	157	101	3%	99%
Joshua	DH	Galantas	2011-2013	67	8,169	22	495	122	5%	45%
Josnua	DH	Galantas	2015-2016	13	3,526	143	503	271	3%	4%
	DH	Galantas	2021-2022	8	1,262	66	261	158	4%	100%

#### Table 10.1: Drill Hole Summary for the Joshua and Kearney Vein Systems

Note: Sample types – DH = Drill Hole; UGDH = Underground Drill Hole. All drilling is diamond drill core.





#### Figure 10.1: Plan View Map of the Drill Hole Collars and Traces for the Joshua and Kearney Vein Systems

# 10.1 DRILL METHODS

# 10.1.1 Riofinex

The 1989 report by Riofinex indicates that the majority of diamond drill holes were drilled with a Craelius Diamec 250 or 750 rig equipped with wireline tools (Riofinex North Limited, 1989). The drilling was contracted to Encore Drilling Company and Drill Sure Limited. These holes were drilled with 57 mm diameter core, and it was sometimes necessary to reduce to 36 mm diameter core where cavings or hole tightness occurred. Deep drill hole OMBHL137 was drilled with a Boyes BS37 rig equipped with wireline tools. The hole was drilled with 85 mm diameter core initially and then reduced to 63 mm.

The report, Riofinex North Limited (1989) only details up to drill hole number OMBHL153. For any remaining holes drilled in 1989 and 1990 it is likely that similar equipment was used as it was a continuation of the drill campaign.



# 10.1.2 Galantas

#### 10.1.2.1 2006-2007

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008:

Irish Drilling Limited were contracted to undertake the drilling and utilised Canadian Boyles Brothers 35A rigs and the wireline drilling method was employed to undertake HQ3 triple tube core drilling. The triple tube (split barrel) method was chosen to ensure good core recovery. All drilling activities were supervised by site personnel and data collection methodologies monitored by ACA Howe during the drilling campaign to ensure industry standard best practices for drilling were adhered to.

Drilling was undertaken in 1.5 m drilling runs and core transferred to wooden core boxes once out of the hole. The drilling contractors placed core blocks in the boxes to mark the end of each run, and the drilled depth was written on to the blocks.

# 10.1.2.2 2011-2013

The following text in italic is taken from Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014:

Drilling contractors utilised JKS Boyles BBS37 rigs with wireline equipment. Some holes were drilled using Galantas' own Atlas Copco CS14 rig. HQ triple tube coring was implemented (61.1 mm) and hexagonal core barrels were brought in to maintain the desired drilling inclination in some of the later holes. The option of switching to NQ was kept and was required for the deeper sections of some holes.

Drilling and data recording activities were supervised by senior geological personnel to ensure industry best practices for drilling were maintained.

Drilling took place in 1.5 m lengths, or runs, and extracted using a secondary winch system. The core was then very carefully pumped from the core barrel into a half tube and examined at the drill side for signs of mineralisation.

#### 10.1.2.3 2015-2016

Priority Drilling were contracted to carry out the 2015 to 2016 surface drill programme. The drill rigs used were JKS Boyles 56 Series with wireline equipment. Drilling was usually HQ triple tube; however, some later holes were drilled NQ. Hexagonal core barrels were utilised to maintain drill inclination and muds were added to the process to ensure good core recovery. Drilling was undertaken in 1.5 m runs. The core was transferred to wooden boxes and depth markers added at the end of each run.

## 10.1.2.4 2021-2022

Mineral Exploration Drilling were contracted to carry out the surface drilling using a Duralite-DL1000 diamond drill rig and the underground drilling using a Boart Longer LM90. An image of the underground drill rig at the Kearney vein is shown in Figure 10.2.



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The method of drilling was HQ triple tube and drill muds were also used to ensure the best possible core recovery. Hexagonal core barrels were also used to maintain the correct drilling inclination. Drill core was extracted in 1.5 m runs and the core was examined by a geologist while still in the split tube. Following examination, the drillers transferred the cored sections into wooden boxes and marked them with depth labels.



## Figure 10.2: Underground Drill Rig at the Kearney Vein

Source: Micon (2022).

# 10.2 RECOVERY

# 10.2.1 Riofinex

Recovery data is unavailable for the Riofinex drill holes. However, it is recorded in Riofinex North Limited (1989) that in general, core recoveries were in excess of 90% including most vein intersections, even where quartz and sulphide were hosted by soft clays.

# 10.2.2 Galantas

The drill core recovery statistics for the different Galantas drilling campaigns are shown in Table 10.2. The average core recovery is greater than 92% which is deemed suitable for use in the MRE. The recoveries were measured using two different methodologies depending on the drill campaign: (1) the recovery was measured for each 3.0m drill run, or (2) the recovery was measured on individual samples. The measurement based on individual samples gives confidence in the recovery of mineralised samples where there is known to be significant clay material.



Vein	Туре	Company	Year	Measured	Samples	Mean	SD	Min.	Median	Max.
	DH	Galantas	2006-2007	Drill Run	1,019	93.00	19.00	0.00	100.00	100.00
Koorpou	DH	Galantas	2011-2013	Sample	571	93.00	16.00	6.00	100.00	100.00
Kearney	DH	Galantas	2015-2016	Sample	28	94.00	12.00	48.00	100.00	100.00
	UGDH	Galantas	2021-2022	Sample	841	95.00	15.00	8.00	100.00	100.00
	DH	Galantas	2011-2013	Sample	916	92.00	17.00	0.00	100.00	100.00
Joshua	DH	Galantas	2015-2016	Sample	287	98.00	7.00	27.00	100.00	100.00
	DH	Galantas	2021-2022	Sample	159	97.00	12.00	15.00	100.00	100.00

#### Table 10.2: Drill Core Recovery Statistics for the Different Galantas Drilling Campaigns

Note: Sample types – DH = Drill Hole; UGDH = Underground Drill Hole. Measured – Drill Run = recovery measured for the 3.0 m drill run; Sample = recovery measured for individual samples.

# **10.3 COLLAR SURVEYS**

## 10.3.1 Riofinex

No details are available on the collar survey method for Riofinex drill holes.

## 10.3.1.1 Grid Transformation

In 2008, ACA Howe merged historical Riofinex data for the Kearney vein on a local mine grid with more recent exploration data captured in the regional Ordnance Survey of Ireland (OSI) coordinate system. They performed a grid transformation of the historical Riofinex data in Micromine based on two know historical drill hole collar locations to convert to the Ordnance Survey of Ireland gird system (ACA Howe, 2008).

Galantas noted discrepancies between the transformed collars and georeferenced historical maps. Drill hole collars were situated on the wrong side of roads compared to the historical maps, and the roads have not moved position since the 1980s. As such, the georeferenced historical map was used to update the collar locations. The map was completed in 1989 during the final phases of the Riofinex exploration programme and it must be assumed these drill holes are in the correct locations on this map. The map was georeferenced with 8 control points located on fixed features that could be correlated with aerial imagery.

The elevation value was also updated. A DEM was generated using digitised contours from a Riofinex map that predates the open pit excavation. These contours had a 2 m spacing across the mine site which provide sufficient resolution considering the relative flat topography.

Micon has reviewed the methodology used by Galantas and the updated collar locations and is satisfied that they represent the true location of the data.

## 10.3.2 Galantas

The surface collar locations were set out, and then re-surveyed after completion of the hole, using a Leica TS06 Plus Total Station. The total station uses known coordinates and a staff with a prism is used to precisely survey the collar. Underground collar locations were marked out by a contracted surveyor using a Trimble S5 robotic total station, the total station uses control points/stations of known coordinates underground and a pole with a reflector prism. The total station has an accuracy of 1 mm to 2 mm.



## **10.4 DOWN HOLE SURVEYS**

## 10.4.1 Riofinex

All drill holes were systematically down hole surveyed using a Tropari survey instrument, except for drill hole OMBHL137 which was surveyed with an Eastman system (Riofinex North Limited, 1989).

Micon notes that not all Riofinex drill holes have down hole survey measurements in the drill hole database. A total of 17 drill holes have survey measurements for the collar elevation only. Of these 17 drill holes, 11 are less than 100 m deep and no drill hole exceeds 134 m deep. It is recommended that the paper records are checked to ensure all the data has been digitised.

# 10.4.2 Galantas

10.4.2.1 2006-2007

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008:

Down hole surveying was completed for holes OM-DD-016 to OM-DD-049 via the use of the MultiSmart multi-shot surveying technology to collect angle and azimuth data at 6m intervals down-hole. The MultiSmart down-hole tool was supplied to the drilling contractor by GeoMEM Ltd. The surveying device is controlled via a StoreIT data pad, PC or palm-held unit and readings were collected at 6m intervals down the hole upon completion of drilling. Data collected on site was transferred directly to ACA Howe unmodified, via email, validated and appended to the Micromine database for the project. Holes OM-DD-001 to OM-DD-015 were not surveyed at the time of drilling as no surveying tool could be sourced at the time. These holes were largely drilled to depths of less than 100m, and following a review by Howe of hole path characteristics of holes that were surveyed, no appreciable deviation of hole paths is seen at shallow depths, but rather hole steepening increasing beyond hole depths of approximately 100-150m. As a precaution, hole OM-DD-014 was able to be re-entered using the survey tool and was found to show little deviation.

Only 5 drill holes without down hole surveys were used in the MRE of the Kearney and Joshua veins. Of these 5 drill holes, all the drillholes are less than 100 m deep.

## 10.4.2.2 2011-2013

The following text in italic is taken from Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014:

On completion of a drill hole the down hole survey was carried out using Flexit MultiSmart multi-shot surveying equipment to collect angle and azimuth data at, most commonly, 15m (sometimes 18m) intervals down-hole. This equipment was supplied by the drilling contractor. The surveying device is controlled via a StoreIT data pad, PC or palm-held unit. Data collected was validated and appended to the Micromine database for the project.



Micon has reviewed the down hole survey interval length and it varies considerably dependant on the drill hole. The most common intervals are 3.0 m, 6.0 m, 9.0 m, 15.0 m or 18.0 m, and the average interval spacing is 12.2 m.

# 10.4.2.3 2015-2016

During the 2015 to 2016 drill campaign a multi-shot survey was taken at regular intervals at the end of the drilling process. The contractor supplied the survey equipment. A Reflex Ex-Trac was used to collect the data and the information was recorded and stored on a hand-held unit before being transferred to the drill database.

# 10.4.2.4 2021-2022

Downhole surveys were carried out during the drill process. A single shot survey was usually taken within the first 40m to ensure that drilling was on target, thereafter, single shots were taken approximately every 50-100 m. Single shot frequency depended on ground conditions and surveys were only attempted where the surrounding rock was sufficiently competent. A final survey was taken at the end of each hole.

Micon has reviewed the down hole survey interval length and the average interval is 57 m.

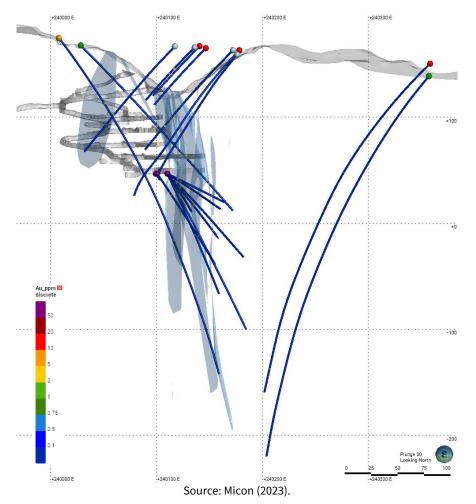
# 10.5 DRILLING, SAMPLING, AND RECOVERY FACTORS

There are no drilling, sampling or recovery factors in the drilling used to support Mineral Resource estimation that could materially impact the accuracy and reliability of the estimate known to the QP.

## **10.6 SAMPLE LENGTH/TRUE THICKNESS**

Drill intercepts intersect the vein structures at variable angles and therefore do not always represent the true vein thickness. This is because of the steeply dipping nature of the veins and limitations related to the angle that can be drilled from surface or the proximity of the drill pad to the vein underground. Examples of this are shown in Figure 10.3. However, the true thickness is easily calculated due to the consistent strike and dip of the vein structures, and this is supported by observations from the underground ore development. Calculations of the true vein thickness for mineralised drill hole intercepts within the modelled vein wireframes are shown in Table 30.2 of the Appendix.





#### Figure 10.3: S-N Cross-Section of the Kearney Vein Showing Variable Dip and Azimuth of Drill Holes

# 10.7 PROBE DRILL HOLES

Galantas use probe drilling as a form of grade control and to test for structures parallel to the main vein, and the occurrence of dilation zones or pinch and swell structures. The method is based on the visual observation of cuttings and no samples are collected for assay. The data was not used in the preparation of this report.

The following text in italic is taken from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28th April 2020:

Probe drilling was carried out using an Atlas Copco 104 long hole drill rig and 1.525 m length rods. Each rod drills a hole of 51 mm diameter. Cuttings were diverted directly from the hole into a large container on the floor via a plastic tube. As each rod was drilled detailed notes were made of any changes in feed pressure, drill rotation speed, water and cutting returns, and any difficulties in drilling which could signify changes in rock components. Particular attention was paid to water colour, with dark grey/black returns often associated with ore zones. If a water colour change was detected during drilling then this was recorded alongside a visual estimate of the remaining rod length (e.g. at 1 m rod length left, the water turned grey). Water and sediment were collected into the container as each rod was drilled. The fines were given time to settle before sampling. Samples were collected by hand,

typically three handfuls per rod, and transferred into a pre-labelled plastic bag. The container was flushed out between every 1.5 m sample length to reduce contamination. A borescope borehole investigation camera was used to record five of the holes.

In the lab, each sediment sample was inspected with a hand lens and all observations recorded in a lab book and Excel spread sheet. Descriptions included: sample colour, grain size, mineral content and ore presence or absence. Each sample was dried and double bagged.

# **10.8 COMMENT ON DRILLING**

In the opinion of the QP, the drill methods, core recovery, collar survey, and downhole survey data collected in the drill programmes are sufficient to support the MRE.

There are some factors that could affect the reliability of the results, but Micon is of the opinion that they will not have a material impact on the Mineral Resources. These include:

- **Down hole surveys** down hole surveys are missing in the digitised database for 17 Riofinex drill holes and were not collected for five drill holes from the 2006 to 2007 campaign. These drill holes are generally less than 100 m deep and a review of the hole paths shows that there is no appreciable deviation of hole paths at shallow depths. Furthermore, the mineralised intercepts from these drill holes are spatially consistent with proximal down hole surveyed drill holes. It is therefore unlikely that modelled vein position is compromised; and,
- **Core recovery data** is not available for the Riofinex drill holes. However, it was recorded in Riofinex North Limited (1989) that in general, core recoveries were in excess of 90% including most vein intersections, even where quartz and sulphide were hosted by soft clays. In addition, the grades of Riofinex drill holes are consistent with proximal Galantas drill holes.



# 11.0 SAMPLE PREPARATION, ANALYSES, AND SECURITY

The assay grades used in the MRE are from drill core samples collected from Riofinex drilling between 1987 and 1989, and Galantas drilling between 2006 and 2022. Assay grades from a limited number of Galantas surface channel samples were also used in the MRE (see Section 14.1.1). The logging, sampling, sample preparation, analysis, and security for drilling are described in detail in this section. The sampling process for surface channel samples is described in Section 9.4.

# **11.1 RIOFINEX**

There is limited information on the logging, sampling, sample preparation, and assay of the Riofinex drill core. The main source is Riofinex North Limited (1989), which is summarised in the following sections.

# **11.1.1** Logging and Sampling

All drill core was logged, with an additional detailed alteration and mineralogical log for all sampled and analysed drill core. The core was carefully measured and marked out with notes made of any core loss and vein intersection angles.

The drill core was selectively sampled based on the logged mineralisation. Individual samples were generally less than one metre long and were marked out according to geological changes such as vein and alteration boundaries. Samples of unmineralised wall rock were taken either side of sampled mineralised intercepts to constrain the mineralisation.

## **11.1.2** Sample Preparation

Sampled drill core was longitudinally split in half with a diamond core saw and submitted to the laboratory for analysis. Further preparation of the half core sample including crushing, grinding, and sub-sampling are not described in the documentation.

## 11.1.3 Assaying

The sample laboratory is unknown. The samples were analysed for gold and silver by fire assay and lead by AAS.

## **11.2 GALANTAS**

Information in this section was summarised from Galantas Gold Corporation (2020), Controls on Mineralisation at the Galantas Gold Mine, Cavanacaw, Omagh, Country Tyrone, Northern Ireland, 28<sup>th</sup> April 2020, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014, ACA Howe (2012), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 10<sup>th</sup> August 2012, and ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008. Any text directly quoted from these reports is stated alongside supporting information from other sources.



The logging and sampling, sample preparation, and assaying methodology is generally consistent for the different Galantas drilling and sampling campaigns. Any differences between the campaigns are highlighted in the preceding sections.

Micon employees Liz de Klerk (QP) and Dr Ryan Langdon visited the Omagh Gold Project for two days from 15<sup>th</sup> to 16<sup>th</sup> November 2022 and observed the logging, sampling, and sample preparation of drill core from the 2021 to 2022 drill campaign.

# **11.2.1** Logging and Sampling

At the drill rig the core boxes are marked with the drill hole id, box number, measured intervals, start depth, and any cavities encountered using a permanent marker. Core blocks are inserted in the boxes to mark the end of each run, and the drilled depth is written on to the blocks. The core was cleaned prior to transportation. The core boxes are transported from the drill site to the core processing facility. Currently a 4 x 4 wheel drive pickup is used to transport the core, in previous campaigns a tracked buggy was used to minimise core disruption during transport.

The current core logging and processing facility is in a lockable converted shipping container sited next to the processing plant. It has a perspex roof and power for light and heating. A custom-built angled core rack can accommodate up to 24 boxes and allows access over the core for logging. In previous drill campaigns prior to 2013, a converted barn located close to the site offices was used.

The core is stacked in order in the converted shipping container before being laid out on the racks for logging and sampling. Core recovery data is collected by measuring the recovered core lengths of each run and comparing this value with lengths written on core blocks by the driller. Any core loss is recorded, and the probable zone of core loss ascertained, often in consultation with the driller. The same process is repeated after the samples have been marked up to calculate the core recovery on a sample-by-sample basis.

The drill core is then logged to capture the necessary geological and structural information. Geological logging captures the lithology, alteration, structure, quartz vein characteristics, sulphide content, and rock quality designation (RQD) data. The data is recorded on detailed handwritten log sheets and then manually entered into a digital database. Once logged, the core boxes are photographed wet and dry and the photographs are uploaded to a computer archive.

Galantas undertook a work program in 2022 to align the logging codes from the historical and recent drill campaigns. This was done to simplify the logging codes and group them into the dominant mineralised and unmineralised lithologies. Both the historical and aligned logging codes have been preserved in the database to ensure no data is lost. Micon has reviewed the aligned logging codes and deem them suitable for use in the MRE.

Micon's QP notes that the logs in the database are incomplete for drill holes from the 2011 to 2013, 2015 to 2016, and 2021 to 2022 drill campaigns (Table 10.1). The missing intervals are generally related to unmineralised rock. However, there are 27 drill holes with mineralised intercepts that have been sampled and assayed but not logged from the 2011 to 2013 and 2015 to 2016 drill campaigns. It is not clear if this is because the core was not logged or the data has not been digitised and entered into the database.

Drill core is selectively sampled with sampled intervals based on the logged mineralisation and lithology. The ore characteristics are sufficiently well understood to enable areas of probable



mineralisation to be identified by Galantas geologists. Samples are generally restricted to core containing quartz veining, sulphide mineralisation, clay gauge, and alteration zones at vein margins. Any alteration zones or unusual lithologies in hanging wall and footwall zones are also sampled. Samples of unmineralised wall rock are taken 0.5 m to 1.0 m either side of sampled mineralised intercepts to constrain the mineralisation. Once samples are chosen, the sample intervals are marked onto the core prior to core cutting.

# **11.2.2** Sample Preparation

The core is cut in half longitudinally with a circular diamond bench saw and both halves of core are replaced in the box in their original orientation. Care is taken to ensure that an exact half of the core is sampled, and no contamination occurs. The samples are placed in clear plastic sample bags and a sample number ticket is inserted. The sample number is also marked on the sample bag with a permanent maker and a second sample ticket is sealed within the bag opening to ensure correct identification at the laboratory. After all the samples have been bagged, they are laid out in numerical order and batches of samples are placed in larger bags ready for dispatch to the laboratory. The remaining half core is stored in shipping containers and trailers on site. Not all of these facilities are lockable.

Exploration surface channel sampling was undertaken at the same time as drilling for the 2011 to 2013 campaign. Only channel samples from this period were used in the MRE (see Section 14.1.1). Surface channel samples were placed into sample bags using the same methodology as the drill core samples. They were added to sample batches of drill core and sent to the laboratory for analysis together with the drill core samples.

The sample batches are dispatched via courier or driven by Galantas to the laboratory in Loughrea, County Galway, Republic of Ireland. The laboratory has changed ownership during the Galantas drilling campaigns. Prior to 2011 it was known as OMAC Laboratories Limited (OMAC) and in 2011 it became part of ALS Limited (ALS). Two inventories of submitted samples are dispatched with the samples. One copy is signed by laboratory staff as proof of receipt and returned to Galantas, whilst the other is signed and retained by laboratory staff for reference. As a precaution, each sample submission sheet is also e-mailed directly to the laboratory prior to delivery of samples. Each sample is barcoded upon entering the laboratory and tracked with the code as it is passed through the system to provide traceability.

The samples are prepared by the laboratory which comprises of drying the samples, jaw crushing to 70% <2 mm, sample splitting of a 1 kg sub sample using a riffle or rotary splitter, and homogenisation and pulverisation to  $85\% < 75 \mu$ m. All fractions during the sample preparation stage are retained.

# 11.2.3 Assaying

All assayed samples used in the MRE were analysed at the OMAC or ALS laboratory in Loughrea, County Galway, Republic of Ireland, now part of ALS.

The laboratory is accredited to ISO/IEC 17025:2-17 by the Irish National Accreditation Board (INAB). This standard relates to competency requirements for testing and calibration laboratories. INAB is a signatory of the European co-operation for Accreditation Multilateral Agreement and the International Laboratory Accreditation Cooperation Mutual Recognition Arrangement for Testing.



Samples are analysed for gold by a 30 g fire assay with AAS (atomic absorption spectroscopy) or ICP-AES (inductively coupled plasma atomic emission spectroscopy), and samples returning grades > 100 Au ppm are with a gravimetric finish. Multi-element analysis is by ICP-AES using a strong oxidising digest for high sulphide samples. The elements reported are Ag, As, Bi, Ca, Cd, Co, Cu, Fe, Hg, Mg, Mn, Mo, Ni, P, Pb, S, Sb, Tl and Zn.

# 11.2.4 Bulk Density

Density measurements were collected by Galantas from grab samples in 2008 and drill core samples in 2022. The density was calculated by weighing the sample in air and suspended in water. All density measurements were carried out internally. The results of the density measurements are described in Section 14.1.3.

# 11.3 QUALITY ASSURANCE QUALITY CONTROL

All Quality Assurance Quality Control (QAQC) data was assessed with respect to the entire dataset for the drill and sampling campaign rather than a subset of the data for the Kearney and Joshua veins only. This was done to ensure that there was enough data to draw statistically valid conclusions. The Galantas 2011 to 2013 dataset includes surface channel samples and drill core samples as they were collected and processed at the same time.

# 11.3.1 Riofinex

The QAQC data for the Riofinex drilling campaign was not available to Micon. Galantas do not have known paper or digital copies of the data. It is likely that QAQC samples were submitted as part of the drilling campaign based on the Riofinex North Limited (1989) report. The report does not explicitly detail that QAQC samples were submitted for the drill core, however it mentions that for the surface channel samples field duplicate were collected and lab duplicates were submitted at a rate of 10%. A small umpire assay programme was also completed.

# 11.3.2 Galantas 2006-2007

The Micon QP has reviewed the ACA Howe (2008) report that details the 2006 to 2007 QAQC and includes the raw QAQC data in the appendix. All samples were analysed at OMAC, County Galway.

A total of 271 samples were submitted for analysis including 71 internal standards, 72 analytical blanks and 128 duplicates. The duplicates are comprised of 92 analytical duplicates and 36 field duplicates. The total number of standards, blanks and duplicates each comprise 3.96%, 4.02% and 7.15%, respectively, of the 1,791 total assay samples submitted in the 2006 to 2007 drilling campaign (Table 11.1). The percentage of standards and blanks submitted fall slightly below the industry accepted standard of 5.00%, but the duplicates exceed this standard.

Sample Type	Percentage of Total Samples (%)
Standards	4
Blanks	4
Field Duplicates	2
Analytical Duplicates	5

## Table 11.1: Number of QAQC Samples



# 11.3.2.1 Standards

A total of 71 samples, across three different internal standards, were submitted for gold analysis. Table 11.2 shows the certified assay values and expected Performance Gates (a Performance Gate is a controlled value specified as a standard deviation of the reference value) of the gold standards used for the analysis. OMAC created the standards from bulk samples submitted by Galantas of barren quartz veins and highly sulphidic ore of material derived from the Kearney open pit. They cannot be considered as Certified Reference Materials (CRMs) based on the limited number of analyses from one laboratory only.

The assay values for the standard samples returned by the laboratory were compared with the reference assay values. Generally, it is expected that no more than 5% (i.e. 1 in 20) of the assays should fall outside of the 2SD UWL and LWL. Summaries of the analysis carried out are presented in Table 11.3 and plots of the standards are presented in Figure 11.1.

	Gold Reference Material											
Performance Gates (Standard Deviations)												
Standard	Gold	Reference Value	1 SD	2 SD (LWL)	2 SD (UWL)	3 SD (LWL)	3 SD (UWL)					
		value		Low	High	Low	High					
Standard B	Au ppm	14.79	0.50	13.79	15.79	13.29	16.29					
Standard C	Au ppm	31.93	0.88	30.17	33.69	29.29	34.57					
Standard D	Au ppm	45.18	0.99	43.20	47.16	42.21	48.15					

#### Table 11.2: Gold (Au ppm) Standards Summary Sheet

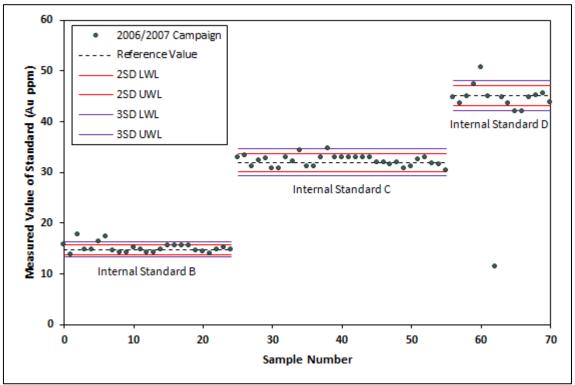


Galantas Gold Corporation

# Table 11.3: Summary of Gold (Au ppm) Standard Assay Results

Standard Label	Reference (Au ppm)	Number of Data Points	Points Outside 2SD	Percentage of Points Outside +/-2 SD (%)	Points Outside 3 SD	Percentage of Points Outside +/-3 SD (%)	Mean of Standard Assays	Mean of Standard Assays Within +/- 2 SD	Mean of Standard Assays Within +/- 3 SD	Bias (with Mean of Standard Assays)	Bias (with Mean of Standard Assays within +/-2 SD)	Bias (with Mean of Standard Assays within +/-3 SD)
Standard B	14.79	25	3	12.00%	3	12.00%	15.04	14.765	14.765	1.71%	-0.17%	-0.17%
Standard C	31.93	31	2	6.45%	1	3.23%	32.19	32.032	32.105	0.81%	0.32%	0.55%
Standard D	45.18	15	5	33.33%	4	26.67%	42.57	44.568	44.807	-5.77%	-1.35%	-0.82%





#### Figure 11.1: Gold (Au ppm) Standard Plot for Standard B, Standard C and Standard D

The results show that Standard B and Standard C present acceptable results as only 12.00% and 6.45%, respectively, of results fall outside of the +/-2SD Performance Gate. Standard D presents poor results with 33.33% of results plotting outside of the +/-2SD Performance Gates. One of the results for Standard D falls so far outside of the Performance Gates that it is within the approximate range of Standard B, the exact reason for this is uncertain but Micon suggests that it may be due to mislabelling of the sample.

Micon concludes that the level of accuracy of the laboratory for the gold samples is acceptable for Standard B and Standard C, but the results for Standard D require are unacceptable with one third of samples falling outside of the 2SD Performance Gates. It is possible the standard material is not homogenous or that the laboratory procedure is not suitable for higher grade gold analysis.

# 11.3.2.2 Blanks

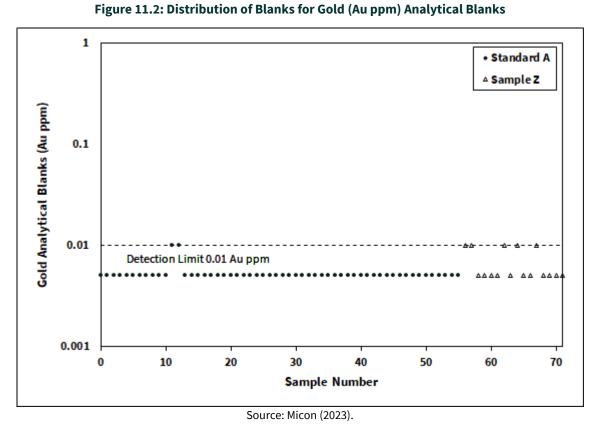
The total number of analytical blank samples submitted for quality control was 72, comprised of two internally produced blanks. One of the blanks consisted of crushed brick (Sample Z) and the other of barren quartz from the Kearney open pit (Standard A). A detailed summary is presented in Table 11.4 and a plot showing the grades of the blank samples analysed is displayed in Figure 11.2. No field blanks were submitted.

All of the values for the analytical blanks plot at or below the detection limit of 0.01 Au ppm, which suggests there is no systematic contamination or mixing during analysis. Micon deems the results to be satisfactory.

Source: Micon (2023).



Year	Detection Limit (Au ppm)	No. of Samples	No. of Samples Above the Detection Limit	Percentage of Samples Above the Detection Limit (%)
2006/2007	0.01	72	0	0.00



# Table 11.4: Characteristics of the Blank Analytical Samples

## 11.3.2.3 Duplicates

A total of 128 duplicates were submitted for analysis, comprised of 92 analytical duplicates and 36 field duplicates.

# Analytical Duplicates

Summary statistics for the analytical duplicates are presented in Table 11.5. The results of the analytical duplicates show a good convergence, with a correlation coefficient of 0.997. A correlation plot was generated for the analytical duplicates to assess the relationship between the original assays and the repeat assay results and is presented in Figure 11.3.

Element	Duplicate Type	Parameters	Original	Duplicate
Au (ppm)		Mean	16.66	16.62
	Analytical	Standard Deviation	25.18	24.93
	Analytical	<b>Correlation Coefficient</b>	0.	997
		No. of Samples	(	92

#### **Table 11.5: Summary of Analytical Duplicates**



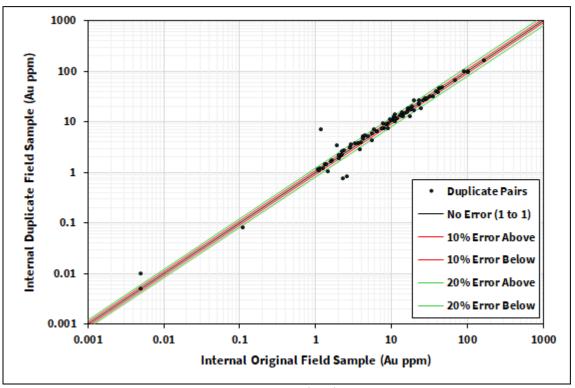


Figure 11.3: Correlation Graph of Original and Duplicate Gold (Au ppm) Analytical Samples

The correlation plot shows five correlation lines; the central black line is the 1:1 line, the red lines denote  $\pm 10\%$  error and the green lines denote  $\pm 20\%$  error. The  $\pm 20\%$  error limits indicate the acceptable range of analytical error for assays derived from unknown samples.

The correlation graph for the analytical duplicates shows a consistent correlation trend between the duplicate samples and with the majority of samples plotting inside the  $\pm 20\%$  error lines. This strong correlation suggests that the laboratory procedures are accurate and reproducible.

An error plot was generated for all the analytical duplicate samples, this plot presents the absolute difference of the original assay value from the mean of assay pairs. The plot illustrates the accuracy of analysis for sample pairs. The error plot is presented in Figure 11.4. The percentages of pairs with analytical errors of less than ±20% and ±10% are displayed in Table 11.6.

Micon concludes that the results of the analytical duplicate quality control assays demonstrate a good level of reproducibility, as demonstrated by the analytical errors presented in Table 11.6 with 94.6% of analysed pairs having analytical errors of less than ±20%.

#### Table 11.6: Analytical Duplicates Analytical Error of the Original Assays to the Mean of Assay Pairs

Error	Au (%)
Pairs with Analytical Errors Less than ±20%	94.6
Pairs with Analytical Errors Less than ±10%	85.9

Source: Micon (2023).



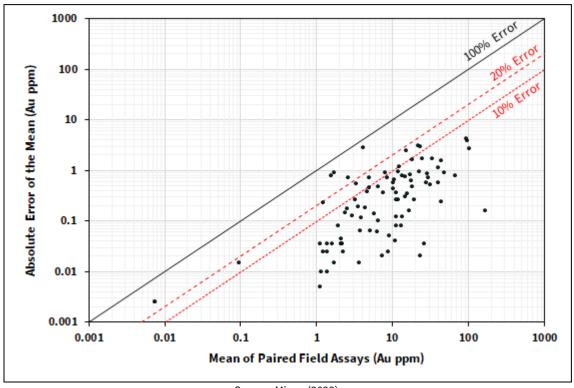


Figure 11.4: Correlation Graph of Original and Duplicate Gold (Au ppm) Analytical Samples

# Field Duplicates

Au

(ppm)

Field

Summary statistics for the field duplicates are presented in Table 11.7. The results of the field duplicates show a very poor convergence, with a correlation coefficient of 0.475. The average grades of the original and duplicate samples are however comparable. A correlation plot was generated for the field duplicates to assess the relationship between the original assays and the repeat assay results and is presented in Figure 11.5.

Element	Duplicate Type	Parameters	Original	Duplicate
		Mean	7.31	7.22

No. of Samples

Standard Deviation

**Correlation Coefficient** 

17.78

15.67

0.475

36

#### **Table 11.7: Summary of the Field Duplicates**

Source: Micon (2023).



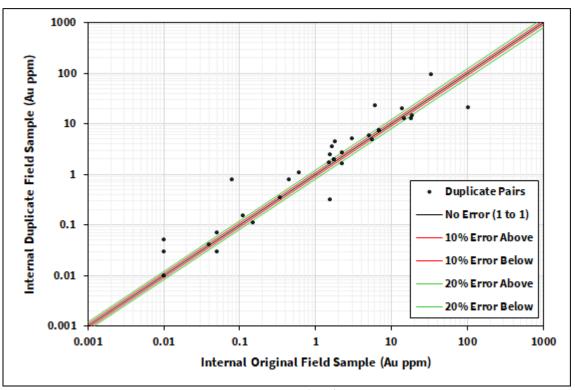


Figure 11.5: Correlation Graph of Original and Duplicate Gold (Au ppm) Field Samples

The correlation graph for the field duplicates shows a consistent correlation trend between the duplicate samples, although the majority of samples plot outside the  $\pm 20\%$  error lines.

An error plot was generated for all the field duplicate samples, this plot presents the absolute difference of the original assay value from the mean of assay pairs. The error plot is presented in Figure 11.6. The percentages of pairs with analytical errors of less than  $\pm 20\%$  and  $\pm 10\%$  are displayed in Table 11.8.

Micon concludes that the results of the field duplicate quality control assays show low reproducibility and a significant variation between assays pairs, as demonstrated by the analytical errors presented in Table 11.8 with only 61.1% of analysed pairs having analytical errors of less than  $\pm 20\%$ . The significant variation present in assay pairs may be due to natural sample variability (nugget effect), typical of a narrow vein gold deposit and this is likely exacerbated by the fact that only quarter was used for the samples which would further increase any nugget effect present.

Error	Au (%)
Pairs with Analytical Errors Less than ±20%	61.1
Pairs with Analytical Errors Less than ±10%	41.7

Table 11.8: Field Duplicates Analytical Error of the Original Assays to the Mean of Assay Pairs

Source: Micon (2023).



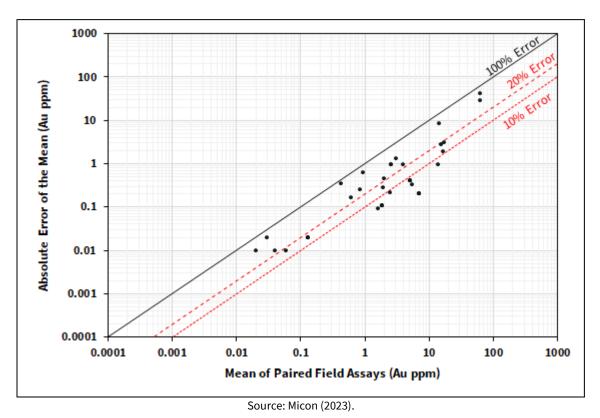


Figure 11.6: Error Plot of External Original and Duplicate Gold (Au ppm) Field Samples

# 11.3.3 Galantas 2011-2013

It is likely that Micon did not receive the full QAQC dataset based on descriptions from previous technical reports (Table 11.9). The following summarises the QAQC results using the information supplied to Micon. A total of 211 QAQC samples were sent for analysis at ALS, County Galway including 65 internal standards, 67 analytical blanks and 79 duplicates. The duplicate samples are comprised of 10 analytical duplicates and 69 field duplicates. The total number of standards, blanks and duplicates each comprise 1.09%, 1.12% and 1.32%, respectively, of the 5,974 total assay samples submitted in the 2011 to 2013 drilling campaign (Table 11.9).

Sample Type	Percentage of Total Samples (%)
Standards	1.09
Blanks	1.12
Duplicates	1.32

#### Table 11.9: Number of QAQC Samples

# 11.3.3.1 Standards

A total of 65 internal standards, across four different internal standards, were submitted for gold analysis. OMAC created the standards from four bulk samples submitted by Galantas from the Kearney open pit. The standards cannot be considered as CRMs based on the limited number of analyses from one laboratory only.



Typically, the quality of standards results would be determined using Performance Gates, but in the case of the 2011-2013 standards no standard deviations were provided for the chosen reference materials. In the absence of standard deviations, Micon instead decided to use performance thresholds of +/-10%, +/-20% and +/-50% of the reference value provided. Table 11.10 shows the reference assay values and the chosen performance thresholds.

	Gold Reference Material Performance Thresholds											
Standard Gold Reference -10% +10% -20% +20% -50% +50%												
Internal Standard A	Au ppm	84.32	75.89	92.75	67.46	101.18	42.16	126.48				
Internal Standard B	Au ppm	8.2	7.38	9.02	6.56	9.84	4.10	12.30				
Internal Standard C	Au ppm	5.51	4.96	6.06	4.41	6.61	2.76	8.27				
Internal Standard D	Au ppm	10.01	2.31	2.83	2.06	3.08	1.29	3.86				

## Table 11.10: Gold (Au ppm) Standards Summary Sheet

The assay values for the standard samples returned by the laboratory were compared with the reference assay values. Generally, it is expected that no more than 10% (i.e. 1 in 10) of the assays should fall outside of the +/-10% thresholds.

Summaries of the analysis carried out are presented in Table 11.11 and Table 11.12 and plots of the standards are presented in Figure 11.7 and Figure 11.8. For the standard plots, the dotted black line shows the reference value, with the green lines showing a deviation of +/-10%, the orange lines showing a deviation of +/-20% and the red lines showing a deviation of +/-50%.



#### Table 11.11: Summary of Gold (Au ppm) Standard Assay Results

Standard Label	Reference Value (Au ppm)	Number of Data Points	Points Outside +/- 10%	Percentage of Points Outside +/-10% (%)	Points Outside +/-20%	Percentage of Points Outside +/-20% (%)	Points Outside +/-50%	Percentage of Points Outside +/-50% (%)
Internal Standard A	84.32	22	4	18.18%	0	0.00%	0	0.00%
Internal Standard B	8.2	11	3	27.27%	3	27.27%	0	0.00%
Internal Standard C	5.51	19	7	36.84%	0	0.00%	0	0.00%
Internal Standard D	2.57	13	5	38.46%	0	0.00%	0	0.00%

#### Table 11.12: Summary of Gold (Au ppm) Standard Assay Results

Standard Label	Reference Value (Au ppm)	Number of Data Points	Mean of Standard Assays	Mean of Standard Assays within +/-10%	Mean of Standard Assays within +/-20%	Mean of Standard Assays within +/-50%	Bias (with Mean of Standard Assays)	Bias (with Mean of Standard Assays within +/-10%)	Bias (with Mean of Standard Assays within +/-20%)	Bias (with Mean of Standard Assays within +/-50%)
Internal Standard A	84.32	22	80.57	80.72	80.57	80.57	-4.45%	-4.27%	-4.45%	-4.45%
Internal Standard B	8.2	11	8.0	8.3	8.3	7.96	-2.92%	0.76%	0.76%	-2.92%
Internal Standard C	5.51	19	5.43	5.44	5.32	5.43	-1.44%	-1.16%	-3.42%	-1.44%
Internal Standard D	2.57	13	2.74	2.56	2.67	2.74	6.50%	-0.43%	3.61%	6.50%



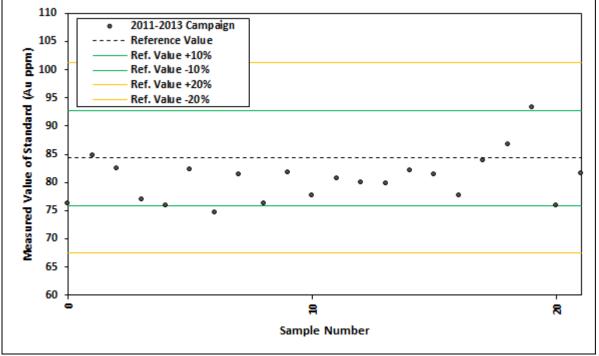
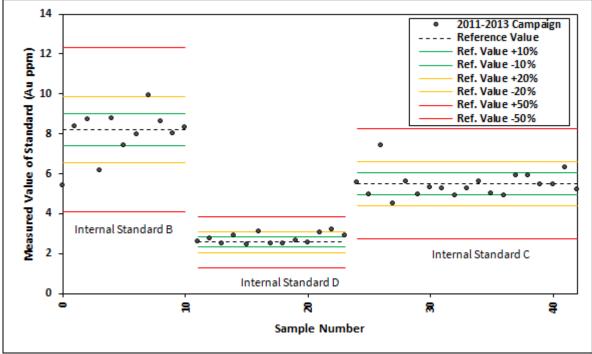


Figure 11.7: Gold (Au ppm) Standards Plot

Source: Micon (2023).





Source: Micon (2023).

The results for the standards are generally good, with internal standard A not having any samples fall outside of +/-20% and 18.18% falling outside of +/-10% of the reference value and internal standards C and D only having one standard each fall outside of +/-20% of the reference value.



Internal Standard B returns 33.33% of the results outside of +/-20% of the reference value but 0.00% outside of +/-50%. Micon suspects that these variations are caused by natural variability in the materials chosen as a reference material and/or due to a lack of sample homogenisation. It is recommended in future that CRMs are used to avoid this. Micon determines the results of the standards to be acceptable.

# 11.3.3.2 Blanks

The total number of analytical blank samples submitted for quality control was 67. The source of the blank material is unknown. A detailed summary is presented in Table 11.13 and a plot showing the grades of the blank samples analysed are displayed in Figure 11.9. No field blanks were submitted.

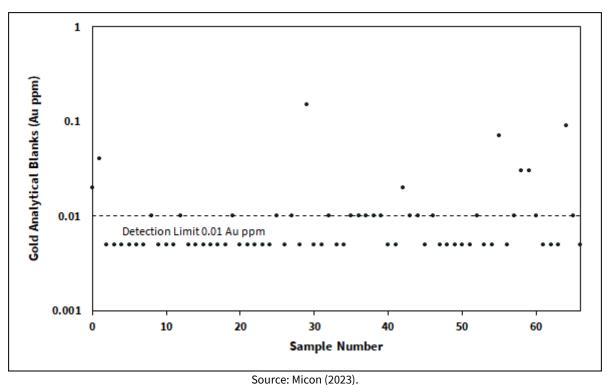
The majority of values for the analytical blanks plot at or below the detection limit of 0.01 Au ppm, although 11.94% of values plot above the detection limit, which suggests that there may be some systematic contamination or mixing during analysis, or the blank material contained trace gold. Due to the relatively small number of samples which plot above detection limit Micon deems the results to be satisfactory but suggests that in future if more than 5.00% of samples fall above detection limit that investigations are carried out to determine the potential cause of this error.

A review of blanks inserted by OMAC during their analysis of the samples, as reported in ACA Howe (2012) and Galantas Gold Corporation (2014), indicate that 0.0% of the 146 blank samples are above the gold detection limit. This indicates that there may be trace gold in the Galantas blank material. A certified blank material should be used for blanks to ensure it contains no trace gold in future drill campaigns.

Detection Limit (Au ppm)	No. of Samples	No. of Samples Above the Detection Limit	Percentage of Samples Above the Detection Limit (%)
0.01	67	8	11.94

## Table 11.13: Characteristics of the Blank Analytical Samples





#### Figure 11.9: Distribution of Blanks for Gold (Au ppm) Analytical Blanks

# 11.3.3.3 Duplicates

A total of 79 duplicates were submitted for analysis, comprised of 10 analytical duplicates and 69 field duplicates.

# Analytical Duplicates

Summary statistics for the analytical duplicates are presented in Table 11.14. The results of the analytical duplicates show a good convergence, with a correlation coefficient of 0.999. A correlation plot was generated for the analytical duplicates to assess the relationship between the original assays and the repeat assay results and is presented in Figure 11.10.

Element	Duplicate Type	Parameters	Original	Duplicate
		Mean	17.93	18.33
Au	Applytical	Standard Deviation	20.70	22.18
(ppm)	Analytical	Correlation Coefficient	0.	999
		No. of Samples		10

#### Table 11.14: Summary of Analytical Duplicates



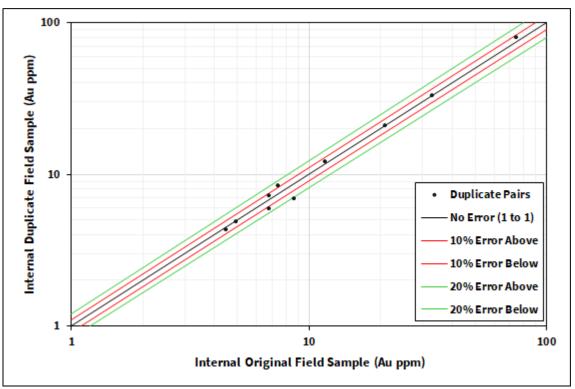


Figure 11.10: Correlation Graph of Original and Duplicate Gold Analytical Samples

The correlation plot shows five correlation lines; the central black line is the 1:1 line, the red lines denote  $\pm 10\%$  error and the green lines denote  $\pm 20\%$  error. The  $\pm 20\%$  error limits indicate the acceptable range of analytical error for assays derived from unknown samples.

The correlation graph for the analytical duplicates shows a consistent correlation trend between the duplicate samples and with the majority of samples plotting inside the  $\pm 20\%$  error lines. This strong correlation suggests that the laboratory procedures are accurate and reproducible.

An error plot was generated for all the analytical duplicate samples, this plot presents the absolute difference of the original assay value from the mean of assay pairs. The plot illustrates the accuracy of analysis for sample pairs. The error plot is presented in Figure 11.11. The percentages of pairs with analytical errors of less than ±20% and ±10% are displayed in Table 11.15.

Micon concludes that the results of the analytical duplicate quality control assays demonstrate a good level of reproducibility, as demonstrated by the analytical errors presented in Table 11.15 with 100.0% of analysed pairs having analytical errors of less than ±20%.

## Table 11.15: Analytical Duplicates Analytical Error of the Original Assays to the Mean of Assay Pairs

Error	Au (%)
Pairs with Analytical Errors Less than ±20%	100.0
Pairs with Analytical Errors Less than ±10%	90.0

Source: Micon (2023).



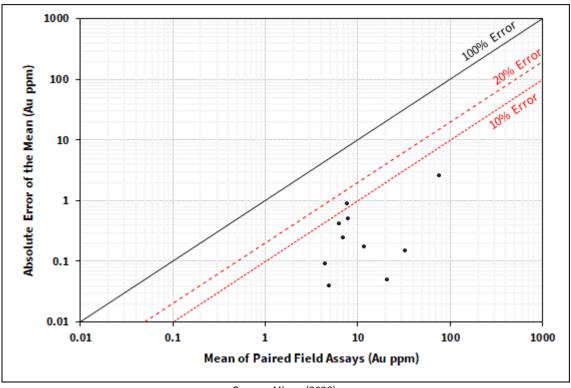


Figure 11.11: Error Plot of External Original and Duplicate Gold (Au ppm) Analytical Samples

# Field Duplicates

Summary statistics for the field duplicates are presented in Table 11.16. The results of the field duplicates show a good convergence, with a correlation coefficient of 0.926. A correlation plot was generated for the field duplicates to assess the relationship between the original assays and the repeat assay results and is presented in Figure 11.12.

Element	Duplicate Type	Parameters	Original	Duplicate
		Mean	7.12	6.39
Au	Field	Standard Deviation	11.93	11.30
(ppm)	Field	Correlation Coefficient	0.	926
		No. of Samples	(	69

#### Table 11.16: Summary of Field Duplicates

Source: Micon (2023).



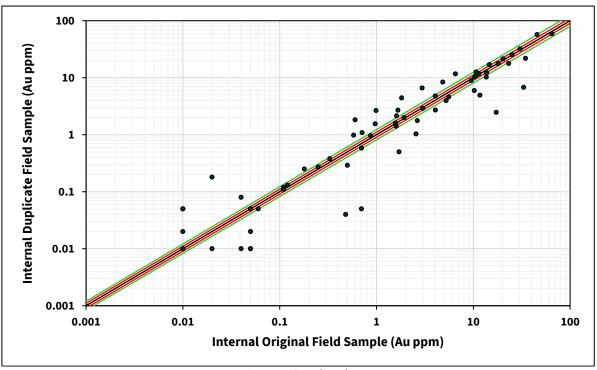


Figure 11.12: Correlation Graph of Original and Duplicate Gold (Au ppm) Field Samples

The correlation graph for the field duplicates shows a consistent correlation trend between the duplicate samples, although a significant number of samples plot outside the ±20% error lines.

An error plot was generated for all the analytical duplicate samples, this plot presents the absolute difference of the original assay value from the mean of assay pairs. error plot is presented in Figure 11.13. The percentages of pairs with analytical errors of less than ±20% and ±10% are displayed in Table 11.17.

Micon concludes that the results of the field duplicate quality control assays show a significant variation between assays pairs, as demonstrated by the analytical errors presented in Table 11.17 with only 55.1% of analysed pairs having analytical errors of less than  $\pm 20\%$ . The significant variation present in assay pairs is likely due to natural sample variability (nugget effect), typical of a narrow vein gold deposit.

Error	Au (%)
Pairs with Analytical Errors Less than ±20%	55.1
Pairs with Analytical Errors Less than ±10%	44.9

Table 11.17: Field Duplicates Analytical Error of the Original Assays to the Mean of Assay Pairs

Source: Micon (2023).



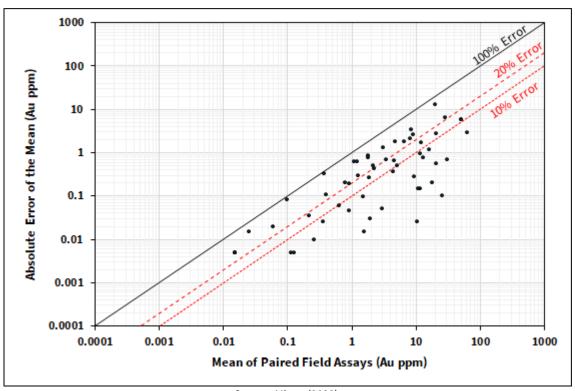


Figure 11.13: Error Plot of External Original and Duplicate Gold (Au ppm) Field Samples

Source: Micon (2023).

# 11.3.4 Galantas 2015-2016 and 2021-2022

During the 2015 to 2016 campaign, a total of 51 QAQC samples were submitted, including 18 internal standards, 17 analytical blanks and 16 field duplicates. The total number of standards, blanks and duplicates each comprise 5.71%, 5.40%, and 5.08%, respectively, of the 315 total assay samples submitted in the 2015 to 2016 campaign (Table 11.18). The percentage of all sample types submitted exceed the industry accepted standard of 5.00%.

During the 2021 to 2022 campaign, a total of 131 QAQC samples were submitted, including 44 internal standards, 45 analytical blanks and 42 field duplicates. The total number of standards, blanks and duplicates each comprise 4.30%, 4.39%, and 4.10%, respectively, of the 1,024 total assay samples submitted in the 2015 to 2016 campaign (Table 11.18). The percentage of all sample types submitted fall slightly short of the industry accepted standard of 5.00%.



Campaign	Sample Type	Percentage of Total Samples (%)
	Standards	5.71
2015-2016	Blanks	5.40
	Duplicates	5.08
	Standards	4.30
2021-2022	Blanks	4.39
	Duplicates	4.10

#### Table 11.18: Number of QAQC Samples

# 11.3.4.1 Standards

For the 2015 to 2016 campaign a total of 18 samples, across 4 different CRMs were submitted for gold analysis. For the 2021 to 2022 campaign a total of 44 samples, across 5 different CRMs were submitted for gold analysis. Table 11.19 shows the certified assay values and expected Performance Gates of the gold standards used for the analysis.

OMAC or ALS created the standards from bulk samples submitted by Galantas from the Kearney open pit.

The assay values for the standard samples returned by the laboratory were compared with the reference assay values. Summaries of the analysis carried out are presented in Table 11.20 and Table 11.21, and plots of the standards are presented in Figure 11.14 to Figure 11.18.

	Gold Reference Material Performance Gates (Standard Deviations)													
StandardGoldReference Value2 SD2 SD3 SD3 SDLowHighLowHighHigh														
Standard A	Au ppm	4.28	0.18	3.92	4.64	3.74	4.82							
Standard B	Au ppm	14.92	0.51	13.9	15.94	13.39	16.45							
Standard A Bag	Au ppm	83.58	2.59	78.4	88.76	75.810	91.350							
Standard D Bag	Au ppm	2.66	0.32	2.02	3.30	1.70	3.62							
Standard E Bag	Au ppm	0.002	0.001	0.002	0.005	0.002	0.006							

## Table 11.19: Gold (Au ppm) Standards Summary Sheet



Galantas Gold Corporation

#### Table 11.20: Summary of 2015-2016 Gold (Au ppm) Standard Assay Results

Standard Label	Reference Value (Au ppm)	Number of Data Points	Points Outside 2SD	Percentage of Points Outside +/-2 SD (%)	Points Outside 3 SD	Percentage of Points Outside +/-3 SD (%)	Mean of Standard Assays	Mean of Standard Assays Within +/- 2 SD	Mean of Standard Assays within +/- 3 SD	Bias (with Mean of Standard Assays)	Bias (with Mean of Standard Assays within +/-2 SD)	Bias (with Mean of Standard Assays within +/-3 SD)
Standard A	4.28	7	1	14.29	1	14.29	15.86	4.24	4.24	270.56%	-1.01%	-1.01%
Standard B	14.92	5	0	0.00	0	0.00	14.63	14.63	14.63	-1.94%	-1.94%	-1.94%
Standard A Bag	83.58	3	0	0.00	0	0.00	82.57	82.57	82.57	-1.21%	-1.21%	-1.21%
Standard D Bag	2.66	3	0	0.00	0	0.00	2.82	2.82	2.82	6.14%	6.14%	6.14%

#### Table 11.21: Summary of 2021-2022 Gold (Au ppm) Standard Assay Results

Standard Label	Reference Value (Au ppm)	Number of Data Points	Points Outside 2SD	Percentage of Points Outside +/-2 SD (%)	Points Outside 3 SD	Percentage of Points Outside +/-3 SD (%)	Mean of Standard Assays	Mean of Standard Assays within +/- 2 SD	Mean of Standard Assays within +/- 3 SD	Bias (with Mean of Standard Assays)	Bias (with Mean of Standard Assays within +/-2 SD)	Bias (with Mean of Standard Assays within +/-3 SD)
Standard A	4.28	23	1	4.35	0	0.00	4.26	4.24	4.26	-0.51%	-1.01%	-0.51%
Standard B	14.92	15	1	6.67	0	0.00	14.31	14.35	14.31	-4.11%	-3.82%	-4.11%
Standard A Bag	83.58	2	1	50.00	0	0.00	77.50	78.60	77.50	-7.27%	-5.96%	-7.27%
Standard D Bag	2.66	1	0	0.00	0	0.00	2.77	2.77	2.77	4.14%	4.14%	4.14%
Standard E Bag	0.002	2	2	100.00	1	50.00	0.008	N/A	N/A	N/A	N/A	N/A



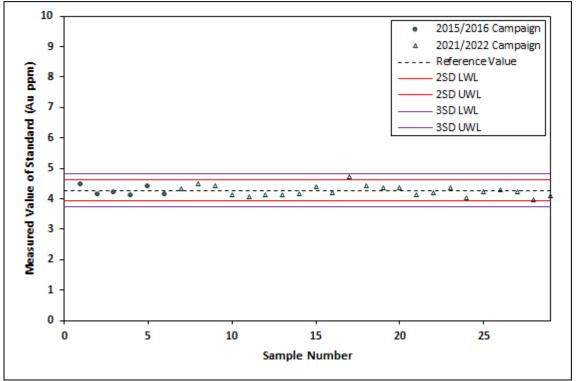
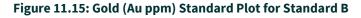
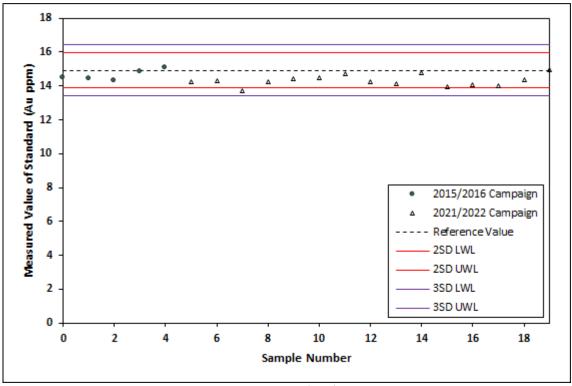


Figure 11.14: Gold (Au ppm) Standard Plot for Standard A

Source: Micon (2023).





Source: Micon (2023).

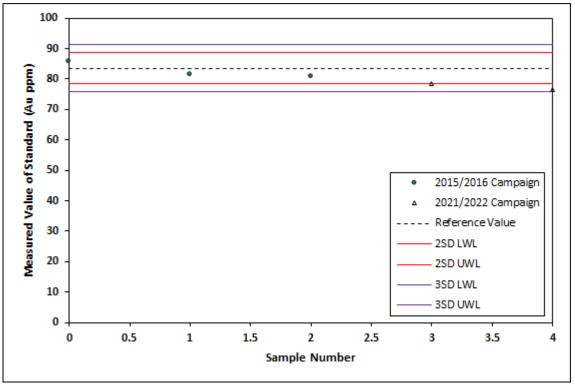
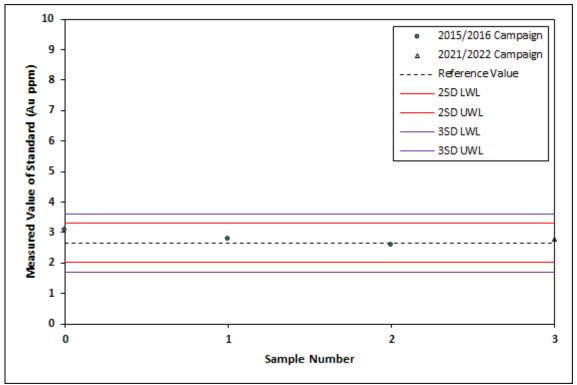


Figure 11.16: Gold (Au ppm) Standard Plot for Standard A Bag

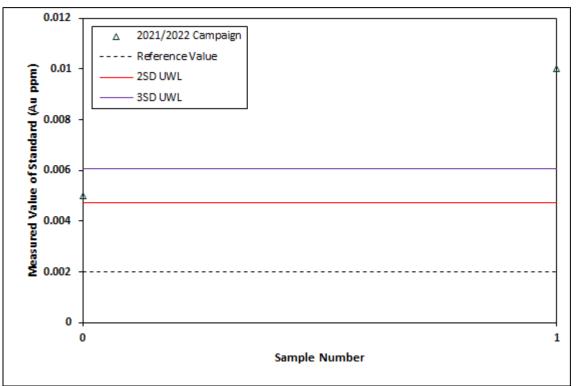
Source: Micon (2023).





Source: Micon (2023).





#### Figure 11.18: Gold (Au ppm) Standard Plot for Standard E Bag

#### Source: Micon (2023).

The results show that Standard B and Standard D Bag present good results, with 5.00% and 0.00% of results falling outside the +/-2SD Performance Gates respectively and Standard A presents acceptable results as only 6.67% of results fall outside of the +/-2SD Performance Gate. Standard A Bag and Standard E Bag present poor results with 20.00% and 100.00% of results plotting outside of the +/-2SD Performance Gates, respectively, but the number of samples submitted is too small to be statistically relevant (5 and 2, respectively).

Micon concludes that the level of accuracy of the laboratory for the gold samples is acceptable for Standard A and Standard B, with the results for Standard A Bag, Standard D Bag and Standard E Bag requiring more samples to be statistically significant. Micon suggests that CRMs are chosen for future QAQC procedures.

# 11.3.4.2 Blanks

The total number of analytical blank samples submitted for quality control was 62 including 17 for the 2015 to 2016 campaign and 45 for the 2021 to 2022 campaign. The source of the blank material is unknown. A detailed summary is presented in Table 11.22 and plots showing the grades of the blank samples analysed are displayed in Figure 11.19 and Figure 11.20. No field blanks were submitted.

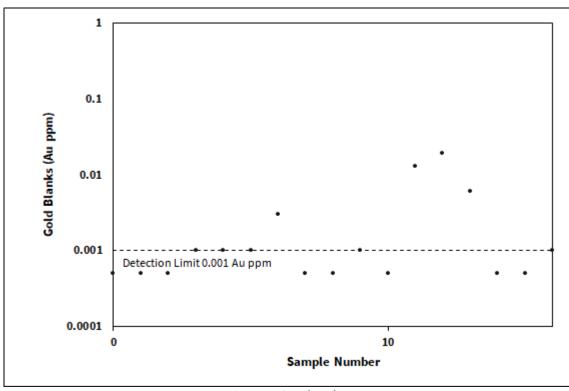
The majority of values for the analytical blanks plot at or below their respective detection limits of 0.001 Au ppm and 0.01 Au ppm, although 23.53% and 24.44% of values plot above the detection limit for the 2015 to 2016 and 2021 to 2022 campaigns, respectively. This suggests that there may be some systematic contamination or mixing during analysis, or the blank material contained trace gold.



A review of blanks inserted by ALS during their analysis of the samples indicates that 5.4% of the 37 2015 to 2016 blank samples, and 3.1% of the 64 2021 to 2022 blank samples are above the gold detection limit. This indicates that there may be trace gold in the Galantas blank material.

Year	Detection Limit (Au ppm)	No. of Samples	No. of Samples Above the Detection Limit	Percentage of Samples Above the Detection Limit (%)	
2015-2016	0.001	17	4	23.53	
2021-2022	0.01	45	11	24.44	

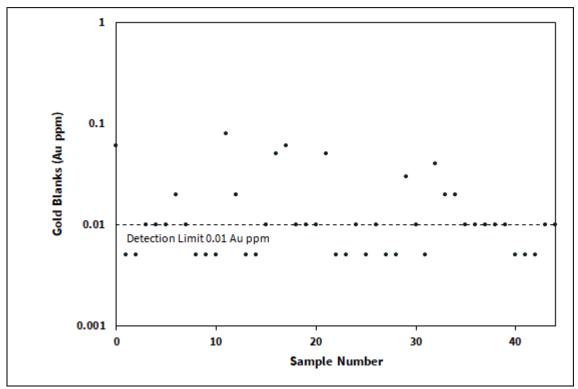
## Table 11.22: Characteristics of the Blank Analytical Samples



## Figure 11.19: Distribution of Blanks for the 2015-2016 Gold (Au ppm) Analytical Blanks

Source: Micon (2023).





#### Figure 11.20: Distribution of Blanks for the 2021-2022 Gold (Au ppm) Analytical Blanks

Source: Micon (2023).

# 11.3.4.3 Duplicates

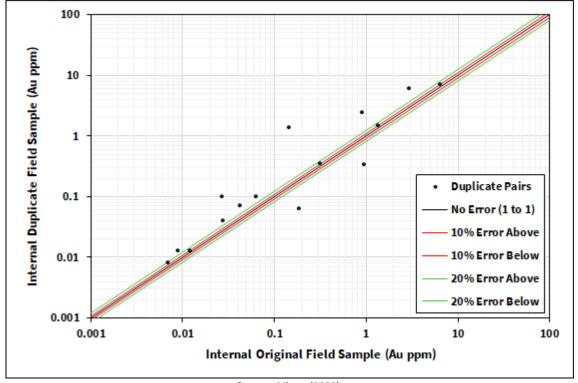
A total of 58 field duplicates were submitted, including 15 for the 2014-2016 campaign and 42 for the 2021 to 2022 campaign. No analytical duplicates were analysed. Summary statistics for the field duplicates are presented in Table 11.23.

The results of the field duplicates show a good convergence for both 2015/2016 and 2021/2022, with correlation coefficients of 0.927 and 0.891, respectively. Correlation plots were generated for the field duplicates (Figure 11.21 and Figure 11.22) to assess the relationship between the original assays and the repeat assay results.

Year	Element	Duplicate Type	Parameters	Original	Duplicate
			Mean	0.90	1.29
2015-2016	Au	Field	Standard Deviation	1.67	2.16
2013-2016	(ppm)	Field	Correlation Coefficient	0.927	
			No. of Samples		15
			Mean	7.05	6.73
2021 2022	Au	Field	Standard Deviation	13.39	11.57
2021-2022	(ppm)	Field	Correlation Coefficient	0.891	
			No. of Samples		42

#### Table 11.23: Summary of Field Duplicates

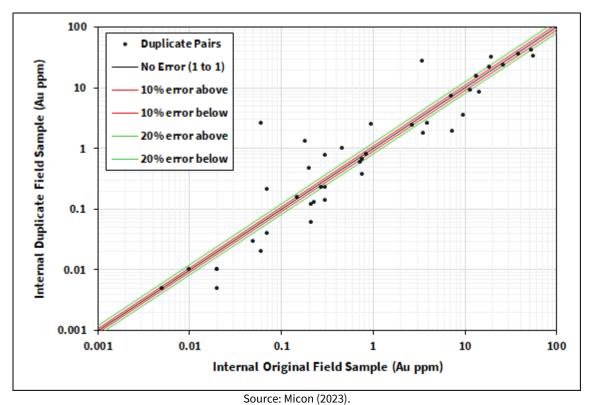




#### Figure 11.21: Correlation Graph of the 2015-2016 Original and Duplicate Gold (Au ppm) Field Samples

Source: Micon (2023).

#### Figure 11.22: Correlation Graph of the 2021-2022 Original and Duplicate Gold (Au ppm) Field Samples





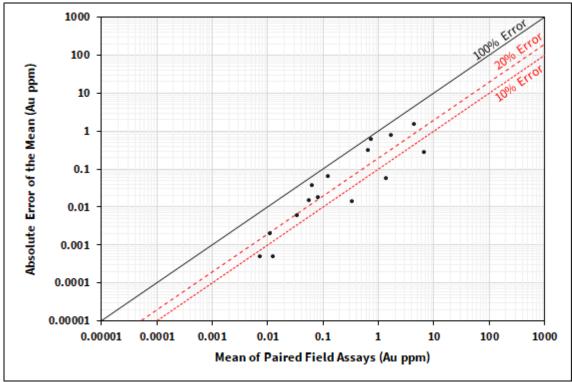
The correlation graphs for the field duplicates shows a consistent correlation trend between the duplicate samples, although the majority of samples plot outside the  $\pm 20\%$  error lines.

Error plots were generated for all the duplicate samples, these plots present the absolute difference of the original assay value from the mean of assay pairs. The error plots are presented in Figure 11.23 and Figure 11.24. The percentages of pairs with analytical errors of less than ±20% and ±10% are displayed in Table 11.24.

Micon concludes that the results of the duplicate quality control assays demonstrate a low level of reproducibility, as demonstrated by the analytical errors presented in Table 11.24 with 46.67% and 40.48% of analysed pairs having analytical errors of less than  $\pm 20\%$  for 2015 to 2016 and 2021 to 2022 campaigns, respectively. This poor level of reproducibility is likely due to natural variability within the core (nugget effect) and as such, Micon deems the results to be satisfactory.

## Table 11.24: Field Duplicates Analytical Error of the Original Assays to the Mean of Assay Pairs

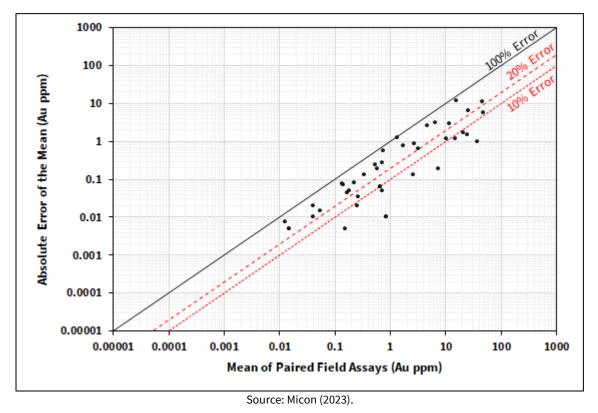
Year							
2015-2016	Pairs with Analytical Errors Less than ±20%	46.67					
2013-2010	Pairs with Analytical Errors Less than ±10%	33.33					
2021-2022	Pairs with Analytical Errors Less than ±20%	40.48					
2021-2022	Pairs with Analytical Errors Less than $\pm 10\%$	30.95					



# Figure 11.23: Error Plot of the 2015-2016 Original and Duplicate Gold (Au ppm) Field Samples

Source: Micon (2023).





## Figure 11.24: Error Plot of the 2021-2022 Original and Duplicate Gold (Au ppm) Field Samples

# 11.3.5 CONCLUSIONS AND RECOMMENDATIONS

Micon deems all of the QAQC results to be satisfactory to use the drill hole assay data for resource estimation. The total number of QAQC samples in Table 11.9 is likely artificially low as it is based on the QAQC samples received by Micon.

Micon is of the opinion that the QAQC procedures and available results are acceptable for use of the sample data in the MRE. In general, the procedures are at, or close to, industry standards. However, there is room for improvement and Micon recommends the following:

- All QAQC data from previous and future drill campaigns is located, digitised, and combined into a single QAQC database. This will ensure that no data is lost;
- No less than 5% of the total number of assays submitted should be submitted for any of the QAQC sample types;
- Analytical duplicates (pulp re-assays) should be submitted independently by Galantas as part of the QAQC procedure;
- Standard samples submitted should be Certified Reference Materials, with known standard deviations and performance gates. As far as possible, they should be matrix matched. The QAQC analysis has shown that there is some doubt about the homogeneity of the internally standards produced for Galantas. If internal standards are to be developed, then a round robin analysis using no less than six laboratories should be performed;
- For better representativity, a minimum of three standards should be used for gold assayed; one of these standards should approximate the Q1 assay value, one the median assay value, and another the Q3 assay value of the grade distribution;



- A certified blank material should be used for submitted blanks to ensure it contains no trace gold; and,
- Galantas should continue to constantly monitor and track the QAQC results throughout the duration of any future campaigns. Any identified issues or discrepancies should be discussed with the laboratory as and when they occur, keeping a record of any issues discussed and the steps taken to correct and/or avoid these issues in future.

# **11.4 DATABASE COMPILATION**

Drill hole data is initially entered into Microsoft Excel spreadsheets before being appended to the Micromine database. The Micromine database is the master version of the database. Upon upload to Micromine the drill hole database tools are used to validate the data.

Micon note that some of the historical data mentioned in reports in not part of the database supplied such as the missing Riofinex down hole survey data, some of the recorded lithology data, Riofinex exploration grab and pionjar samples. Micon recommends that all sample data is digitised from paper records or collated from digital sources into a central geological database for the Project.

# 11.5 COMMENT ON SAMPLE PREPARATION, ANALYSES, AND SECURITY

As noted in Section 11.1 and 11.3.1, the QP was unable to verify the sampling and assaying quality of the Riofinex samples collected between 1987 and 1990. However, the QP believes these samples are appropriate to use in the MRE since based on the analysis and observations described in Section 12.0.

It is the QP's opinion that security, sample collection, preparation, security and analytical procedures undertaken on the Omagh Gold Project during the 2006 to 2022 drill programmes are appropriate for the style of mineralisation. QAQC sample assays provided sufficient confidence in assay values for their use in the estimation of Mineral Resources.

The QP has made a number of recommendations in Section 11.3.5 regarding the QAQC procedures, which is implemented, will ensure that they are in line with industry standard best practices.



# 12.0 DATA VERIFICATION

## 12.1 SITE VISIT

Liz de Klerk (QP) and Dr Ryan Langdon visited the Omagh Gold Project for two days from 15<sup>th</sup> to 16<sup>th</sup> November 2022. The purpose of the site visit was to:

- Meet the Omagh Gold Project key technical and management staff;
- Observe the operation, understand current practices, understand the requirements of the operation and its limiting factors;
- Review all aspects of the geology, exploration, drilling, sampling and assaying operations, data collection, database compilation, deposit modelling and QAQC programme;
- Review all aspects of the mining operation; and,
- Gather information and data to serve as input for the QAQC, geological modelling, and MRE studies.

During the visit, the following activities were carried out:

- Visit to the underground mine where ore development and stoping were taking place;
- Visit to the underground drill rig (Figure 10.2). It was not operational during the visit, but the standard operating procedures (SOP) were discussed with Galantas technical staff;
- Visit to the areas of the Kearney and Joshua open pits that are not backfilled;
- Visit to the core logging, sampling, and storage facility;
- Observation of ongoing drill core logging and sample mark up by Galantas geologists;
- Micon compared and verified the drill hole logs and assay results to the remaining half drill core for selected holes;
- Visit to the process plant;
- Visit to the onsite laboratory and discussed it capabilities with Galantas technical staff;
- Discussions with Galantas technical staff on the current mineralisation model, exploration history, previous geological and block models, and the sample database; and,
- Collected and reviewed the data necessary for the MRE.

## 12.2 DATABASE

Drill hole data was provided to Micon by Galantas. Micon has not conducted any drilling, collection of samples, or independent assaying of material from the Omagh Gold Project. Micon has reviewed the methods used for logging, sampling, and assaying, but has relied upon the data provided by Galantas.

The Omagh Gold Project drill hole database is primarily maintained on site in Micromine. Micon received the drill hole data from Galantas in multiple Microsoft Excel files. The data was collated into a single Excel spreadsheet and the database was validated and inspected to ensure that the data is acceptable and in a suitable condition for use in modelling and resource evaluation, in



accordance with the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines (CIM, 2019).

Three main methods were used: (1) spreadsheet checks, (2) importation and visualisation in Leapfrog, and (3) plotting of graphs and generation of summary statistics with Snowden Supervisor (Supervisor) software.

Spreadsheet checks included checking that all intervals recorded in the database tables have a corresponding entry in the collar table and that maximum depths are consistent between the tables. Leapfrog was primarily used to visualise the data in 3D and to check that the collar location and shape of the drill hole traces is logical. Leapfrog also has a database validation tool when importing the drill hole database that highlights any problems. Supervisor was used to produce histograms and statistics of sample length and recovery values.

Overall, Micon identified few problems with the database, and it was considered to be relatively clean. Minor corrections were generally related to human typing errors or duplication of data and Micon was able to correct the data after inspecting the cause of the error. A clean version of the database tables, alongside the corrections, was supplied to Galantas to update their records on site.

# 12.3 TWIN DRILLING

Two previous technical reports discuss that Galantas drilled five twin drill holes to verify the historical Riofinex holes (ACA Howe, 2008; ACA Howe, 2012). The twin drill hole pairs are listed in Table 12.1 and shown in Figure 12.1 and Figure 12.2. The Kearney twin drill holes were drilled as part of the 2006 to 2007 drill campaign, and the Joshua drill holes as part of the 2011 to 2013 drill campaign.

Micon has reviewed the twin drill holes and is of the opinion that the drill holes are not sufficiently close to constitute true verification drill holes. The collars are significantly offset, and it ranges between 18 and 52 m for the drill hole pairs (Table 12.1). Some of this offset is due to the different grid transformation applied by ACA Howe in 2008 to the dataset (see Section 10.3.1.1). Furthermore, the drill hole pairs are drilled at different dips and azimuths (Table 12.1). This combined with the collar offset, results in the mineralised intersections being spaced a large distance apart (Figure 12.1,

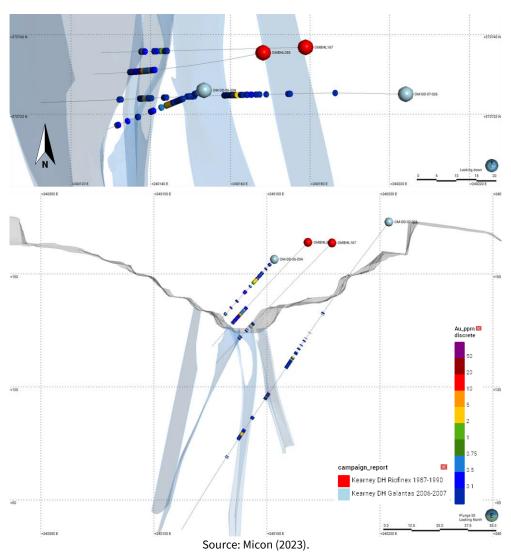


Figure 12.2 Figure 12.2). As, such direct comparison of the mineralised intersect gold grades and thicknesses is not valid. Nevertheless, the drill hole pairs do intersect the same vein structures and show continuity of the mineralisation.

Vein	Galanta	Galantas Drill Hole				<b>Riofinex Hole ID</b>				
vein	Hole ID	Dip	Azimuth	Hole ID	Dip	Azimuth	(m)			
Kaarman	OM-DD-06-004	-46	248	OMBHL055	-45	258	20			
Kearney	OM-DD-07-026	-49	270	OMBHL167	-45	269	30			
	OM-DD-11-058	-45	280	OMBHL073	-45	261	52			
Joshua	OM-DD-11-061	-45	99	OMBHL051	-45	80	18			
	OM-DD-11-062	-45	90	OMBHL084	-45	71	20			

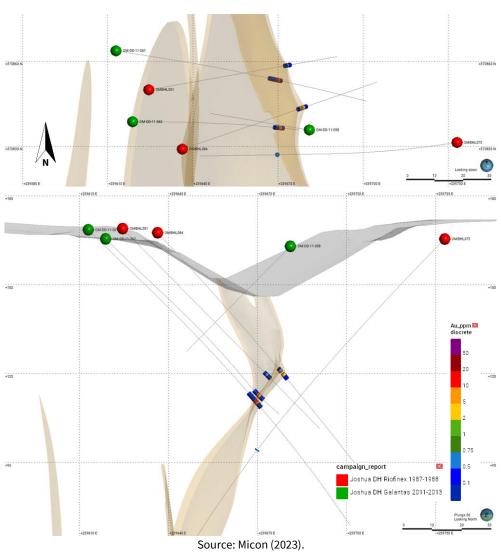
## Table 12.1: Twin Drill Pairs





## Figure 12.1: Kearney Twin Drill Holes Plan View and S-N Cross-Section





## Figure 12.2: Joshua Twin Drill Holes Plan View and S-N Cross-Section

# 12.4 DRILL DATA COMPARISON

Due to the inadequacy of the twin drill holes, Micon compared the gold grades and true vein thicknesses of the drill hole composites for Riofinex and Galantas drill holes.

Length weighted gold grade composites of each vein intercept were calculated for all the modelled Kearney and Joshua vein structures and the true thickness of the vein intercepts were interpolated from the modelled vein wireframes. To simplify the comparison, it was performed on the flattened (2D) coordinates (see Section 14.6.1).

The results of the comparison are shown in Table 12.2 to Table 12.5. The data was limited to mineralised intersects that were within 20 m radius of Riofinex and Galantas drill holes, and for the major veins only. This allowed a comparison of data that was spatially related. A 20 m radius for the major veins was selected as the minimum distance to ensure enough data for analysis without including spatially unrelated pairs. The data was declustered where clustering was observed.



The comparison shows that there is variation between the average Riofinex and Galantas gold grades, but there is not a consistent bias. For example, the average gold grades of the Riofinex drill holes are higher in the Kearney veins but the Galantas drill holes are higher in the Joshua vein. Vein thicknesses show even more variability with no consistent bias for a specific drill campaign.

The variability is likely due to the small number of data points and the distance between them of up to 20 m rather than biases in the drill campaign. The veins are observed to pinch and swell over short distances, with similar variations in gold grade also observed.

## Table 12.2: Kearney Vein Gold Grade (Au ppm) Statistics for Drill Data Comparison

Vein	Company	Samples	Mean	SD	Var.	Min.	Median	Max.	сѵ
Vein_3	Galantas	7	3.90	2.78	7.71	1.07	3.09	9.94	0.71
vem_3	Riofinex	12	4.08	3.62	13.11	0.89	3.05	16.57	0.89
Vein_9	Galantas	5	5.03	3.76	14.14	1.90	2.97	12.27	0.75
vem_9	Riofinex	6	7.54	9.57	91.60	0.52	3.13	27.39	1.27
Vein_19	Galantas	3	0.82	0.46	0.21	0.20	0.58	1.30	0.56
vem_19	Riofinex	3	3.31	2.97	8.83	0.84	1.22	7.49	0.90

Note: Data declustered for vein\_3 Galantas (40 m x 40 m) and Riofinex (25 m x 25 m), and vein\_9 Riofinex (90 m x 90 m).

## Table 12.3: Joshua Vein Gold Grade (Au ppm) Statistics for Drill Data Comparison

Vein	Company	Samples	Mean	SD	Var.	Min.	Median	Max.	cv
Voin 1	Galantas	16	4.64	4.36	18.98	0.21	3.16	17.31	0.94
Vein_1	Riofinex	10	2.62	2.25	5.06	0.51	1.63	8.93	0.86

Note: Data declustered for vein\_1 Galantas (30 m x 30 m) and Riofinex (45 m x 45 m).

#### Table 12.4: Kearney Vein Thickness (m) Statistics for Drill Data Comparison

Vein	Company	Samples	Mean	SD	Var.	Min.	Median	Max.	cv
Vein_3	Galantas	7	1.33	1.02	1.04	0.24	0.80	3.69	0.77
vem_3	Riofinex	12	1.77	1.49	2.23	0.28	0.97	4.66	0.84
Vein_9	Galantas	5	1.62	0.75	0.56	0.42	1.59	2.78	0.46
vem_9	Riofinex	6	0.42	0.37	0.14	0.07	0.22	1.26	0.88
Vein_19	Galantas	3	1.49	1.53	2.34	0.35	0.41	3.65	1.03
veni_19	Riofinex	3	0.86	0.65	0.42	0.19	0.42	1.73	0.76

Note: Data declustered for vein\_3 Galantas (40 m x 40 m) and Riofinex (25 m x 25 m), and vein\_9 Riofinex (90 m x 90 m).

#### Table 12.5: Joshua Vein Thickness (m) Statistics for Drill Data Comparison

Vein	Company	Samples	Mean	SD	Var.	Min.	Median	Max.	CV
Voin 1	Galantas	16	1.31	1.15	1.32	0.13	1.13	5.11	0.87
Vein_1	Riofinex	10	1.52	1.14	1.30	0.12	1.09	4.65	0.75

Note: Data declustered for vein\_1 Galantas (30 m x 30 m) and Riofinex (45 m x 45 m).



## 12.5 COMMENT ON DATA VERFICATION

Micon reviewed the drill rig, core logging, sampling and sample preparation on site and they are to current industry standards. Micon also compared and verified the drill hole logs and assay results to the remaining half drill core for selected holes.

The historical drill hole data from Riofinex was compared with the Galantas data as part of the verification. This was done because the QAQC samples for the Riofinex drill holes are not available and the documentation on the drilling is limited. Mineralised intercepts from the twin holes that were drilled by Galantas were not spatially close enough to be directly compared. However, the drill hole pairs do intersect the same vein structures and show continuity of the mineralisation. A comparison of gold grades and thicknesses of Riofinex and Galantas mineralised intercepts did not show any clear bias, but variability in the results is likely due to the small number of data points and the distance between them of up to 20 m. The veins are observed to pinch and swell over short distances, with similar variations in gold grade are also observed.

Micon considered the inclusion of the Riofinex data in the MRE as reasonable based on the following observations:

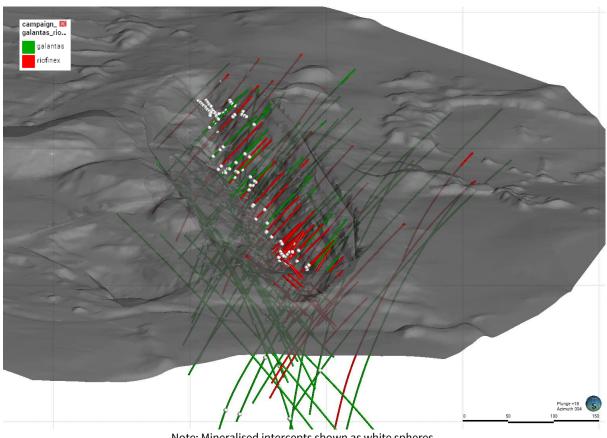
- The data comparison of mineralised intercepts did not show any identifiable bias;
- The Riofinex drill holes intersect the same vein structures as the Galantas drill holes and are continuous with them with respect to grade, thickness, and orientation considering the observed natural variability;
- A large number of mineralised Riofinex drill hole intercepts have been mined out in the Kearney open pit which combined with the Joshua open pit produced in excess of 30,000 oz of gold (Figure 12.3); and,
- The underground development has intercepted mineralised vein structures where predicted by the Riofinex drill holes.

There is a QAQC programme in place that includes the use of standards, duplicates, and blanks (see Section 11.3). The current and historical procedures are satisfactory; however some improvements could be made to it.

Micon notes that there is not a digital archive of all historical reports and paper records, and it is recommended that all historical data (e.g. reports, maps, logs, assay certificates) are digitised so that a secure record of the data can be archived, and all data can be easily accessed by the QP in future. Subsequent to this, Micon recommends that all sample data is collated from digital sources into a central geological database for the Project. The digitisation and collation process may lead to the location of some missing records that are highlighted in this report.

In conclusion, the QP has reviewed the sample collection, analytical methodologies and drill hole database are to current industry standards and permit a meaningful investigation of the mineralisation at the Omagh Gold Project for the purpose of resource estimation under the 2019 CIM Guidelines and provide the basis for the conclusions and recommendations reached in this Report.





## Figure 12.3: Oblique View to the North Showing the Kearney Open Pit, Drill Holes, and Mineralised Intercepts

Note: Mineralised intercepts shown as white spheres. Source: Micon (2023).



## 13.0 MINERAL PROCESSING AND METALLURGICAL TESTING

## 13.1 MINERAL PROCESSING

## **13.1.1 Processing Plant Description**

The Omagh Gold Project processing plant has been operational since 2007 and is located on the mine site, approximately 0.8 km by road from the underground portal. The processing plant processed all the ore from the open pit mining operation between 2006 and 2012 when approximately 30,000 oz of gold was produced. Underground ore from the ore development and initial stopes has been periodically processed through the plant. The ore extracted from the open pit and underground is considered to be equivalent in terms of mineral processing.

The processing plant is fed with ore from the underground mine. Blasted ore is hauled from underground to a storage pad where it is blended to the desired feed grade. Subsequently, blended ore is fed with a loading shovel into a hopper fitted with grizzly bars. Oversize ore that does not fit through the grizzly bars is crushed periodically by a mobile jaw crusher and is then stored on the ore pad for processing. The ore is removed from the hopper via an apron feeder, loading onto a conveyor feeding the primary jaw crusher. The jaw crusher reduces the ore to approximately 50 mm diameter. A rotating magnet removes any large tramp steel before the ore enters the jaw crusher.

Ore is then conveyed into a barrel washer, which breaks up any clay agglomerations. This conveyor is fitted with a belt weightometer which calculates mill throughput which is used in the reconciliation process. The barrel washer outputs directly onto a product screen. The top deck screens at +25 mm, and oversize is conveyed to a cone crusher where it is reduced to 12 mm and conveyed to the crushed ore bin. Ore sized between 1 mm to 25 mm gets conveyed directly to the ore bin from the screen, and -1mm ore is pumped directly into the primary ball mill feed. Crushing is completed in multiple campaigns throughout the day in order to keep the ore bin topped up.

From the ore bin, material is conveyed under a magnet and into the tertiary cone crusher to further reduce the size of the ore and remove any fine tramp steel. This belt is also fitted with a weightometer, thus allowing for further metallurgical reconciliation. The crushed material is fed directly into the primary ball mill and the primary ball mill grinds the material to 75% passing 180  $\mu$ m and 40% passing 75  $\mu$ m (Figure 13.1). Additional water is supplied into the primary ball mill from the thickening tank.

The ground material is pumped to a hydrocyclone where the overflow (nominal D80 of 75  $\mu$ m) is pumped to the primary condition tank and the underflow feeds into a screw classifier. The overflow from the screw classifier is sent back to the primary mill sump for reclassification. Underflow from the screw classifier is fed into the secondary ball mill for regrinding. The secondary ball mill discharges back into the primary mill sump to complete the closed circuit, allowing for proper classification of the ore.

Copper sulphate is added in the first conditioning tank to prepare the material for the float cells. The material is pumped into a second conditioning tank in which potassium amyl xanthate (PAX) is added to further assist the froth flotation process.



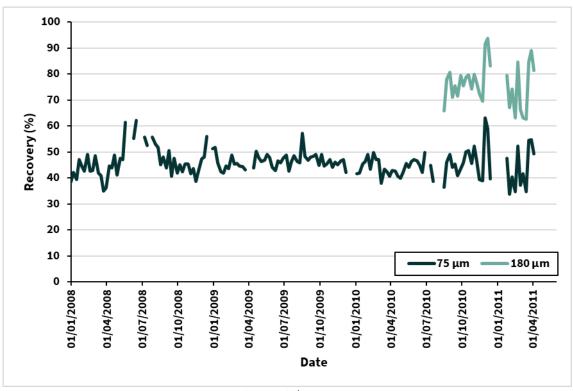


Figure 13.1: Grind Size of Material from the Primary Ball Mill

Source: Galantas.

The material is gravity fed into rougher banks below the second conditioning tank. Two inline rougher banks, each containing 4 cells are used to float the sulphide material which is collected in the troughs and delivered to a cleaner bank containing 4 cells. Methyl isobutyl carbinol (MIBC) is used as the frother and is added at key points in the banks.

Remaining tails from the rougher banks is pumped through the two scavenger banks, each containing 4 cells. Concentrate that is not collected in the scavenger banks is pumped to the tailings management facility. The scavenged concentrate material is returned to the cleaner bank where it has another chance to float.

Concentrate from the cleaner banks, containing four cells, is pumped directly to the concentrate holding tank. A cleaner-scavenger bank is located beneath the cleaner bank and is used to retrieve any remaining material. The concentrate of this bank is pumped to the cleaner cells, and the tailings is pumped to the scavenger cells.

Concentrate is filtered from the holding tank using a filter press which discharges the final concentrate into the bagging area below in 1.0 t to 1.3 t batches.

The on-site laboratory features an automatic assay furnace, a sulphur analyser, and an ICP-MS (inductively coupled plasma mass spectroscopy). The laboratory can produce near real time metallurgical information to improve and optimise plant recovery, as well as reducing costs via quality in-house testing and periodic process review to reduce wear rates and reagent use where possible.

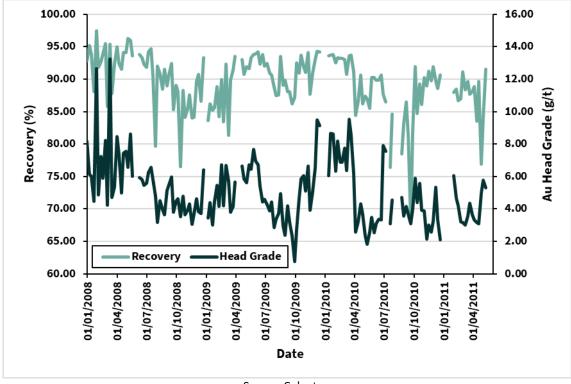


# **13.1.2 Process Flow Sheet**

The process flow sheet is shown in Figure 13.3 and highlights the components of the processing cycle.

## 13.1.3 Process Plant Recovery

Process plant recovery generally varies between 85% to 95%. Past plant performance data from 2008 to 2011 shows the relationship between gold head grade and gold recovery (Figure 13.2).





Source: Galantas.

## 13.1.4 Concentrate

The approximate composition of the final concentrate for the Net Smelter Return (NSR) is shown in Table 13.1. The concentrate is bagged in intermediate bulk container (IBC) bags weighing between 1.0 t and 1.3 t.

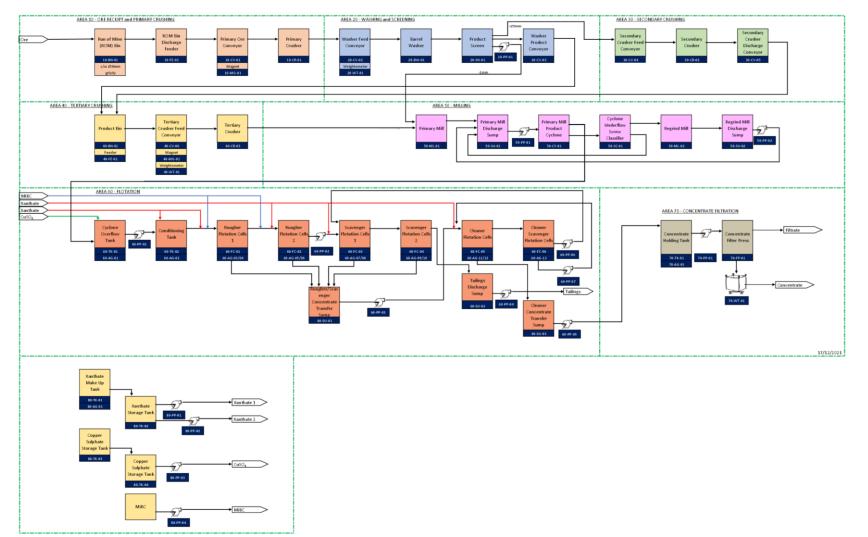
Item	Unit	Value
Gold	ppm	100
Silver	ppm	250
Lead	%	9-10
Arsenic	%	1-6
Moisture	%	8

#### Table 13.1: Approximate Composition of the Final Concentrate

Note: Arsenic is a penalty element.



Galantas Gold Corporation



## Figure 13.3: Process Flow Sheet

Source: Galantas.



# 13.1.5 Refining

Bagged concentrate is transported by road to Dublin on a truck and curtain trailer with an average shipment weight of 27 tonnes. It is then shipped to a Dutch smelter for refining.

Metal prices received are 95% of the average price of the previous month for gold, silver, and lead. Refining charges apply as do penalty charges for arsenic.

# 13.1.6 Tailings

Tailings are discharged into the paste cells. Water from the paste cells settles and migrates through the cleaning ponds to the final polishing pond. Tailings will then be harvested for paste fill to reduce the surface imprint and backfill some underground workings. The processing plant is supplied with re-cycled water from the polishing pond. Surplus water enters the catchment drainage via a V notch weir arrangement, where volume and water quality are routinely measured to ensure the standards regulated by the statutory authority (NIEA) are met.

## 13.1.7 Planned Process Plant Upgrades

To improve throughput, a new crushing circuit is required. A closed-circuit crushing system will be implemented to bring the mill feed size down to -10 mm. The finely crushed ore will then be stored in a stockpile with enough capacity to allow the process plant to run without crushing during the night, reducing nighttime noise levels. In addition to the crushing circuit, a fines handling system will be constructed to input a consistent amount of fines into the classification circuit, bypassing the mill, allowing a further increase in throughput.

## **13.2 METALLURGICAL TESTWORK**

## 13.2.1 Historical Test work

The information in the Section was summarised from Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, 26<sup>th</sup> July 2014, and ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008. Any text directly quoted from these reports is stated.

Initial froth flotation test work was carried out by Lakefield in 1992 and 1998. The plant that currently operates is based upon the results of that test work (as described in Section 13.1). Further tests on tailored reagents have been carried out during operation of the plant, and improvements made.

The following text in italic is taken from ACA Howe (2008), Technical Report on the Omagh Gold Project, Counties Tyrone and Fermanagh, Northern Ireland for Galantas Gold Corporation, 28<sup>th</sup> May 2008:

Lakefield did test work on samples in 1992 and 1998. Two samples were submitted in 1991 designated as low grade (sample A) and high grade (sample B). Gold values were 8g/t and 12.3g/t respectively. The work was commissioned for plant design purposes to be used by Kilborn Engineering who prepared a report in 1992 and a revision in 1995. Various processes were tested at Lakefield on the high



grade sample in 1992. Straight CIL recovered about 87% of the gold. Standard flotation produced a cleaner concentrate assaying 144g/t gold at a batch recovery of 90%. Gravity recovered about 40% of the gold in a preconcentrate. Due to the fineness of the free gold and the presence of large amounts of sulphides, the preconcentrate was not upgraded sufficiently by gravity. The recommended flow sheet to recover gold was standard flotation.

Lakefield did further test work on the low-grade sample, which had been kept in storage, in 1998. The work included flotation tests and cyanide leaching of the flotation concentrate.

# 13.2.2 Planned Test work

The following test work in planned:

- **Particle size distribution (PSD) studies** to quantify and improve the comminution and classification circuit in order to deliver a consistent, well sized feed to the flotation circuit;
- Bulk modal analysis (BMA) and particle liberation study (PLS) on the flotation feed, concentrate and tails. The BMA would quantify the types of minerals present, giving high quality particle images. It may be useful for domaining the different and could provide geometallurgical information such as the flotation reagent quantities relative to the prevailing ore type. The PLS would quantify the liberation of the ore phases in percent. This information would show if the grain size produced from the comminution is sufficient to liberate all particles. The information from this study could increase the recovery. In conjunction with the TPS described below, this may give proxies for free gold, and a better understanding of which phase hosts gold. This may allow further tailoring and improvement of the process plant;
- **Target Phase Search (TPS)** targets individual gold or gold bearing particles on a scanning electron microscope (SEM) to quantify the size and associations of (potentially) free gold in the deposit. Results from this test work would be a definitive step towards a gravity circuit addition; and,
- **Gravity concentrator** if free gold is identified by the other studies then a scoping study on compact concentrators and where to put it in the circuit.



# **14.0 MINERAL RESOURCE ESTIMATES**

## 14.1 DATA

## **14.1.1** MRE Database

A database was compiled from excel spreadsheets supplied by the Client for use in the MRE. The database includes diamond drill hole and surface channel samples from multiple drill and surface channel sampling campaigns (Table 14.1). The database includes data collected between 1987 and 2022 by Riofinex and Galantas. A map of the data included in the MRE database is shown in Figure 14.1. A list of drill holes and surface channel samples used in the MRE of the Joshua and Kearney veins are shown in Table 30.1 in the Appendix, and a summary of mineralised intercepts within the modelled vein wireframes is shown in Table 30.2.

Vain	Turne	Company	Year	Count		Lengt	h (m)		Assayed	
Vein	Туре				Total	Min.	Max.	Av.	Au (%)	(%)
	DH	Riofinex	1987-1990	50	5,189	28	355	104	10%	100%
	DH	Galantas	2006-2007	35	4,875	38	329	139	16%	99%
Koornov	DH	Galantas	2011-2013	18	5,599	85	449	311	4%	38%
Kearney	DH	Galantas	2015-2016	1	354	-	-	-	3%	0%
	UGDH	Galantas	2021-2022	22	3,016	61	252	137	9%	40%
	CS	Galantas	2012	32	102	1	11	3	98%	0%
	DH	Riofinex	1987-1988	23	2,332	43	157	101	3%	99%
	DH	Galantas	2011-2013	67	8,169	22	495	122	5%	45%
Joshua	DH	Galantas	2015-2016	13	3,526	143	503	271	3%	4%
	DH	Galantas	2021-2022	8	1,262	66	261	158	4%	100%
	CS	Galantas	2011	77	227	2	7	3	99%	0%

#### Table 14.1: Summary of Drill Hole and Surface Channel Samples Used in the MRE

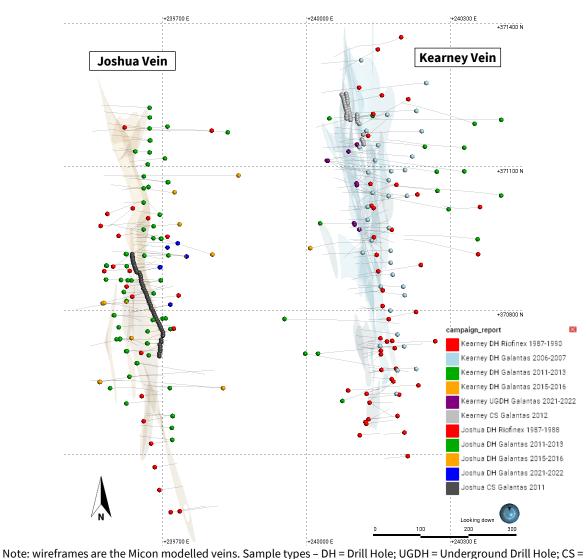
Note: Sample types – DH = Drill Hole; UGDH = Underground Drill Hole; CS = Surface Channel Samples. All drilling is diamond drill core.

Some surface channel samples, and all underground channel samples were not included in the MRE database. The samples excluded include the Riofinex, OML, and Galantas 2006 surface channel samples (Section 9.4.1, Section 9.4.2.1). These samples were not used in the grade interpolation because of uncertainties in the true vein width and grades, and unconstrained vein boundaries. The samples were used to inform the general trend of the vein wireframes.

The database contains six tables, including: collar, survey, assay, lithology, recovery, and structural data. The database was closed on 31<sup>st</sup> December 2022 and no new data was added after this date.

Systematic checks were performed to ensure that the data is acceptable and in a suitable condition for use in modelling and resource evaluation in accordance with CIM (2019), as outlined in Section 12.2.





# Figure 14.1: Plan View Map of the Drill Hole and Surface Channel Samples Collars and Traces Used in the MRE

14.1.2 Assaying and Detection Limits

A large proportion of the drill core was selectively sampled and assayed as the holes were drilled through waste in the hangingwall, footwall, or between mineralised veins (Table 14.1). Drill core was generally assayed where there was visual evidence of sulphides and/or mineralised lithologies. It is possible that some mineralised intervals have been missed where drill holes have not been logged in detail.

Surface Channel Samples. Source: Micon (2023).

Micon recommends that all drill core is logged in detail before selecting samples for assay and any drill core that is potentially mineralised should be sampled. Furthermore, waste rock marginal to mineralised intercepts should also be sampled to ensure the vein width is fully defined. The drill core should be compared against the geological vein model to ensure that any intercepts that crosscut the model are sampled and assayed even if they appear unmineralised. This will allow the geological model to be tested and validated.



Any samples below detection limit or with a 0 value in the database were set to half the detection limit value of the 2021 to 2022 drill campaign of 0.005 Au ppm.

# 14.1.3 Bulk Density

Density measurements were collected by Galantas from grab samples in 2008 and drill core samples in 2022. The density was calculated by weighing the sample in air and suspended in water. A total of 150 samples were made in 2008 from the Kearney vein system. In 2022, 93 samples were taken from the Kearney vein system and 67 from the Joshua vein system.

Different ore types have been identified at the Kearney and Joshua vein systems, they include: altered schist (AltSch), black clay gouge (bkClay), grey green clay gouge (gr-gy CG), mineralised schist (MinSch), quartz breccia (QtzBx). Density measurements were made of each ore type as well as waste rocks including pelite (Pel) and Cavanacaw psammite (CavPsam). For the density calculation, the 2008 samples were aligned with the current logged ore types. The average density values are shown in Table 14.2.

Lithelegy/	2008 Kearney		2022 Kearney		2022 Joshua		TOTAL	
Lithology/ Type	Count	Density (t/m³)	Count	Density (t/m³)	Count	Density (t/m³)	Count	Density (t/m³)
AltSch	25	2.77	10	2.67	10	2.59	45	2.70
bkClay	25	2.81	10	2.42	8	2.59	43	2.68
CavPsam	-	-	9	2.70	10	2.66	19	2.68
gr-gy CG	25	2.77	10	2.38	10	2.31	45	2.58
MinSch	25	2.77	9	2.69	10	2.65	44	2.72
Pel	-	-	10	2.74	10	2.66	20	2.70
QtzBx	50	3.19	35	3.02	9	2.92	94	3.10

## Table 14.2: Average Density Values from 2008 and 2022 Sampling Campaigns

Note: Lithology/Type abbreviations – AltSch = altered schist; bkClay = black clay gouge; CavPsam = Cavanacaw psammite; gr-gy CG = grey green clay gouge; MinSch = mineralised schist; Pel = pelite; QtzBx = quartz breccia.

The different ore types are present in varying proportions within individual Kearney and Joshua veins. Density determination of individual mineralised intercepts was not possible because not all vein intercepts have been logged. Furthermore, there is no strong correlation between gold grade and density to calculate a density based on assay data.

As such, the length weighted average density of all logged mineralised intercepts was calculated using the average density values for each ore type listed in Table 14.2. The mineralised intercepts are those within the modelled vein wireframes. The Joshua and Kearney vein data was combined due to the small dataset for the Joshua vein system. A density value of 2.98 t/m<sup>3</sup> was calculated for the mineralised veins and 2.70 t/m<sup>3</sup> for waste rocks.

# 14.2 GEOLOGICAL MODELLING

Of the available data, only 60.5% of the data, including 59.9% of the drill core, has lithology logs. The major logged mineralised lithologies are quartz breccia, clay gouge, mineralised schist, and altered schist. However, some intervals logged as mineralised contain sub-economic gold grades (Figure 14.3). Furthermore, a significant number of logged host rock psammite (e.g. CavPsam),

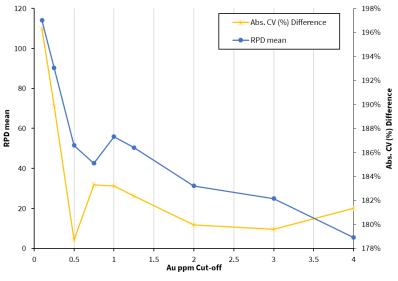


pelite, and schist intervals that are interpreted as unmineralised carry significant gold grades (Figure 14.3).

Considering the incomplete lithology logs and that mineralised intervals cannot be clearly deduced from the logged lithology; the geological vein wireframes could not be constructed from the lithology logs alone. As such, the assay grades were primarily used to select mineralised intervals for wireframing and the lithology data was used as supporting secondary data.

Sterk et al. (2019) state that grade cut-offs should be based on the statistical evaluation of the difference between background concentration and enrichment and should be supported by geological evidence. They do not recommend defining grade domains based on economic-grade cut-offs or multi-element cut-offs (metal equivalent) as the distribution of elements within a stationary domain is not dependent on dollars or the market.

To determine the cut-off grade for the ore (vein) and waste populations the methodology described in Sterk et al. (2019) was combined with visual observations of typical grades observed in vein intercepts, and observations of inflection points in log probability plots. The method used, is to calculate the maximum difference expressed by the coefficient of variation (CV) between the average grade of all first metres outside a zone of mineralisation and all the first metres inside a zone of mineralisation for a range of geologically reasonable cut-offs. The grade cut-off where this difference is largest presents the maximum geological contrast between waste and mineralisation and represents a geologically justifiable domain boundary. This process is similar to looking at the maximum inflection point in a log probability plot, but an advantage is that it is geospatially relevant and is not only based on the total average distribution curve.

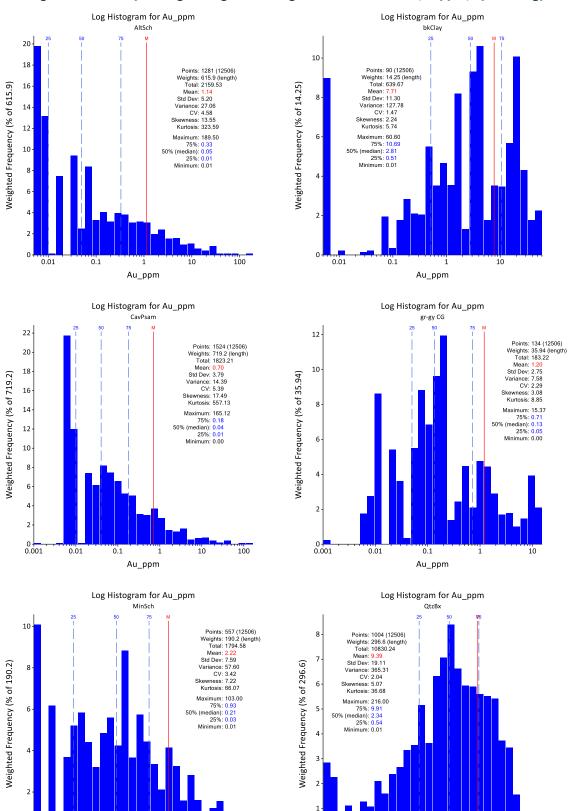


#### Figure 14.2: Ore-waste Cut-off Calculation Plot

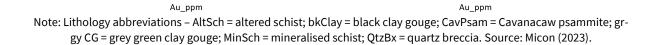
Note: RPD = relative percentage difference, Abs. CV = absolute coefficient of variation. Source: Micon (2023).

A cut-off grade of 1 Au ppm was used to inform the selection of ore and waste intervals. This was based on the cut-off grade calculation showing a peak in CV at 1 Au ppm and is supported by the fact that visually, most vein intercepts that can be correlated between drill holes are > 1 Au ppm (Figure 14.4).





#### Figure 14.3: Example Length Weighted Histograms of Gold Grades (Au ppm) by Lithology



100

10

1

0

0.01

0.1

1

Au\_ppm

10

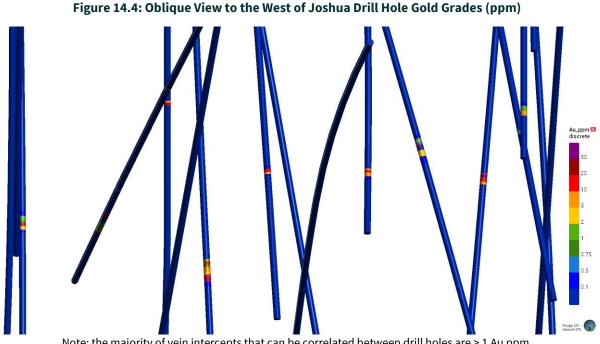
100

0

0.01

0.1





Note: the majority of vein intercepts that can be correlated between drill holes are > 1 Au ppm. Source: Micon (2023).

Economic composites were made in Leapfrog at a cut-off grade of 1 Au ppm. Settings used were no minimum ore composite length, maximum included waste of 1.0 m, and maximum consecutive waste of 1.0 m.

The economic composites were used to highlight mineralised intervals to assign to veins for wireframing. Mineralised samples were manually assigned to a vein based on previous wireframe interpretations, geological mapping, and structural data. The inclusion of internal waste was kept to a minimum. No minimum thickness was used for the assigned intervals, the vein wireframe is a 3D representation of the mineralised ore body. Dilution when mining will be accounted for during the Mineable Stope Optimiser (MSO) and the reporting of diluted tonnages and grades based on the stope shape wireframes. In total, mineralised intervals were assigned to 22 veins in the Kearney vein system and seven veins in the Joshua vein system.

A separate vein system geological model was created for Kearney and Joshua in Leapfrog. Underground mapping at Kearney gave additional spatial constraints on the vein hangingwall and footwall surfaces in the form of polylines. Data from channel samples pre-2011 were not used in the MRE and were only used to guide the orientation of the vein wireframe models. The vein systems were modelled with a minimum thickness of 0.1 m. Pinch outs were manually digitised using polylines and the vein wireframes were clipped to ensure that they did not extend significantly beyond the drill data. The clipping boundary was limited to within 70 m of drill hole data for the largest most continuous veins and within 50 m for the smaller more discontinuous veins (Table 14.3). These distances were based on the observed vein continuity from exploration drilling and surface channel sampling. Where there was a pinch out at less than the clipping boundary distance the boundary as set to the approximate midpoint between the pinch out and the nearest vein intersection. A summary of the modelled veins is shown in Table 14.3 and Table 14.4 and images of the vein wireframes in Figure 14.5, Figure 14.6, and Figure 14.7.

A small number of pinch outs were ignored due to contradicting or missing data. The very bottom of drill hole OMBHLO42 intersected Kearney vein\_3 but the assay data showed no mineralisation.



This was within the underground development in an ore drive, and it is likely that the resolution of the down hole survey was not sufficient, and the drill hole should have fell just outside vein 3. As such, the pinch out was ignored. Pinch outs were also ignored for drill holes OM-DD-16-163 and OM-DD-13-145. These drill holes have not been logged or assayed and it is unclear if this is due to a lack of mineralisation, or the data was never collected. Other drill hole data indicates mineralised vein structures in close proximity to these holes and therefore the pinch outs were ignored.

For the Kearney and Joshua vein systems there are major veins that make up majority of the modelled wireframes. At Kearney, vein\_3, vein\_9, and vein\_19 represent 73%, and at Joshua vein\_1 represents 86%, of the respective total vein volume (Table 14.3, Table 14.4).

Vein	Wireframe	Volume (m <sup>3</sup> )	Percentage of	No. of	Clip Distance
			Total Volume (%)	Intercepts	(m)
	vein_1	2,376	1%	8	50
	vein_3	123,410	29%	85	70
	vein_5	354	0%	2	50
	vein_9	91,434	22%	72	70
	vein_10	3,388	1%	11	50
	vein_11	1,553	0%	5	50
	vein_12	3,283	1%	2	50
	vein_13	1,992	0%	3	50
	vein_14	12,915	3%	14	50
	vein_15	13,732	3%	6	50
	vein_18	21,314	5%	19	50
Kearney	vein_19	93,391	22%	37	70
	vein_20	4,666	1%	4	50
	vein_21	3,813	1%	3	50
	vein_22	4,581	1%	10	50
	vein_23	5,144	1%	8	50
	vein_24	9,328	2%	15	50
	vein_26	3,062	1%	7	50
	vein_27	4,154	1%	2	50
	vein_28	11,127	3%	2	50
	vein_29	1,953	0%	6	50
	vein_30	1,515	0%	3	50
	TOTAL	418,483	100%	324	

Table 14.3: Summary of the Modelled Vein Wireframes for the Kearney Vein System

#### Table 14.4: Summary of the Modelled Vein Wireframes for the Joshua Vein System

Vein	Wireframe	Volume (m <sup>3</sup> )	Percentage of Total Volume (%)	No. of Intercepts	Clip Distance (m)	
	vein_1	194,460	86%	161	70	
	vein_2 4,721		2%	8	50	
	vein_3 4,311		2%	4	50	
Joshua	vein_4	5,514	2%	4	50	
Joshua	vein_5	1,117	0%	4	50	
	vein_6	4,513	2%	6	50	
	vein_kestrel	10,781	5%	4	50	
	TOTAL	225,417	100%	191		



Galantas Gold Corporation

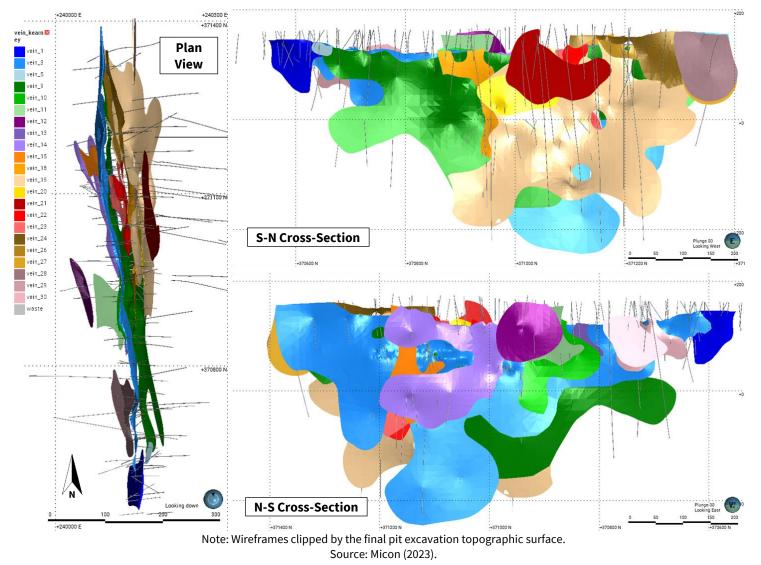
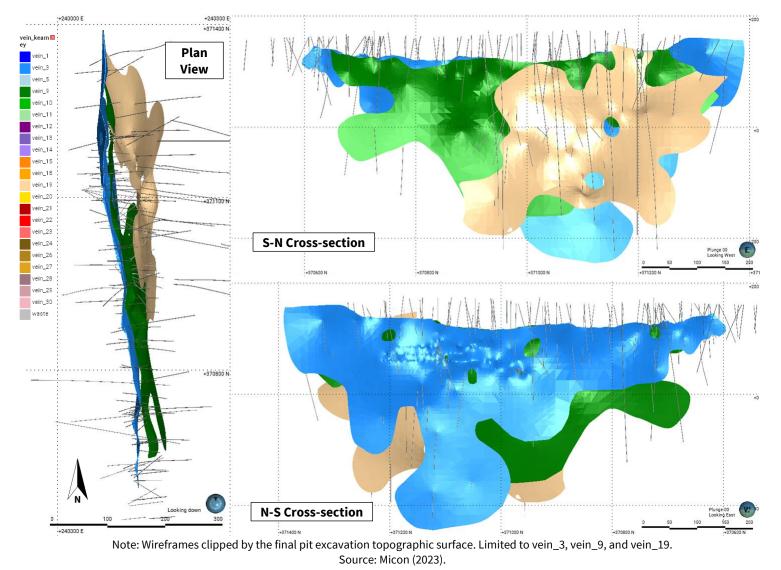


Figure 14.5: Plan and Cross-Section Views of the Kearney Vein Wireframes

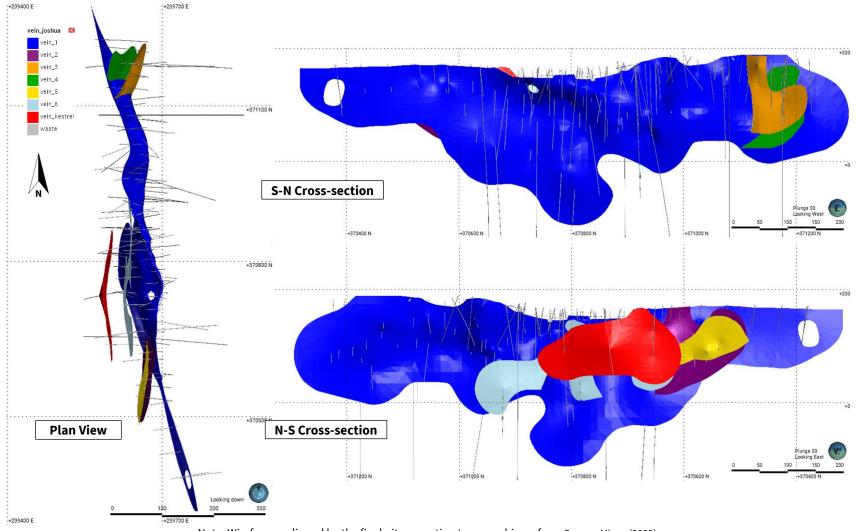


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#### Figure 14.6: Plan and Cross-Section Views of the Major Kearney Vein Wireframes





#### Figure 14.7: Plan and Cross-Section Views of the Joshua Vein Wireframes

Note: Wireframes clipped by the final pit excavation topographic surface. Source: Micon (2023).



Attempts were made to model the dilation zones as part of the vein wireframes, but their spatial extents could not be confidently modelled in between drill holes. It is recognised by Galantas that the location of the dilation zones can be predicted but there is not sufficient data at the required resolution to accurately model them. The vein wireframes do however show a pinch and swell structure where there is high resolution data from underground geological mapping (Figure 14.8).

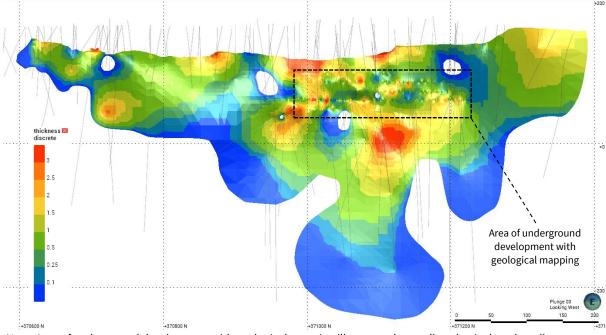


Figure 14.8: S-N Cross-Section Showing Kearney Vein\_3 Thickness and Pinch and Swell Structures

Note: Area of underground development with geological mapping illustrates the small-scale pinch and swell structures. Source: Micon (2023).

# 14.3 EXPLORATORY DATA ANALYSIS

Exploratory Data Analysis (EDA) was undertaken for Au assay data to define and validate stationary estimation domains, identify the nature of the contacts between domains, and to inform outlier management. Methods used include contact plots, summary statistics, histogram plots, and log probability plots. All data is length weighted unless specified.

# 14.3.1 Statistics

## 14.3.1.1 Kearney

The length weighted statistics for all modelled Kearney veins and unmodelled waste are shown in Table 14.5 and corresponding histograms and log probability plots in Figure 14.9 and Figure 14.10, respectively. The length weighted statistics of individual Kearney vein structures are shown in Table 14.6. Histograms and log probability plots of the largest vein structures are shown in Figure 14.11. For all other veins the histograms and log probability plots were reviewed by the author.

The wireframes clearly show a good segregation of ore (or vein) and waste with minimal mineralised intervals that are excluded from the vein wireframes.



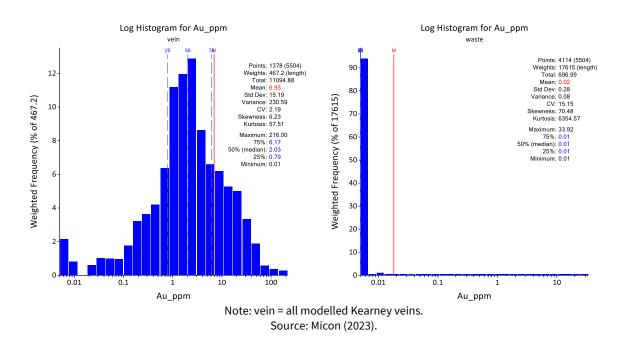
## Table 14.5: Length Weighted Gold Grade (Au ppm) Statistics for All Kearney Veins and Waste

Vein	Туре	Samples	Mean	SD	Var.	Min.	Median	Max.	сv
Kearney	Vein	1,378	6.93	15.19	230.59	0.01	2.03	216.00	2.19
	Waste	4,114	0.02	0.28	0.08	0.01	0.01	33.92	15.15

#### Table 14.6: Length Weighted Gold Grade (Au ppm) Statistics for Individual Kearney Veins

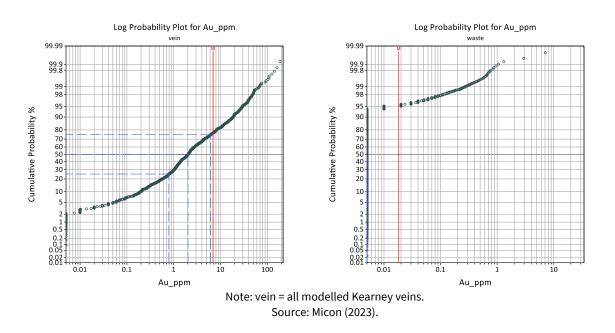
Vein	Structure	Samples	Mean	SD	Var.	Min.	Median	Max.	C۷
	vein_1	17	2.61	3.05	9.27	0.15	1.45	18.32	1.17
	vein_3	512	7.67	15.63	244.45	0.01	2.22	213.00	2.04
	vein_5	4	15.46	13.61	185.28	1.56	6.51	32.74	0.88
	vein_9	274	5.90	13.16	173.18	0.01	1.94	141.50	2.23
	vein_10	12	12.51	29.25	855.75	1.20	5.64	165.12	2.34
	vein_11	8	9.46	5.89	34.68	1.80	7.52	20.16	0.62
	vein_12	5	3.91	3.26	10.65	1.44	1.82	9.32	0.84
	vein_13	3	0.90	0.16	0.03	0.79	0.79	1.39	0.18
	vein_14	36	7.43	13.10	171.60	0.01	2.32	75.20	1.76
	vein_15	50	11.14	16.69	278.42	0.04	2.83	95.40	1.50
Kearney	vein_18	98	4.79	6.94	48.21	0.01	1.37	35.70	1.45
Realliey	vein_19	197	4.48	9.81	96.24	0.01	1.20	125.00	2.19
	vein_20	12	3.33	6.32	39.92	0.29	0.73	34.40	1.90
	vein_21	5	3.46	4.65	21.66	0.10	1.02	12.58	1.34
	vein_22	18	10.78	17.23	296.76	0.07	3.25	59.22	1.60
	vein_23	23	23.87	46.99	2208.18	0.01	2.29	216.00	1.97
	vein_24	73	7.92	16.29	265.27	0.03	2.68	93.91	2.06
	vein_26	12	2.58	3.30	10.90	0.14	1.30	13.07	1.28
	vein_27	4	3.78	2.33	5.41	1.13	2.34	7.01	0.61
	vein_28	5	2.92	1.79	3.19	1.33	1.86	6.92	0.61
	vein_29	7	3.55	3.79	14.38	0.91	1.39	13.74	1.07
	vein_30	3	2.70	1.43	2.05	1.34	1.64	4.51	0.53



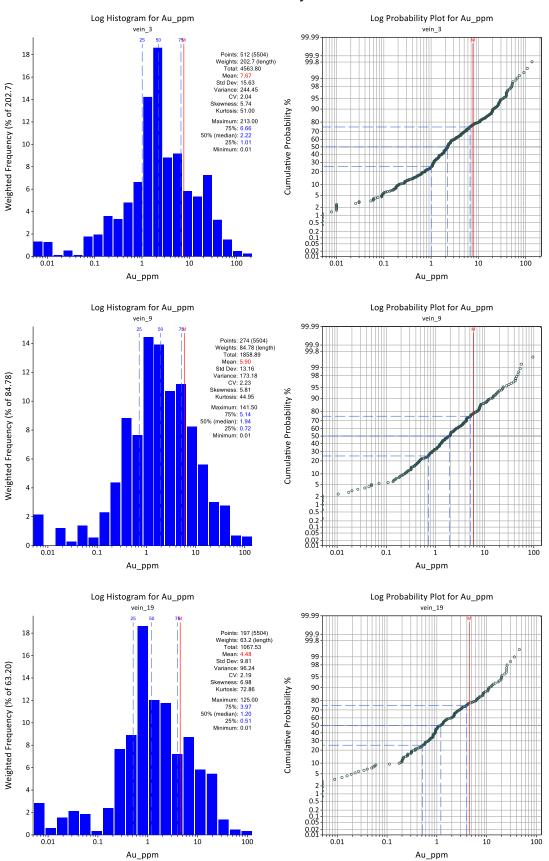


#### Figure 14.9: Length Weighted Gold Grade (Au ppm) Histograms for All Kearney Veins and Waste

Figure 14.10: Length Weighted Gold Grade (Au ppm) Log Probability Plots for All Kearney Veins and Waste







#### Figure 14.11: Length Weighted Gold Grade (Au ppm) Histogram and Log Probability Plots for Selected Kearney Veins

Note: Kearney vein\_3, vein\_9, and vein\_19 represent 73% of the total modelled vein volume. Source: Micon (2023).



# 14.3.1.2 Joshua

The length weighted statistics for all modelled Joshua veins and unmodelled waste are shown in Table 14.7 and corresponding histograms and log probability plots in Figure 14.12 and Figure 14.13, respectively. The length weighted statistics of individual Kearney vein structures are shown in Table 14.8. Histograms and log probability plots of the largest vein structures are shown in Figure 14.14. For all other veins the histograms and log probability plots were reviewed by the author.

The wireframes clearly show a good segregation of ore (or vein) and waste with minimal mineralised intervals that are excluded from the vein wireframes.

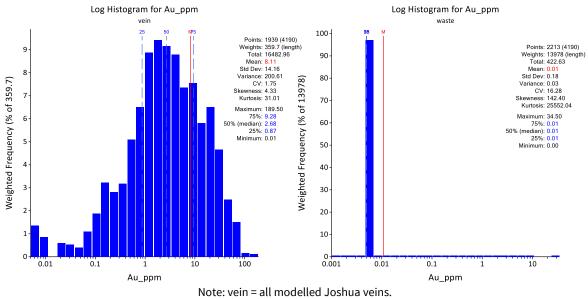
Vein	Туре	Samples	Mean	SD	Var.	Min.	Median	Max.	сv
Joshua	Vein	1,939	8.11	14.16	200.61	0.01	2.68	189.50	1.75
	Waste	2,213	0.01	0.18	0.03	0.001	0.01	34.50	16.28

#### Table 14.7: Length Weighted Gold Grade (Au ppm) Statistics for All Joshua Veins and Waste

#### Table 14.8: Length Weighted Gold Grade (Au ppm) Statistics for Individual Joshua Veins

Vein	Structure	Samples	Mean	SD	Var.	Min.	Median	Max.	cv
Joshua	vein_1	1,872	7.89	13.69	187.39	0.01	2.68	189.50	1.74
	vein_2	19	5.07	8.78	77.14	0.12	2.18	31.90	1.73
	vein_3	8	9.35	11.36	128.95	1.02	3.76	49.20	1.21
	vein_4	11	14.33	15.61	243.76	0.01	3.45	52.50	1.09
	vein_5	5	31.24	33.14	1098.45	0.80	6.03	73.50	1.06
	vein_6	8	9.82	13.18	173.82	0.44	2.55	43.00	1.34
	vein_kestrel	16	15.96	30.14	908.16	0.75	3.29	108.50	1.89

#### Figure 14.12: Length Weighted Gold Grade (Au ppm) Histograms for All Joshua Veins and Waste



Source: Micon (2023).



## Figure 14.13: Length Weighted Gold Grade (Au ppm) Log Probability Plots for All Joshua Veins and Waste

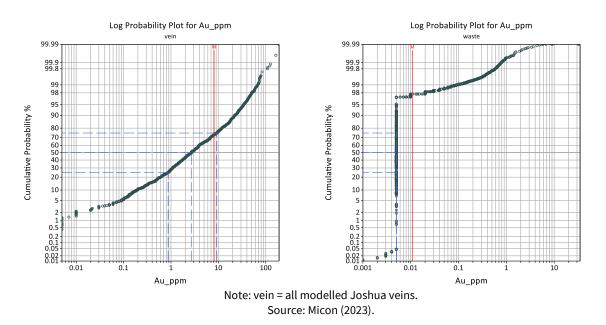
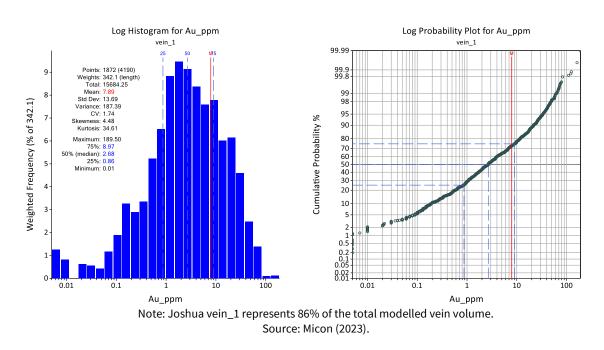


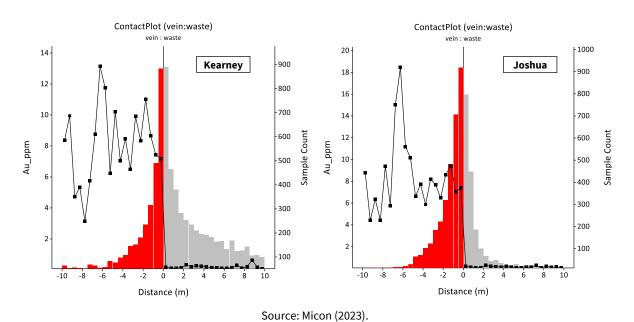
Figure 14.14: Length Weighted Gold Grade (Au ppm) Histogram and Log Probability Plots for Selected Joshua Veins



# 14.3.2 Contact Plots

Contact plots were created of all modelled veins and unmodelled waste for the Kearney and Joshua veins. All the contact plots demonstrate hard boundaries, indicating that they should be interpolated as separate estimation domains. The contact plots are shown in Figure 14.15.





#### Figure 14.15: Contact Plots of Gold Grade (Au ppm) for All Joshua and Kearney Veins and Waste

# 14.3.3 Outliers

Log probability plots were created to understand where the grade distributions deviated from a normal distribution, indicating the presence of outliers. Representative log probability plots are shown in Figure 14.10, Figure 14.11, Figure 14.13 and Figure 14.14 and all other log probability plots of modelled Kearney and Joshua vein structures were reviewed by the author.

The presence of high-grade outlier samples is problematic if they have little spatial connectivity, and they need to be managed appropriately. Outlier grades were capped before compositing interpolation to limit their influence. Based on the log probability plots a cap or 80 Au ppm was used for structures that contained outlier values, as listed in Table 14.9.



Vein	Structure	Cap (Au ppm)		
	vein_1	-		
	vein_3	80		
	vein_5	-		
	vein_9	80		
	vein_10	80		
	vein_11	-		
	vein_12	-		
	vein_13	-		
	vein_14	-		
	vein_15	80		
Koarnov	vein_18	-		
Kearney	vein_19	80		
	vein_20	-		
	vein_21	-		
	vein_22	-		
	vein_23	80		
	vein_24	80		
	vein_26	-		
	vein_27	-		
	vein_28	-		
	vein_29	-		
	vein_30	-		
	vein_1	80		
	vein_2	-		
	vein_3	-		
Joshua	vein_4	-		
	vein_5	-		
	vein_6	-		
	vein_kestrel	80		

#### Table 14.9: Outlier Treatment of Gold Grade (Au ppm) for Joshua and Kearney Veins

## 14.4 COMPOSITING

The MRE was interpolated using two dimensional (2D) inverse distance to the power of 3 (ID<sup>3</sup>). As such, the length weighted gold grade of each vein intercept was calculated for all the modelled Kearney and Joshua vein structures.

The true thickness of the vein intercepts were interpolated from the modelled vein wireframes. The vein vertices and corresponding vein thicknesses were extracted as points for each modelled vein. The resolution of the vertices is significantly higher (< 1 m) around the vein intercepts due to the resolution of the wireframes being set to adaptive and minimum 0.25 m triangles. This ensures that the true thickness assigned from the vertices are spatially close (< 1 m) to the vein intercept. The true thickness was interpolated using a nearest neighbour approach. Figure 14.16 shows the extracted vertices and corresponding vein intercepts.



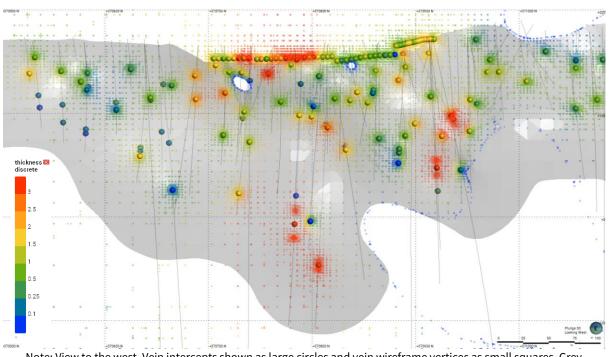


Figure 14.16: Thickness of Vein Intercepts and Wireframe Vertices for Joshua Vein\_1

Note: View to the west. Vein intercepts shown as large circles and vein wireframe vertices as small squares. Grey wireframe is Joshua vein\_1. Source: Micon (2023).

# 14.4.1 Declustering

For some veins the data is clustered, such as where multiple drill holes have been drilled from a single underground location or closely spaced surface channel samples. The composited data was declustered where necessary. A range of cell sizes was tested and the decluster cell sizes used per domain are shown in Table 14.10. An overlapping cuboid shaped decluster cell was used, and the data was declustered in 2D.



### Table 14.10: Decluster Cell Sizes

Main	Churching	Cell	Size	
Vein	Structure	X (m)	Y (m)	
	vein_1	-	-	
	vein_3	35	35	
	vein_5	-	-	
	vein_9	25	25	
	vein_10	-	-	
	vein_11	-	-	
	vein_12	-	-	
	vein_13	-	-	
	vein_14	35	35	
	vein_15	-	-	
Kaarnay	vein_18	28	28	
Kearney	vein_19	28	28	
	vein_20	-	-	
	vein_21	-	-	
	vein_22	-	-	
	vein_23	-	-	
	vein_24	32	32	
	vein_26	25	25	
	vein_27	-	-	
	vein_28	-	-	
	vein_29	-	-	
	vein_30	-	-	
	vein_1	25	25	
	vein_2	-	-	
	vein_3	-	-	
Joshua	vein_4	-	-	
	vein_5	-	-	
	vein_6	-	-	
	vein_kestrel	-	-	



# 14.4.2 Statistics

## 14.4.2.1 Gold Grades

The declustered gold grade composite statistics are shown in Table 14.11 and Table 14.12 and histograms of the largest vein structures are shown in Figure 14.17 and Figure 14.18 for Kearney and Joshua, respectively. For all other veins, the statistics and histograms were reviewed by the author.

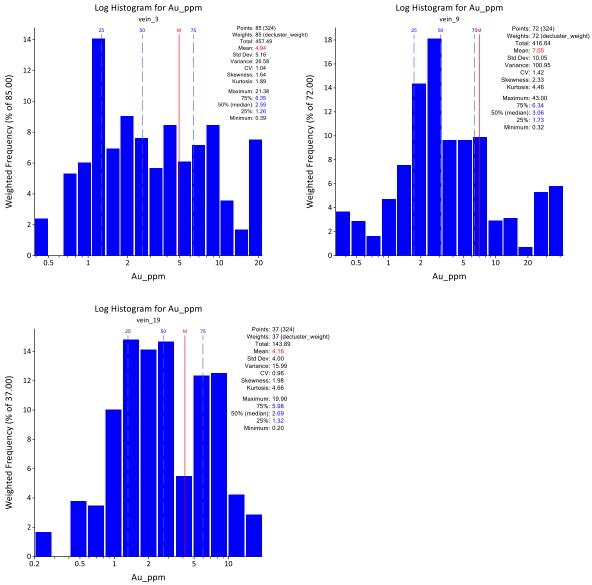
Vein	Structure	Samples	Mean	SD	Var.	Min.	Median	Max.	с٧
	vein_1	8	2.13	1.43	2.04	0.15	2.49	3.99	0.67
	vein_3	85	4.94	5.16	26.58	0.39	2.59	21.38	1.04
	vein_5	2	10.78	9.22	84.97	1.56	1.56	20.00	0.86
	vein_9	72	7.05	10.05	100.95	0.32	3.06	43.00	1.42
	vein_10	11	12.18	21.87	478.49	1.20	3.22	80.00	1.80
	vein_11	5	10.09	5.59	31.22	4.95	6.74	20.16	0.55
	vein_12	2	3.83	1.89	3.59	1.93	1.93	5.72	0.49
	vein_13	3	1.07	0.25	0.06	0.79	0.91	1.39	0.23
	vein_14	14	9.50	17.13	293.46	1.04	3.41	75.20	1.80
	vein_15	6	10.20	11.14	124.12	1.03	2.84	30.09	1.09
Koornov	vein_18	19	6.50	7.06	49.89	0.52	4.55	26.88	1.09
Kearney	vein_19	37	4.16	4.00	15.99	0.20	2.69	19.90	0.96
	vein_20	4	4.31	1.99	3.97	2.24	2.97	7.43	0.46
	vein_21	3	5.02	5.34	28.56	1.15	1.24	12.58	1.06
	vein_22	10	19.01	22.36	499.90	1.20	3.48	59.22	1.18
	vein_23	8	13.28	14.93	222.76	1.15	7.64	50.63	1.12
	vein_24	15	10.94	7.51	56.47	0.99	11.62	21.89	0.69
	vein_26	7	2.47	1.83	3.36	0.14	1.35	4.91	0.74
	vein_27	2	4.92	2.09	4.36	2.83	2.83	7.01	0.42
	vein_28	2	2.55	0.43	0.19	2.12	2.12	2.99	0.17
	vein_29	6	4.49	4.29	18.39	0.91	3.32	13.74	0.96
	vein_30	3	2.55	1.40	1.95	1.34	1.58	4.51	0.55

#### Table 14.11: Decluster Weighted Gold Grade (Au ppm) Composite Statistics for Individual Kearney Veins

### Table 14.12: Decluster Weighted Gold Grade (Au ppm) Composite Statistics for Individual Joshua Veins

Vein	Structure	Samples	Mean	SD	Var.	Min.	Median	Max.	CV
	vein_1	161	5.52	7.06	49.88	0.21	2.47	46.93	1.28
	vein_2	8	5.41	9.29	86.24	0.48	1.34	29.74	1.72
	vein_3	4	17.28	18.54	343.59	3.62	7.07	49.20	1.07
Joshua	vein_4	4	17.37	11.49	132.03	3.18	10.71	33.50	0.66
	vein_5	4	11.20	17.09	291.97	0.80	1.56	40.79	1.53
	vein_6	6	13.12	15.28	233.33	1.19	3.24	43.00	1.16
	vein_kestrel	4	17.10	18.77	352.34	3.01	3.85	48.96	1.10

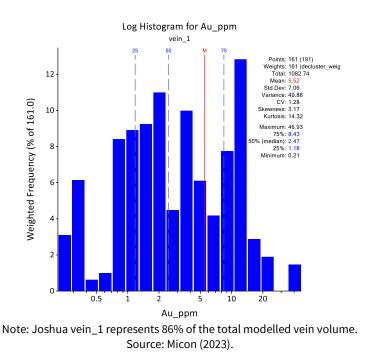




## Figure 14.17: Decluster Weighted Gold Grade (Au ppm) Composite Histograms for Selected Kearney Veins

Note: Kearney vein\_3, vein\_9, and vein\_19 represent 73% of the total modelled vein volume. Source: Micon (2023).





## Figure 14.18: Decluster Weighted Gold Grade (Au ppm) Composite Histograms for Selected Kearney Veins

## 14.4.2.2 Vein Thickness

The declustered vein thickness composite statistics are shown in Table 14.13 and Table 14.14 and histograms of the largest vein structures are shown in Figure 14.19 and Figure 14.20 for Kearney and Joshua, respectively. For all other veins, the statistics and histograms were reviewed by the author.



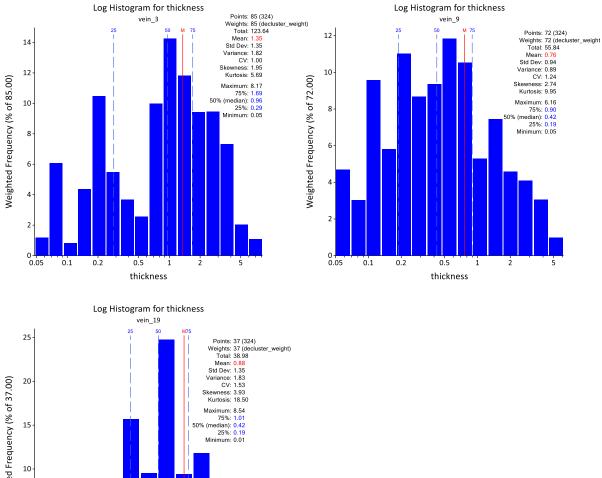
Vein	Structure	Samples	Mean	SD	Var.	Min.	Median	Max.	сv
	vein_1	8	0.90	1.01	1.03	0.11	0.53	3.49	1.12
	vein_3	85	1.35	1.35	1.82	0.05	0.96	8.17	1.00
	vein_5	2	0.56	0.34	0.12	0.21	0.21	0.90	0.62
	vein_9	72	0.76	0.94	0.89	0.05	0.42	6.16	1.24
	vein_10	11	0.18	0.14	0.02	0.04	0.10	0.43	0.77
	vein_11	5	0.16	0.04	0.00	0.12	0.14	0.25	0.27
	vein_12	2	0.55	0.29	0.08	0.26	0.26	0.83	0.52
	vein_13	3	0.65	0.46	0.21	0.13	0.35	1.24	0.71
	vein_14	14	0.45	0.46	0.21	0.07	0.25	1.84	1.02
	vein_15	6	1.34	1.00	1.00	0.15	1.08	3.43	0.75
Kearney	vein_18	19	0.64	0.61	0.38	0.03	0.50	2.45	0.96
Realliey	vein_19	37	0.88	1.35	1.83	0.01	0.42	8.54	1.53
	vein_20	4	0.54	0.59	0.35	0.03	0.07	1.49	1.09
	vein_21	3	0.26	0.22	0.05	0.08	0.11	0.57	0.83
	vein_22	10	0.26	0.23	0.05	0.08	0.19	0.90	0.89
	vein_23	8	0.67	0.74	0.55	0.08	0.36	2.42	1.10
	vein_24	15	0.70	0.42	0.18	0.17	0.53	1.35	0.60
	vein_26	7	0.60	0.42	0.18	0.10	0.30	1.14	0.71
	vein_27	2	0.38	0.20	0.04	0.17	0.17	0.58	0.54
	vein_28	2	0.83	0.71	0.50	0.13	0.13	1.54	0.85
	vein_29	6	0.19	0.09	0.01	0.07	0.12	0.29	0.49
	vein_30	3	0.19	0.04	0.00	0.15	0.17	0.24	0.19

## Table 14.13: Decluster Weighted Vein Thickness (m) Composite Statistics for Individual Kearney Veins

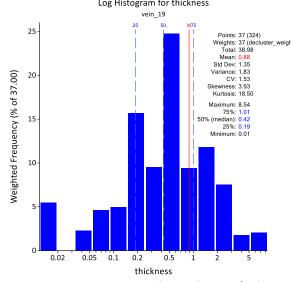
#### Table 14.14: Decluster Weighted Vein Thickness (m) Composite Statistics for Individual Joshua Veins

Vein	Structure	Samples	Mean	SD	Var.	Min.	Median	Max.	cv
	vein_1	161	1.20	1.20	1.44	0.06	0.89	5.11	1.00
	vein_2	8	0.33	0.26	0.07	0.07	0.23	0.93	0.78
	vein_3	4	0.48	0.41	0.17	0.10	0.19	1.13	0.85
Joshua	vein_4	4	0.68	0.42	0.17	0.28	0.53	1.38	0.61
	vein_5	4	0.16	0.14	0.02	0.05	0.07	0.39	0.89
	vein_6	6	0.15	0.12	0.02	0.04	0.09	0.41	0.84
	vein_kestrel	4	0.44	0.34	0.11	0.12	0.25	1.00	0.77



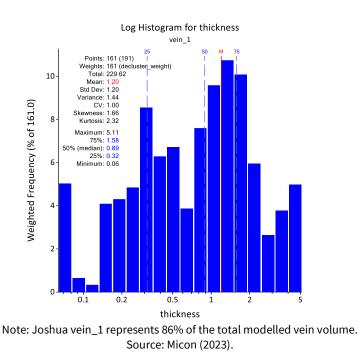


## Figure 14.19: Decluster Weighted Vein Thickness (m) Composite Histograms for Selected Kearney Veins



Note: Kearney vein\_3, vein\_9, and vein\_19 represent 73% of the total modelled vein volume. Source: Micon (2023).





## Figure 14.20: Decluster Weighted Vein Thickness (m) Composite Histograms for Selected Kearney Veins

# 14.5 ESTIMATION DOMAINS

Each modelled vein structure was estimated individually using hard boundaries for the Kearney and Joshua vein systems. In total there were seven estimation domains for Kearney, and 22 estimation domains for Joshua (Table 14.15).



#### Table 14.15: Estimation Domains for the Kearney and Joshua Vein Systems

Vein	Structure
	vein_1
	vein_3
	vein_5
	vein_9
	vein_10
	vein_11
	vein_12
Kearney	vein_13
	vein_14
	vein_15
	vein_18
	vein_19
	vein_20
	vein_21
	vein_22
	vein_23
	vein_24
	vein_26
	vein_27
	vein_28
	vein_29
	vein_30
	vein_1
	vein_2
	vein_3
Joshua	vein_4
	vein_5
	vein_6
	vein_kestrel

# **14.6 INTERPOLATION**

The method of interpolation used was 2D ID<sup>3</sup>. A 2D method of interpolation was preferred because of the narrow tabular shape of the veins. The veins have been sampled on intervals of varying length which makes compositing for three-dimensional (3D) estimation problematic. Furthermore, the full vein width is likely to be mined within a single stope.

Ordinary kriging (OK) was not used because of a lack of pairs of data to model reliable variograms for most of the veins. Additionally, there were insufficient data to model the short scale variability of the veins which led to unsatisfactory validation results during initial OK interpolation tests.

An accumulation variable was calculated for the gold grade, where:

Accumulation = Au grade \* vein thickness



The accumulation was interpolated into the block model using ID<sup>3</sup>, as was the vein thickness. The gold grades were calculated on a block-by-block basis as follows:

 $Au\ grade = rac{accumulation}{vein\ thickness}$ 

# 14.6.1 Rotation and Flattening

A coordinate transformation was applied to the composite data to allow the 2D ID<sup>3</sup> interpolation of gold grades. To allow for the transformation the composite data from the steeply dipping veins were rotated so that the veins were approximately parallel to the XY plane. After rotation the composite data was flattened by projecting it on to the XY plane which was a suitable 2D reference plane for estimation. The rotated X and Y coordinate of the composite data was left unchanged, and the Z coordinate was set to a constant Z value.

A rotation matrix was used to rotate the coordinate system as defined by Latifi and Boisvert (2022) where  $\alpha$  is the strike angle and  $\beta$  is the dip angle of the vein:

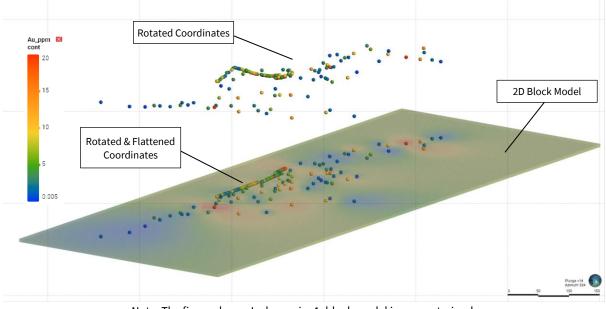
 $\begin{pmatrix} x'' \\ y'' \\ z'' \end{pmatrix} = \begin{pmatrix} \cos\alpha\cos\beta & -\cos\beta\sin\alpha & -\sin\beta \\ \sin\alpha & \cos\alpha & 0 \\ \sin\beta\cos\alpha & -\sin\beta\sin\alpha & \cos\beta \end{pmatrix} \begin{pmatrix} x \\ y \\ z \end{pmatrix}$ 

The  $\alpha$  and  $\beta$  angles used for the rotation are shown in Table 14.16.

Table 14.16: Angles Used for the Coordinate Rotation

Vein	α angle (°)	β angle (°)
Kearney	355	85
Joshua	355	90

Figure 14.21: Oblique View to the NW of the Rotated and Flattened Coordinates and 2D Block Model



Note: The figure shows Joshua vein\_1, block model is unconstrained. Source: Micon (2023).



# 14.6.2 Block Model Description

## 14.6.2.1 2D to 3D Transformation

Separate block models were created for the Joshua and Kearney veins. After interpolation the rotation and flattening were reversed and the 2D interpolated values were transferred to the 3D block models for Kearney and Joshua.

## 14.6.2.2 Kearney

The block model descriptions for the 2D and 3D block models are shown in Table 14.17 and Table 14.18. The 3D block mode is rotated to align with the general vein orientation with an azimuth, dip, and pitch of 265°, 5°, and 0° respectively. It has a parent block size of 5.0 m (X), 1.0 m (Y) and 5.0 m (Z) with a minimum sub-block size of 1.25 m (X), 0.0625 m (Y) and 1.25 m (Z). The volumes of the seam wireframe were compared with the block volume for the same domain to ensure that the block size and sub-blocking was suitable to model the ore body.

#### Table 14.17: Kearney 2D Block Model Description

Direction	Parent Block Size (m)	Sub-Block Number	Base Coordinate	Minimum Bounding Coordinate	Number of Parent Blocks
Х	5	-	23454.88	23454.88	97
Y	5	-	348175.87	348175.87	183
Z	5	-	270400.00	270395.00	1

#### Table 14.18: Kearney 3D Block Model Description

Direction	Parent Block Size (m)	Sub-Block Number	Base Coordinate	Minimum Bounding Coordinate	Number of Parent Blocks
Х	5	4	240250.00	239942.00	183
Y	1	16	370525.00	370505.03	230
Z	5	4	220.00	-283.20	97

Note: Rotated block model with an azimuth, dip, and pitch of 265°, 5°, and 0° respectively.

## 14.6.2.3 Joshua

The block model descriptions for the 2D and 3D block models are shown in Table 14.19 and Table 14.20. The 3D block mode is rotated to align with the general vein orientation with an azimuth, dip, and pitch of 355°, 0°, and 0° respectively. It has a parent block size of 1.0 m (X), 5.0 m (Y) and 5.0 m (Z) with a minimum sub-block size of 0.0625 m (X), 1.25 m (Y) and 1.25 m (Z). The volumes of the seam wireframe were compared with the block volume for the same domain to ensure that the block size and sub-blocking was suitable to model the ore body.

Direction	Parent Block Size (m)	Sub-Block Number	Base Coordinate	Minimum Bounding Coordinate	Number of Parent Blocks
Х	5	-	-245.00	-245.00	80
Y	5	-	347980.24	347980.24	213
Z	5	-	270900	270895.00	1

#### Table 14.19: Joshua 2D Block Model Description

#### Table 14.20: Joshua 3D Block Model Description

Direction	Parent Block Size (m)	Sub-Block Number	Base Coordinate	Minimum Bounding Coordinate	Number of Parent Blocks
Х	1	16	239580.00	239487.18	248
Y	5	4	370270.00	370270.00	213
Z	5	4	245.00	-155.00	80

Note: Rotated block model with an azimuth, dip, and pitch of 355°, 0°, and 0° respectively

## **14.6.3** Search Parameters

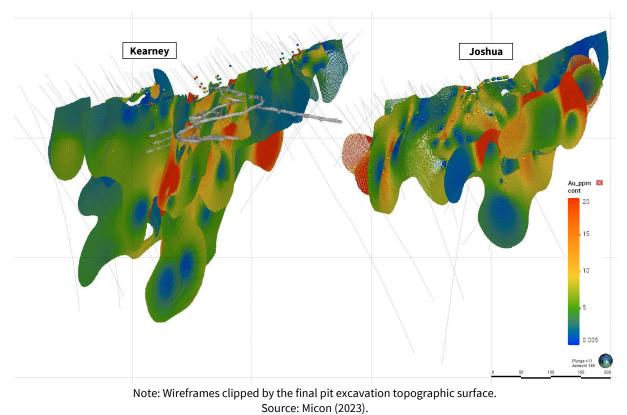
The same parameters were used for the accumulation and vein thickness variables for both the Kearney and Joshua veins. Each vein was interpolated independently using an isotropic search ellipse and global ID<sup>3</sup> with a hard boundary. Global ID<sup>3</sup> utilises all samples within the vein and ensures there are no artifacts in the interpolation, which is common when a limited search is used. The search ellipse was set large enough to ensure all samples were included. Declustering weights were used for veins with clustered data Table 14.10.

# 14.6.4 Interpolation Results

The interpolation results for gold grades in the major Kearney and Joshua veins are shown in Figure 14.22, Figure 14.23, and Figure 14.24.



## Figure 14.22: Oblique View to the SE of the Kearney and Joshua Vein Blocks and Composite Gold Grades (Au ppm)

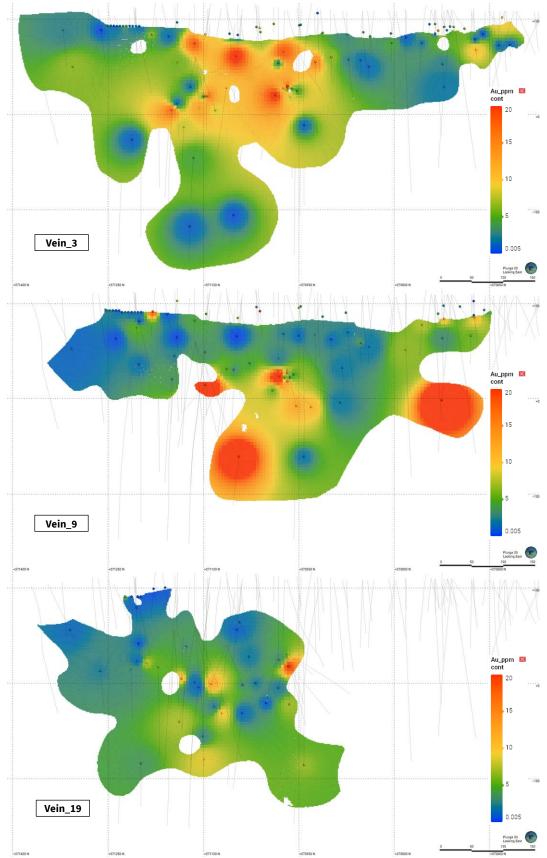


# 14.6.5 Density Assignment

An average density value was assigned to the veins and waste blocks based on the density measurements collected from vein and waste material (see Section 14.1.3). The assigned values are shown in Table 14.21.

Lithology	Density (t/m <sup>3</sup> )				
Vein	2.98				
Waste	2.70				





#### Figure 14.23: N-S Cross-Sections of Kearney Vein Blocks and Composite Gold Grades (Au ppm)

Note: Wireframes clipped by the final pit excavation topographic surface. Kearney vein\_3, vein\_9, and vein\_19 represent 73% of the total modelled vein volume. Source: Micon (2023).



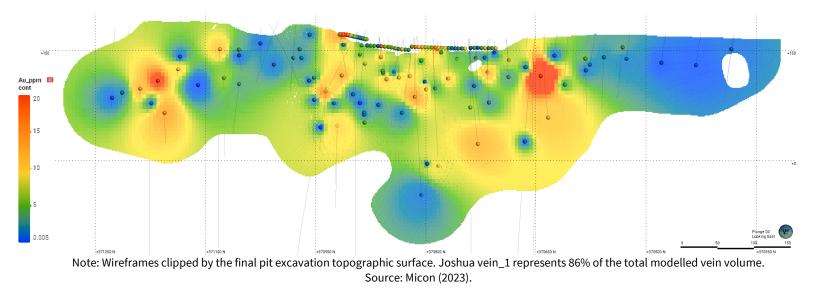


Figure 14.24: N-S Cross-Section of the Joshua Vein\_1 Blocks and Composite Gold Grades (Au ppm)



## 14.7 VALIDATION

In order to assess the quality of the block model estimate multiple methods of validation were performed, including visual inspection, statistical comparison, decluster plots, and swath plots. Visual inspection was performed on the 3D block models and composites and all other validation methods were performed on the 2D block models and composites.

All the model validations were satisfactory, and the estimates were considered appropriate for Mineral Resource reporting.

# 14.7.1 Visual Inspection

The vein block models were compared with the input composite data to check for misallocation of grade on a local scale. The interpolated block grades generally match well with the input composite data. Examples are shown in Figure 14.23 and Figure 14.24. All other veins were visually inspected by the author.

## 14.7.2 Statistical Comparison

Global statistics of the declustered composite and block model gold grades were compared to verify how well the block model represent the informing composites on a global scale. The statistics are shown in Table 14.22 and Table 14.25.

The average block grades generally compare well with the declustered composite grades. For the majority of veins, the average block grades are lower than the composite data which is expected due to the smoothing effect of the linear interpolant. In some instances, the average block grades are higher than the composite data and on visual inspection this is due to extrapolation of higher grade blocks at the margins of the vein model. This is more prevalent where there are few informing composite samples.



Table 14.22: Statistics Comparing Declustered Composite and Block Gold Grades (Au ppm) for	
Individual Kearney Veins	

Vein	Structure	Category	Samples	Mean	SD	Var.	Min.	Median	Max.
		ID <sup>3</sup>	464	2.48	0.63	0.40	0.21	2.51	3.96
	vein_1	Composite	8	2.13	1.43	2.04	0.15	2.49	3.99
		ID <sup>3</sup>	7,701	5.98	3.24	10.51	0.39	5.44	20.79
	vein_3	Composite	85	4.94	5.16	26.58	0.39	2.59	21.38
		ID <sup>3</sup>	107	16.07	5.15	26.53	1.66	18.26	19.99
	vein_5	Composite	2	10.78	9.22	84.97	1.56	1.56	20.00
		ID <sup>3</sup>	5,692	6.81	6.95	48.25	0.32	4.33	42.99
	vein_9	Composite	72	7.05	10.05	100.95	0.32	3.06	43.00
	voir 10	ID <sup>3</sup>	848	11.47	11.14	124.09	1.28	9.68	79.88
	vein_10	Composite	11	12.18	21.87	478.49	1.20	3.22	80.00
		ID <sup>3</sup>	555	7.85	3.20	10.24	4.95	6.76	20.16
	vein_11	Composite	5	10.09	5.59	31.22	4.95	6.74	20.16
		ID <sup>3</sup>	465	3.12	0.92	0.84	1.94	2.93	5.71
	vein_12	Composite	2	3.83	1.89	3.59	1.93	1.93	5.72
		ID <sup>3</sup>	151	0.97	0.14	0.02	0.79	0.98	1.39
	vein_13	Composite	3	1.07	0.25	0.06	0.79	0.91	1.39
		ID <sup>3</sup>	1,619	8.37	8.64	74.58	1.04	5.62	75.13
	vein_14	Composite	14	9.50	17.13	293.46	1.04	3.41	75.20
		ID <sup>3</sup>	599	11.55	6.71	45.09	1.04	10.21	30.03
	vein_15	Composite	6	10.20	11.14	124.12	1.03	2.84	30.09
		ID <sup>3</sup>	1,416	5.58	4.56	20.79	0.53	4.63	26.87
Kasasa	vein_18	Composite	19	6.50	7.06	49.89	0.52	4.55	26.88
Kearney		ID <sup>3</sup>	4,052	4.16	2.05	4.22	0.20	4.04	19.89
	vein_19	Composite	37	4.16	4.00	15.99	0.20	2.69	19.90
		ID <sup>3</sup>	481	3.52	0.86	0.75	2.24	3.27	7.42
	vein_20	Composite	4	4.31	1.99	3.97	2.24	2.97	7.43
		ID <sup>3</sup>	635	4.05	3.37	11.33	1.15	2.18	12.58
	vein_21	Composite	3	5.02	5.34	28.56	1.15	1.24	12.58
		ID <sup>3</sup>	781	18.56	17.30	299.42	1.20	9.11	59.16
	vein_22	Composite	10	19.01	22.36	499.90	1.20	3.48	59.22
		ID <sup>3</sup>	602	13.73	13.18	173.64	1.15	10.70	50.63
	vein_23	Composite	8	13.28	14.93	222.76	1.15	7.64	50.63
		ID <sup>3</sup>	797	10.61	6.67	44.49	1.65	8.49	21.89
	vein_24	Composite	15	10.94	7.51	56.47	0.99	11.62	21.89
		ID <sup>3</sup>	421	2.51	1.45	2.12	0.16	1.82	4.91
	vein_26	Composite	7	2.47	1.83	3.36	0.14	1.35	4.91
	vein_27	ID <sup>3</sup>	607	4.46	1.57	2.45	2.83	3.80	7.01
		Composite	2	4.92	2.09	4.36	2.83	2.83	7.01
		ID <sup>3</sup>	591	2.77	0.26	0.07	2.12	2.93	2.99
	vein_28	Composite	2	2.55	0.43	0.19	2.12	2.12	2.99
		ID <sup>3</sup>	380	2.93	1.64	2.70	0.91	2.98	13.41
	vein_29	Composite	6	4.49	4.29	18.39	0.91	3.32	13.74
		ID <sup>3</sup>	313	2.62	0.84	0.71	1.34	2.19	4.50
	vein_30	Composite	3	2.55	1.40	1.95	1.34	1.58	4.51



Vein	Structure	Category	Samples	Mean	SD	Var.	Min.	Median	Max.
	voin 1	ID <sup>3</sup>	7,768	6.10	4.20	17.68	0.28	5.94	46.81
	vein_1	Composite	161	5.52	7.06	49.88	0.21	2.47	46.93
	voin 2	ID <sup>3</sup>	802	7.06	7.77	60.38	0.48	3.42	29.74
	vein_2	Composite	8	5.41	9.29	86.24	0.48	1.34	29.74
	voin 2	ID <sup>3</sup>	415	12.76	8.91	79.36	3.63	9.71	49.13
	vein_3	Composite	4	17.28	18.54	343.59	3.62	7.07	49.20
Joshua	voin 1	ID <sup>3</sup>	368	16.24	6.99	48.83	3.23	19.02	33.43
JOSHUA	vein_4	Composite	4	17.37	11.49	132.03	3.18	10.71	33.50
	vein_5	ID <sup>3</sup>	346	10.93	13.30	176.81	0.80	4.91	40.79
		Composite	4	11.20	17.09	291.97	0.80	1.56	40.79
	voin C	ID <sup>3</sup>	1,093	10.20	10.13	102.59	1.19	7.03	42.99
	vein_6	Composite	6	13.12	15.28	233.33	1.19	3.24	43.00
	voin kostrol	ID <sup>3</sup>	987	13.60	12.57	157.95	3.01	8.74	48.96
	vein_kestrel	Composite	4	17.10	18.77	352.34	3.01	3.85	48.96

### Table 14.23: Statistics Comparing Declustered Composite and Block Gold Grades (Au ppm) for Individual Joshua Veins

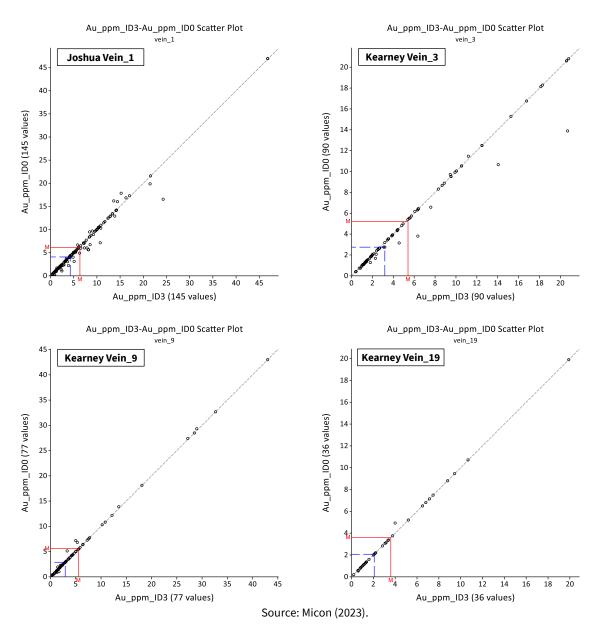
# 14.7.3 Decluster Plots

The decluster plots compare an inverse distance to the power of 0 (ID<sup>0</sup>) estimate of composites within a block on the y-axis versus the ID<sup>3</sup> block value on the x-axis. An ID<sup>0</sup> interpolant is equivalent to an arithmetic average. Decluster plots for the major veins are shown in Figure 14.25. For all other veins the decluster plots were reviewed by the author.

The decluster plots generally show good correlation between the ID<sup>0</sup> estimate and the ID<sup>3</sup> estimate. In general, most point plot on the 1:1 line.



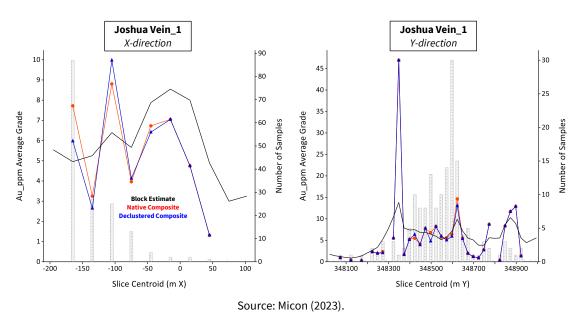
#### Figure 14.25: Decluster Plot of Gold Grades (Au ppm) for the Major Joshua and Kearney Veins



## 14.7.4 Swath Plots

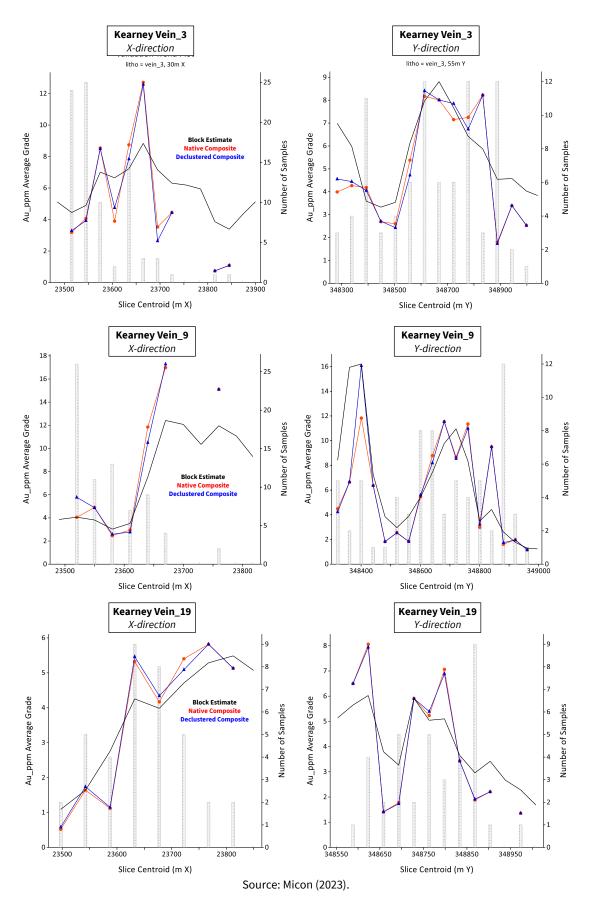
Swath plots of equal dimension slices were created in the X and Y directions to compare the declustered composite and block model gold grades. Swath plots for the major veins are shown in Figure 14.26 and Figure 14.27. The declustered composite data generally match well considering the number of informing data points, the smoothing effect of the linear interpolant, and extrapolation of block grades at the margin on the vein wireframes.





## Figure 14.26: Swath Plots of Gold Grades (Au ppm) for Joshua Vein\_1

Omagh Gold Project



#### Figure 14.27: Swath Plots of Gold Grades (Au ppm) for the Major Kearney Veins



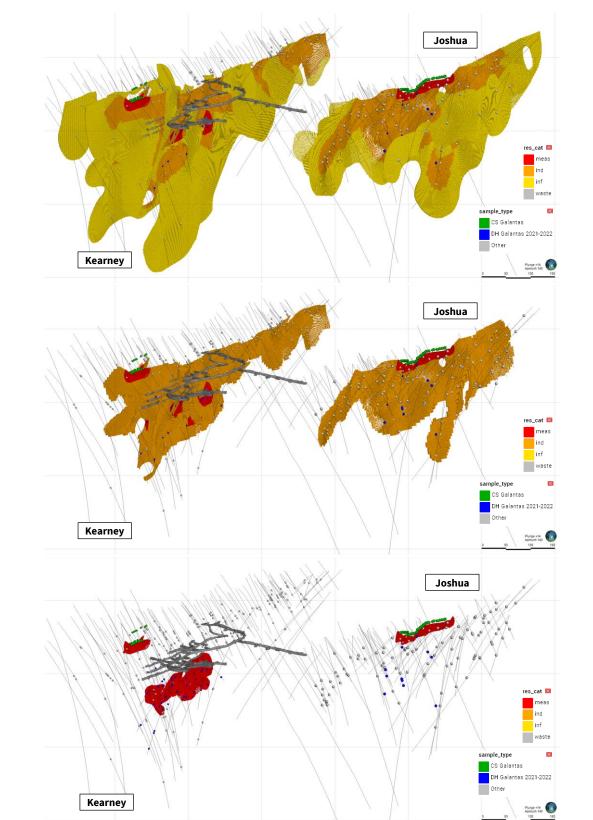
## 14.8 MINERAL RESOURCE CLASSIFICATION

The MRE was classified in accordance with National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects and as defined in the CIM Definition Standards, 2014. Mineral Resources were classified as Measured, Indicated, and Inferred. The Mineral Resource classification is based on the following:

- **Measured** within 20 m of closely spaced surface channel samples used in the Mineral Resource estimate. Or, volumes where the average distance to the nearest drill hole is generally <20 m and the majority of intercepts are from recent underground drill holes where there has been underground development;
- Indicated volumes where the average distance to the nearest drill hole is generally <40 m; and,
- **Inferred** all other interpolated blocks inside the vein wireframes.

The average distance to the nearest drill hole was calculated using the three closest samples. The classified MRE is shown in Figure 14.28 and Figure 14.29.



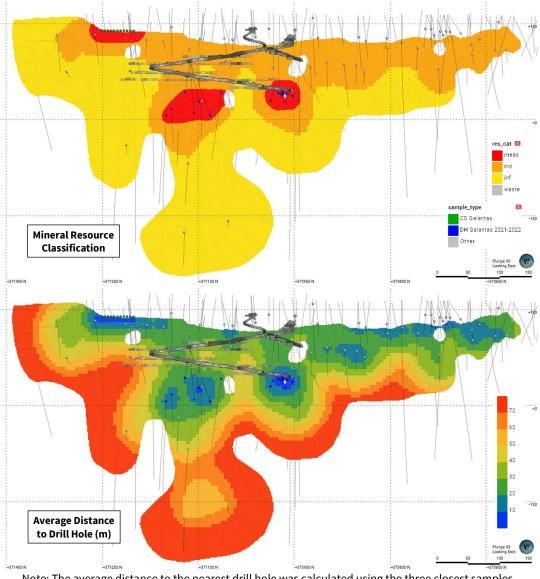


## Figure 14.28: Oblique View to the SE of the Kearney and Joshua Vein Blocks by Mineral Resource Classification and Sample Collars

Note: Block model not constrained by MSO shapes. Source: Micon (2023).



#### Figure 14.29: View to the E of Kearney Vein\_3 Blocks by Mineral Resource Classification and Average Distance to Drill Hole with Sample Collars



Note: The average distance to the nearest drill hole was calculated using the three closest samples. Block model not constrained by MSO shapes. Source: Micon (2023).

# 14.9 MINERAL RESOURCE STATEMENT

# 14.9.1 Reasonable Prospects for Eventual Economic Extraction

By definition, a Mineral Resource has reasonable prospects for eventual economic extraction or RPEEE (CIM Definition Standards, 2014). Only ore that meets RPEEE were considered in the Mineral Resource Statement, assuming inputs derived from metallurgical test work and similar operations.

The Omagh Gold Project has demonstrated RPEE on the following basis:

• More than 2,500 m of ore and waste development drives have been completed and in July 2022 longhole drilling commenced to open the first series of stopes at the Kearney vein system.;



- The ore produced from the development and limited stoping has been used to feed the onsite processing plant on a part time basis. The processing plant which was operational during the open pit phase of the mine, produces a saleable sulphide rich flotation concentrate; and,
- The operation is fully permitted including an up-to-date Environmental Impact Assessment (EIA).

In accordance with the recommendation of the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines 2016 a Mineable Shape Optimiser (MSO) was used to identify spatially continuous mineralisation within potentially mineable shapes using reasonable assumptions based on the current operation and long-term price trends. For the MSO a minimum stope width of 1.2 m optimised to a cut-off of 2.25 Au ppm was used. Economic parameters for cut-off grade determination are listed in Table 14.24.

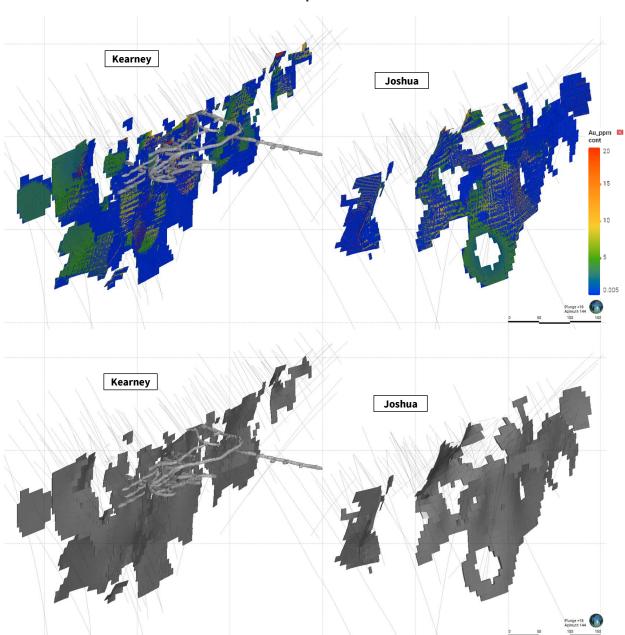
The gold price is slightly less than the 3 year monthly average value of US\$1,840 and is therefore considered appropriate (The World Bank, 2023). Process recovery, payability, and recovery were based on operational values from the Omagh Gold Project. Mining, processing, and general and administration costs were based on operational values from the Omagh Gold Project and other projects in Northern Ireland, Scotland, and Europe.

The MSO was applied to highlight the portion of the deposit that is economically mineable and was completed using Datamine Studio UG. The block models were prepared and imported into the software. Block estimates classified as Measured, Indicated, and Inferred were considered in the optimisation. The MSO shapes and constrained block model are shown in Figure 14.30.

Parameter	Unit	Value
Gold Price	US\$/oz	1,800.00
Process Recovery	%	92
Payability	%	90
Royalty	%	4
Mining Cost	US\$/t	120.00
Processing Cost	US\$/t	30.72
General & Administration Cost	US\$/t	13.00

#### Table 14.24: Input Parameters for Cut-Off Grade Determination





### Figure 14.30: Oblique View to the SE of the Constrained MSO Kearney and Joshua Vein Blocks and MSO Shapes

## 14.9.2 Resource Statement

The 2023 MRE was prepared by Micon and reviewed throughout the process and approved by Mrs. Liz de Klerk, M.Sc., Pr.Sci.Nat., FIMMM as the Qualified Person.

The Mineral Resources for the Joshua and Kearney veins have an effective date of 22<sup>nd</sup> June 2023. The Mineral Resources were constrained to the topographic surface that represents the limit of open mining from the available data (see Section 9.8.1)and depleted for the underground development and stope wireframes that were correct as of the 31<sup>st</sup> December, 2022. There has not been any significant ore development or stoping since this survey was made.



A cut-off of 2.25 Au ppm was used in the MSO optimisation process and diluted tonnages and grades are reported based on the optimised stopes. Waste blocks within individual optimised stopes were assigned to Measured, Indicated, or Inferred on a proportional basis.

The Mineral Resource statement is presented in Table 14.25 for the Kearney and Joshua vein systems.

Classification	Vein	Tonnage (t)	Gold Grade (Au ppm)	Contained Gold (oz)
Measured	Kearney	94,131	6.73	20,371
Medsureu	Joshua	18,381	6.59	3,897
Indicated	Kearney	402,924	6.50	84,258
	Joshua	247,217	7.39	58,730
	Kearney	497,055	6.54	104,629
Measured + Indicated	Joshua	265,598	7.33	62,627
	Total	762,653	6.82	167,256
	Kearney	402,479	5.33	69,020
Inferred	Joshua	283,925	6.21	56,648
	Total	686,404	5.69	125,668

# Table 14.25: Mineral Resources of the Kearney and Joshua Vein SystemsEffective 22nd June 2023

Notes:

- 1. The Mineral Resource Estimate has been prepared in accordance with National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects with an effective date of 22<sup>nd</sup> June 2023.
- 2. The database was closed on the 31<sup>st</sup> December 2022 and the underground development surveys are correct as of the 31<sup>st</sup> December 2022.
- 3. To demonstrate RPEEE underground Mineral Resources were constrained by MSO shapes of 1.2 m minimum stope width optimised to a cut-off of 2.25 Au ppm.
- 4. Economic parameters for cut-off grade determination: US\$1,800 oz gold price, 92% process recovery, 90% payability, 4% royalty, US\$120 t mining cost, US\$30.72 t processing cost, US\$13 t general and administration.
- 5. Diluted tonnages and grades are reported based on the optimised stopes.
- 6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the estimated Mineral Resources will be converted into Mineral Reserves.
- 7. Average density values: mineralised veins =  $2.98 \text{ t/m}^3$ , waste = $2.70 \text{ t/m}^3$ .
- 8. Grade interpolation by 2D inverse distance cubed (ID<sup>3</sup>) using a block size of 5 m (X) by 5 m (Y), with grade capping for outliers at 80 Au ppm.
- 9. Mineral Resource Classification:
- 10. Measured within 20 m of channel samples used in the Mineral Resource estimate or volumes where the average distance to the nearest drill hole is <20 m and the majority of intercepts are from recent underground drill holes.
- 11. Indicated volumes where the average distance to the nearest drill hole is <40 m.
- 12. Inferred all other interpolated blocks inside the vein wireframes.
- 13. Mineral Resources figures have been rounded to reflect that they are estimates.

# 14.9.3 Omagh Gold Project

The 2023 MRE for the Omagh Gold Project is set out in Table 14.26. It includes the results of the MRE for the Kearney and Joshua vein systems by Micon, effective 22<sup>nd</sup> June 2023 (Table 14.25). All other veins were not updated during the process and therefore remain unchanged from the 2014 MRE (Galantas Gold Corporation, 2014).



Classification	Vein	Tonnage (t)	Gold Grade (Au ppm)	Contained Gold (oz)
	Kearney	94,131	6.73	20,371
	Joshua	18,381	6.59	3,897
	Kerr	6,848	4.63	1,019
	Elkins	-	-	-
Measured	Gormleys	-	-	-
	Princes	-	-	-
	Sammy's	-	-	-
	Kearney North	-	-	-
	Total	119,360	6.59	25,287
	Kearney	402,924	6.50	84,258
	Joshua	247,217	7.39	58,730
	Kerr	12,061	4.34	1,683
	Elkins	68,500	4.24	9,000
Indicated	Gormleys	-	-	-
	Princes	-	-	-
	Sammy's	-	-	-
	Kearney North	-	-	-
	Total	730,702	6.56	153,671
	Kearney	497,055	6.55	104,629
	Joshua	265,598	7.33	62,627
	Kerr	18,909	4.45	2,702
	Elkins	68,500	4.24	9,000
Measured + Indicated	Gormleys	-	-	-
	Princes	-	-	-
	Sammy's	-	-	-
	<b>Kearney North</b>	-	-	-
	Total	850,062	6.56	178,958
	Kearney	402,479	5.33	69,020
	Joshua	283,925	6.21	56,648
	Kerr	23,398	3.20	2,405
	Elkins	20,000	5.84	3,800
Inferred	Gormleys	75,000	8.78	21,000
	Princes	10,000	38.11	13,000
	Sammy's	27,000	6.07	5,000
	Kearney North	18,000	3.47	2,000
	Total	859,802	6.24	172,873

#### Table 14.26: Mineral Resources of the Omagh Gold Project

Notes:

1. Updated MRE for the Kearney and Joshua veins were completed by Micon, effective date 22<sup>nd</sup>June 2023.

 All other veins were not updated by Micon in 2023, and therefore remain unchanged from the 2014 MRE by Galantas as stated in the technical report, Galantas Gold Corporation (2014), Resource Estimate, Preliminary Economic Assessment and Detailed Feasibility Study on the Omagh Gold Project, Country Tyrone, Northern Ireland, dated 26<sup>th</sup> July 2014 and filed on 4<sup>th</sup>September 2014.

3. The 2014 MRE has incorporated a different level of rounding to the current estimate, resulting in the reported contained ounces for the veins being approximated.



## 14.9.4 Factors that May Affect the Mineral Resource

As of the Report effective date, the Qualified Person responsible for the MRE, is not aware of any known current environmental, permitting, legal, title, taxation, socio-economic, marketing or political factors that might materially affect the MRE that are not discussed in this Report. However, these factors could impact the Mineral Resources and if any such risk materialise the affected areas must be re-evaluated to confirm changes in the Mineral Resources.



# **15.0 MINERAL RESERVE ESTIMATES**

No mineral reserves are declared as part of this technical report.



# **16.0 MINING METHODS**

Not applicable to this technical report.



# **17.0 RECOVERY METHODS**

Not applicable to this technical report.

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# **18.0 PROJECT INFRASTRUCTURE**

Not applicable to this technical report.



# **19.0 MARKET STUDIES AND CONTRACTS**

Not applicable to this technical report.

#### 20.0 ENVIRONMENTAL STUDIES, PERMITTING AND SOCIAL OR COMMUNITY IMPACT

# 20.1 ENVIRONMENTAL STUDIES

A detailed Environmental Statement was submitted with the underground mine planning application on the 6<sup>th</sup> July 2012. The planning application has been subsequently granted and the mine is operational. The planning permission expires on the 27<sup>th</sup> July 2030. This may be extended with a new planning application.

An Extended Phase 1 Habitat Survey was conducted in 2019 by LUC in collaboration with Eolas Ecology to ensure existing baseline data was up to date and accurate (LUC, 2019). The results indicated that the majority of habitats located within the Project were accurately reflected in the Environmental Statement submitted as part of the planning application.

A study of the potential for acid rock drainage in January 2013, reported in Galantas Gold Corporation (2014), concluded that mine waste rock is not acid forming and some waste rock may be potentially acid neutralising. The sampling was carried out by Pentland Macdonald Ltd of Belfast, an independent, environmental monitoring company. They collected a representative suite of 100 samples which were analysed at SGS Minerals Services Ltd laboratory in Cornwall. The study is consistent with the results of earlier work, which drew similar conclusions that there was no acid generation potential. In compliance with the 2016 planning consent, a number of rock samples have been taken at varying depths in the mine and found to be non-acid forming.

Reviews by the NIEA in 2017 and 2018 of the ground water discharge report that the groundwater has detectable concentrations of some metals, but no other indication of pollution. There was no evidence that activities at the Omagh Gold Project had a detrimental effect on the chemical quality of the Kerr Burn, the main water discharge site of the mine.

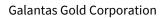
There are no known issues could materially impact the issuer's ability to extract the mineral resources.

#### 20.2 MANAGEMENT AND MONITORING

Waste and tailings facilities are regularly monitored and inspected according to the site Waste Management Plan. The tailings are discharged to paste cells sited within the former Kearney open pit and water from the cells settles and migrates through the cleaning ponds to the final polishing pond. Recycled water is supplied to the processing plant from the polishing pond. Surplus water enters the catchment drainage via a V-notch weir arrangement. The discharge volume and water quality are routinely measured to ensure the standards regulated by the statutory authority are met. Tailings will be harvested for paste fill of stopes to reduce the surface imprint.

Dust is effectively managed through a Dust Management Plan which is in place to monitor the dispersal of total particulates and heavy metals from the site. This dust is monitored monthly and dust suppression systems are in place. The site is also regularly monitored for noise impact and the Noise Management Plan is in place to ensure that the site complies with limits and conditions.

Water is managed via a Monitoring and Action Plan for Controlled Water which lists detailed mitigation measures and procedures. This includes a programme for the collection of water level data. Water is management throughout the working life of the mine. Post mine closure a detailed





Decommissioning Method Statement will be submitted for the site which will demonstrate that the watercourses onsite shall be maintained in perpetuity.

# 20.3 PERMITTING REQUIREMENTS

The permitting requirements are set out in Planning Application K/2012/0373/F issued by the DoE NI. The planning application was submitted on the 6<sup>th</sup> July 2012 and expires on the 27<sup>th</sup> July 2030, upon which an extension may be granted with a new planning application.

The permitting requirements include mention of the collection of baseline water level data, protection of the aquatic environment, retainment of trees and habitats, control of traffic levels on the local road network, implementation of a noise and dust management plans, and restoration requirements.

Environmental liabilities associated with the Omagh Gold Project include restoration requirements that exist under agreements made with regulating authorities. The CEC hold a restoration bond of £300,000 to ensure the requirements for site restoration are met.

# 20.4 SOCIAL AND COMMUNITY

In order to control traffic levels on the local roads, there are limitations on the number of heavy good vehicles exiting the site and the days on which they should exit, for example no heavy goods vehicles on the weekends or public holidays.

In the interest of the community, noise levels should not exceed 45dB from 07:00 am to 19:00 pm Monday to Friday and 07:00 am to 13:00 pm on Saturdays. Outside those hours, noise generating activities are limited and noise levels should not exceed 40dB. Blasting shall not exceed peak particle velocity at residential locations at specified times in order to control ground vibrations from blasting.

#### 20.5 MINE CLOSURE

Within six months of the completion of the operations, the mine entrance will be made secure and all ground infrastructure, vehicles and buildings will be removed from the site compound. Progressive restoration of the site will be carried out and completed within one year from the cessation of operations.

The restoration plan includes landscaped tailings cells, a filled in open pit and the polishing pond which will be retained for habitat. There will be treatment and rehabilitation of the waste rock storage, tailings cells, and water treatment system.

There will be a phased landscape restoration, which includes planting wet woodland/birch woodland, informal native hedges, and standard woodland with hedge species. There will also be a permanent grass pasture with wildflowers and a pedestrian track and car park. There will be a 5-year landscape and restoration aftercare period.



# 21.0 CAPITAL AND OPERATING COSTS

Not applicable to this technical report.



# 22.0 ECONOMIC ANALYSIS

Not applicable to this technical report.



# 23.0 ADJACENT PROPERTIES

Mineral exploration has identified a number of significant deposits in the Caledonian orogenic belt in addition to the Omagh Gold Project. These include the Curraghinalt gold deposit in Northern Ireland owned by Dalradian Gold, and Cononish Project in Scotland owned by Scotgold Resource Limited.

The along-strike extensions of the Caledonian belt into Scandinavia and North America are also known to host a number of major mineral deposits in a similar geological environment. These include the Silurian hosted, shear-zone gold deposit of Kolsvik (Bindal) in Norway, the Upper Proterozoic, sandstone and porphyry hosted, high-sulphidation, epithermal gold deposit of Hope Brook in Newfoundland and the Ridgeway gold deposit in the Upper Proterozoic Slate Belt of South Carolina.

# 23.1 CURRAGHINALT GOLD DEPOSIT

The Curraghinalt gold deposit is located approximately 23 km northeast of the Omagh Gold Project and is hosted in the Mullaghcarn Formation, the same Formation that hosts the Omagh Gold Project. The Mullaghcarn Formation is predominantly semi-pelites and psammites with lesser pelites and chloritic semi-pelites that are bounded to the south by the moderately northwest dipping Omagh Thrust Fault (SRK Consulting, 2018).

The Curraghinalt gold deposit is a high-grade orogenic gold deposit comprised of a series of westnorthwest trending, moderately to steeply dipping, stacked quartz-carbonate-sulphide veins and arrays of narrow and short extension veinlets. The MRE completed by SRK Consulting in 2018, modelled 21 gold-bearing quartz veins. Minor gold bearing quartz veins occur between the main modelled veins, but their continuity was difficult to demonstrate at the drill spacing.

The Curraghinalt vein system has been explored by core drilling, underground mapping, and face and channel sampling where partly exposed in underground workings (SRK Consulting, 2018). The veins range from a few centimetres to five metres wide and have been traced from surface to a depth of approximately 1,200 m. They remain open along strike and at depth. On average, the quartz veins dip between 50° and 75° to the north.

SRK Consulting reported a NI 43-101 updated Mineral Resource with an effective date of 10<sup>th</sup> May 2018 (Table 23.1). No other publicly available Mineral Resources are currently available based on Micon's research.



# Table 23.1: Mineral Resource Statement, Curraghinalt Gold Project, Northern Ireland, SRK Consulting(Canada) inc., 10th May 2018

Classification	Tonnage (kt)	Gold Grade (g/t Au)	Contained Gold (koz)
Measured	34	26.00	28
Indicated	6,309	14.95	3,033
Measured + Indicated	6,343	15.01	3,061
Inferred	7,722	12.24	3,038

Notes:

1. Mineral resources are not mineral reserves and have not demonstrated economic viability. All figures have been rounded to reflect the relative accuracy of the estimates. Underground mineral resources are reported at a cut-off grade of 5.0 g/t gold. The cut-off grades are based on a gold price of US\$1,200 per troy ounce and a gold recovery of 95 percent.

# 23.2 CONONISH PROJECT

The Cononish gold and silver project is located in the Grampian Highlands of Scotland, close to the town of Tyndrum. It is a narrow quartz vein system, hosted by a suite of metamorphosed Proterozoic sediments, part of the Dalradian Supergroup. Mineralisation is associated with a narrow, approximately 2.0 m wide, near vertical quartz-carbonate vein, which strikes northeast-southwest (Bara Consulting, 2015). Gold occurs as electrum and silver as telluride with minor native gold and silver. Both gold and silver are spatially associated with sulphides in quartz.

Excavation during the early 1990s of a 1.2 km adit along the strike of the vein, combined with 2 m spaced channel sampling, demonstrated that historical surface diamond drill holes were representative of the in-situ vein width and gold and silver grades. Subsequent underground diamond drill holes and sampling of raise development from the adit supported the geometry and grade of the vein.

CSA reported a Joint Ore Reserves Committee (JORC) updated Mineral Resource with an effective date of 12<sup>th</sup> January 2015, as reported in Bara Consulting (2015) (Table 23.2).

Classification	Tonnage (kt)	Gold Grade (g/t Au)	Gold Metal (koz)	Silver Grade (g/t Ag)	Silver Metal (koz)
Measured	60	15.0	29	71.5	139
Indicated (in-situ)	474	14.3	217	58.7	895
Indicated (stockpile)	7	7.9	2	39.0	9
Measured + Indicated	541	14.3	248	59.9	1,043
Inferred	75	7.4	18	21.9	53

# Table 23.2: Mineral Resource Statement, Cononish Gold and Silver Project, Scotland, CSA,12th January 2015

Notes:

1. Reported from 3D block model with grades estimated by Ordinary Kriging with 15 m x 15 m SMU Local Uniform Conditioning adjustment. Minimum vein width is 1.2 m. Totals may not appear to add up due to appropriate rounding.



# 24.0 OTHER RELEVANT DATA AND INFORMATION

There is no other relevant data and information for inclusion in this report.



# 25.0 INTERPRETATIONS AND CONCLUSIONS

The Omagh Gold Project vein swarm comprises 17 named vein structures in an area of about 6 km<sup>2</sup>. The most important of those vein structures are the Kearney and Joshua vein systems, which are the focus of the MRE described in this technical report.

Mineralisation consists of centimetre-to-metre-scale wide brecciated quartz veins with disseminated to massive auriferous sulphides, predominately pyrite and galena with some accessory arsenopyrite and chalcopyrite. Quartz veins pinch and swell from stringers to widths greater than a metre over distances of several metres. The veins are commonly fringed by varying widths of clay gouge. Wall rock alteration in the form of sericitisation and bleaching may extend several metres into quartz-feldspar schist host rocks, depending on the degree of fracturing. The vein systems of the Omagh Gold Project are structurally controlled complex zone of quartz-sulphide mineralisation and associated alteration, along which there has clearly been tectonic movement, resulting in an irregular brecciated lattice-work of mineralised veins.

The Kearney vein system is the largest mineralised vein system. It is comprised of 22 modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 8.0 m. The Kearney vein system has a strike length of approximately 850 m and a maximum vertical extent proved by drilling is 337 m, it remains open at depth down plunge. The three largest veins are continuous for between 400 m and 800 m along strike. The Joshua vein system is the second largest mineralised vein system. It is comprised of seven modelled sub-vertical N to NNW-trending veins that range in thickness from <0.1 m to 5.0 m. The Joshua vein system has a strike length of approximately 1 km and a maximum vertical extent proved by drilling is 200 m, it remains open at depth down plunge. The largest vein system is continuous for the entire strike length of the Joshua vein system. Smaller discontinuous veins may only extend for less than 80 m along strike at both the Kearney and Joshua vein systems.

The Kearney and Joshua veins show a classic pinch and swell geometry on a scale of 40 m to 60 m, with thicker "swell" zones of massive sulphide and quartz breccia are connected by thinner "pinch" veins and zones of black clay fault gouge. The pinch and swell structures have been described by Galantas as potential dilation zones.

The exploration, drilling and sampling, and analysis described in this report, alongside the operational experience and observations from open pit mining and underground development permit a meaningful investigation of the mineralisation at the Omagh Gold Project for the purpose of resource estimation under the 2019 CIM Guidelines and provide the basis for the conclusions and recommendations reached in this Report.

Since the previous MRE in 2014, two further campaigns of infill drilling have been carried out focusing on the Kearney and Joshua vein systems in 2015 to 2016 and 2021 to 2022. Economic composites were created at 1 ppm Au to highlight mineralised intersects to be included in the vein wireframes. Mineralised samples were manually assigned to a vein based on previous wireframe interpretations, geological mapping, and structural data. The inclusion of internal waste was kept to a minimum.

A separate vein system geological model was created for Kearney and Joshua. Underground mapping at Kearney gave additional spatial constraints on the vein hangingwall and footwall surfaces in the form of polylines. The vein systems were modelled with a minimum thickness of 0.1 m. Pinch outs were manually digitised using polylines and the vein wireframes were clipped to



ensure that they did not extend significantly beyond the drill data. The clipping boundary was limited to within 70 m of drill hole data for the largest most continuous veins and within 50 m for the smaller more discontinuous veins. These distances were based on the observed vein continuity from the exploration drilling. Where there was a pinch out at less than the clipping boundary distance the boundary as set to the approximate midpoint between the pinch out and the nearest vein intersection.

Attempts were made to model the dilation zones as part of the vein wireframes, but their spatial extents could not be confidently modelled in between drill holes. It is recognised that the location of the dilation zones can be predicted but there is not sufficient data at the required resolution to accurately model them.

The method of interpolation used was 2D ID<sup>3</sup>. A 2D method of interpolation was preferred because of the narrow vein geometry of the ore body. The veins have been sampled on intervals of varying length which makes compositing for 3D estimation problematic. Furthermore, the veins will be mined in a single stope with no mining selectivity across the vein width.

Length-weighted full width vein composites were created for each mineralised intercept, input assay data was capped at 80 Au ppm and the true vein width of composites was calculated from the modelled vein wireframe thickness.

An accumulation variable was calculated for the gold grade, where:

# Accumulation = Au grade \* vein thickness

The accumulation was interpolated into the block model using ID<sup>3</sup>, as was the true vein width. Global inverse distance utilising all samples with an isotropic search was used as were declustering weights for veins with clustered data. The grades were calculated on a block-by-block basis as follows:

 $Au\ grade = rac{accumulation}{vein\ thickness}$ 

The 2D block models for Kearney and Joshua utilized a block size of 5 m (X) by 5 m (Y). The full width vein composites were rotated so that the plane of the modelled vein was approximately parallel to the XY plane. The Z value was set to a constant value, projecting the full width vein composites on to the XY plane for 2D interpolation. After interpolation the projection and rotation were reversed and the 2D interpolated values were transferred to the 3D block models for Kearney and Joshua. The 3D block models utilised a parent block size of 5 m (X) by 1 m (Y) by 5 m (Z) with a minimum subblock size of 1.25 m (X) by 0.0625 m (Y) by 1.25 m (Z) and was rotated with an azimuth of 265°, dip of 5°, and pitch of 0°.

An average density value of 2.98 t/m<sup>3</sup> was assigned to mineralized veins and 2.70 t/m<sup>3</sup> to waste.

In order to assure the quality of the estimate, the block model was validated using statistical comparison, visual inspection, and swath plot analysis.

The Mineral Resource estimate was classified in accordance with NI 43-101 Standards of Disclosure for Mineral Projects and as defined in the CIM Definition Standards, 2014. Mineral Resources were



classified as Measured, Indicated, and Inferred. The Mineral Resource classification is based on the following:

- **Measured** within 20 m of closely spaced channel samples used in the Mineral Resource estimate or volumes where the average distance to the nearest drill hole is <20 m and the majority of intercepts are from recent underground drill holes where there has been underground development;
- **Indicated** volumes where the average distance to the nearest drill hole is <40 m; and,
- **Inferred** all other interpolated blocks inside the vein wireframes.

The average distance to the nearest drill hole was calculated using the three closest samples.

By definition, a Mineral Resource has reasonable prospects for eventual economic extraction or RPEEE (CIM, 2014). The Omagh Gold Project has demonstrated RPEE on the following basis:

- More than 2,500 m of ore and waste development drives have been completed and in July 2022 longhole drilling commenced to open the first series of stopes at the Kearney vein system;
- The ore produced from the development and limited stoping has been used to feed the onsite processing plant on a part time basis. The processing plant which was operational during the open pit phase of the mine, produces a saleable sulphide rich flotation concentrate; and,
- The operation is fully permitted including an up-to-date Environmental Impact Assessment.

In accordance with the recommendation of the CIM Estimation of Mineral Resources and Mineral Reserves Best Practice Guidelines 2016 a Mineable Shape Optimiser (MSO) was used to identify spatially continuous mineralization within potentially mineable shapes using reasonable assumptions based on the current operation and long-term price trends. For the MSO a minimum stope width of 1.2 m optimised to a cut-off of 2.25 g/t Au was used. Economic parameters for cut-off grade determination include: US\$1,800 oz Au price, 92% process recovery, 90% payability, 4% royalty, US\$120 t mining cost, US\$30.72 t processing cost, US\$13 t general and administration.

The Mineral Resource statement is presented in Table 25.1 for the Kearney and Joshua vein systems.



Classification	Vein	Tonnage (t)	Gold Grade (Au ppm)	Contained Gold (oz)
Measured	Kearney	94,131	6.73	20,371
Measureu	Joshua	18,381	6.59	3,897
Indicated	Kearney	402,924	6.50	84,258
	Joshua	247,217	7.39	58,730
	Kearney	497,055	6.54	104,629
Measured + Indicated	Joshua	265,598	7.33	62,627
	Total	762,653	6.82	167,256
	Kearney	402,479	5.33	69,020
Inferred	Joshua	283,925	6.21	56,648
	Total	686,404	5.69	125,668

# Table 25.1: Mineral Resources of the Kearney and Joshua Vein Systems Effective 22<sup>nd</sup> June 2023

Notes:

- 1. The Mineral Resource Estimate has been prepared in accordance with National Instrument 43-101 (NI 43-101) Standards of Disclosure for Mineral Projects with an effective date of 22<sup>nd</sup> June 2023.
- 2. The database was closed on the 31<sup>st</sup> December 2022 and the underground development surveys are correct as of the 31<sup>st</sup> December 2022.
- 3. To demonstrate RPEEE underground Mineral Resources were constrained by MSO shapes of 1.2 m minimum stope width optimised to a cut-off of 2.25 Au ppm.
- 4. Economic parameters for cut-off grade determination: US\$1,800 oz gold price, 92% process recovery, 90% payability, 4% royalty, US\$120 t mining cost, US\$30.72 t processing cost, US\$13 t general and administration.
- 5. Diluted tonnages and grades are reported based on the optimised stopes.
- 6. Mineral Resources are not Mineral Reserves and do not have demonstrated economic viability. There is no certainty that all or any part of the estimated Mineral Resources will be converted into Mineral Reserves.
- 7. Average density values: mineralised veins =  $2.98 \text{ t/m}^3$ , waste = $2.70 \text{ t/m}^3$ .
- 8. Grade interpolation by 2D inverse distance cubed (ID<sup>3</sup>) using a block size of 5 m (X) by 5 m (Y), with grade capping for outliers at 80 Au ppm.
- 9. Mineral Resource Classification:
- 10. Measured within 20 m of channel samples used in the Mineral Resource estimate or volumes where the average distance to the nearest drill hole is <20 m and the majority of intercepts are from recent underground drill holes.
- 11. Indicated volumes where the average distance to the nearest drill hole is <40 m.
- 12. Inferred all other interpolated blocks inside the vein wireframes.
- 13. Mineral Resources figures have been rounded to reflect that they are estimates.

# 25.1 RISKS AND UNCERTAINTIES

There are some factors that could affect the reliability of the results, but Micon is of the opinion that they will not have a material impact on the mineral resources. These include:

- **Down hole surveys** are missing in the digitised database for 17 Riofinex drill holes and were not collected for 5 drill holes from the 2006 to 2007 campaign. These drill holes are generally less than 100 m deep and a review of the hole paths shows that there is no appreciable deviation of hole paths at shallow depths. Furthermore, the mineralised intercepts from these drill holes are spatially consistent with proximal down hole surveyed drill holes. It is therefore unlikely that modelled vein position is compromised;
- **Core recovery data** is not available for the Riofinex drill holes. However, it was recorded in Riofinex North Limited (1989) that in general, core recoveries were in excess of 90% including most vein intersections, even where quartz and sulphide were hosted by soft

clays. In addition, the grades of Riofinex drill holes are consistent with proximal Galantas drill holes;

- **Riofinex drill data** was compared with the Galantas data as part of the verification. This was done because the QAQC samples for the Riofinex drill holes are not available and the documentation on the drilling is limited. Based on the results and observations by Micon, the inclusion of the data in the MRE was considered reasonable; and,
- **Pinch and swell geometry** is not fully captured in the vein wireframes where data is widely spaced. This could lead to potential uncertainty in the vein volumes and tonnages. This is reflected in the mineral resource classification, with areas of low data density classified as Inferred Mineral Resources.

# 25.2 UPSIDE POTENTIAL

There is potential to increase the Mineral Resources and the confidence in them. The Joshua and Kearney veins remain open at depth and down plunge. Drilling is ongoing at the Joshua vein system with the aim of testing predicted dilation zones. Further exploration of other Omagh Gold Project vein systems not modelled as part of this report, but reported in previous MREs, could also lead to increased mineral resources.

Micon recommends that both silver and lead are included in the next MRE update as this could have potential economic benefits for the Project.

# 26.0 **RECOMMENDATIONS**

# 26.1 LOGGING AND SAMPLING

Micon recommends that all recovered drill core is logged in detail before selecting samples for assay, and any drill core that is potentially mineralised should be sampled. Furthermore, waste rock marginal to mineralised intercepts should also be sampled to ensure the vein width is fully defined. The drill core should be compared against the geological vein model to ensure that any intercepts that crosscut the model are sampled and assayed even if they appear unmineralised. This will allow the geological model to be tested and validated.

Micon also recommends that multiple samples are take per underground channel sample according to geological or alteration contacts. This will allow a better understanding of the true vein width and grade. A length-weighted average grade can then be calculated for the entire width of the channel to inform mining. It is recommended that samples are sent to an accredited laboratory with regular QAQC samples (standards, blanks, and duplicates). If the analyses are of suitable quality, they could be used in future geological models and MREs.

#### 26.2 HISTORICAL RECORDS

Micon notes that there is not a digital archive of all historical reports and paper records, and it is recommended that all historical data (e.g. reports, maps, logs, assay certificates) are digitised so that a secure record of the data can be archived, and all data can be easily accessed by the QP in future. Subsequent to this, Micon recommends that all sample data is collated from digital sources into a central geological database for the Project. The digitisation and collation process may lead to the location of some missing records that are highlighted in this report.

# 26.3 QAQC

Micon is of the opinion that the QAQC procedures and available results are acceptable for use of the sample data in the MRE. In general, the procedures are at, or close to, industry standards. However, there is room for improvement and Micon recommends the following:

- All QAQC data from previous and future drill campaigns is located, digitised, and combined into a single QAQC database. This will ensure that no data is lost;
- No less than 5% of the total number of assays submitted should be submitted for any of the QAQC sample types;
- Analytical duplicates (pulp re-assays) should be submitted independently by Galantas as part of the QAQC procedure;
- Standard samples submitted should be Certified Reference Materials, with known standard deviations and performance gates. As far as possible, they should be matrix matched. The QAQC analysis has shown that there is some doubt about the homogeneity of the internally standards produced for Galantas. If internal standards are to be developed, then a round robin analysis using no less than six laboratories should be performed;
- For better representativity, a minimum of three standards should be used for gold assayed; one of these standards should approximate the Q1 assay value, one the median assay value, and another the Q3 assay value of the grade distribution;



- A certified blank material should be used for submitted blanks to ensure it contains no trace gold; and,
- Galantas should continue to constantly monitor and track the QAQC results throughout the duration of any future campaigns. Any identified issues or discrepancies should be discussed with the laboratory as and when they occur, keeping a record of any issues discussed and the steps taken to correct and/or avoid these issues in future.

# 26.4 MINERAL RESOURCE ESTIMATE

Micon recommends that both silver and lead are included in the next MRE update as this could have potential economic benefits for the Project.

# 26.5 BUDGET

A preliminary budget for the planned recommendations is outlined in Table 26.1. It is expected that the additional samples generated from the logging and sampling recommendations would increase the sample analysis costs by approximately 50% compared to the current expenditure. The logging of all recovered drill core is unlikely to generate any additional costs as it can be performed by Galantas' geologists.

The digitisation of historical records and the creation of a central geological database could be performed by Galantas' personnel and as such there would be no additional costs. The costs outlined in Table 26.1 are for an external consultant to perform the work.

The QAQC costs are primarily related to sourcing CRMS and certified blanks. Additional QAQC samples, such as analytical blanks or increasing the number of QAQC analyses should be budgeted at the current analytical sample cost and is dependent on the amount of samples collected. All other QAQC recommendations can be carried out by Galantas' personnel at no additional cost.

The MRE budget is for an external consultant to complete the work.

Recommendation	Cost (US\$)
Historical Records	25,000
QAQC – CRMs and Blanks	1,000
Mineral Resource Estimate	50,000

#### **Table 26.1: Budget Recommendations**



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# 28.0 CERTIFICATES

#### **CERTIFICATE OF QUALIFIED PERSON LIZ DE KLERK**

As the co-author and Qualified Person of this report entitled "NI 43-101 Technical Report for the Mineral Resources Estimate on the Omagh Gold Project, County Tyrone, Northern Ireland" with effective date 22<sup>nd</sup> June 2023, I, Elizabeth de Klerk, do hereby certify that:

- I am employed as a Senior Geologist by, and carried out this assignment for, Micon International Co Limited, Suite 10, Keswick Hall, Norwich, United Kingdom. tel. 0044(1603) 501 501, e-mail <u>ldeklerk@micon-international.co.uk</u>.
- 2. I hold the following academic qualifications:

B.Sc. GeologyUniversity of Leicester, United Kingdom, 2000;M.Sc. Exploration GeologyUniversity of Rhodes, Grahamstown, South Africa, 2002;

- 3. I am a Fellow of the Institute of Materials Minerals and Mining (FIMMM) (No. 682617) and a Fellow of the Geological Society of Africa and a registered Professional Natural Scientist (Pr.Sci. Nat. 400090/08)
- 4. I have worked as a geologist in the minerals industry for over 18 years in the mining industry in Africa, Europe, Russia and the United Kingdom.
- 5. I do, by reason of education, experience and professional registration, fulfil the requirements of a Qualified Person as defined by NI 43-101 and CIM Standards;
- 6. I have reviewed the geology, mineral resources, mineral reserves and site operations.
- 7. I visited the property that is the subject of this Technical Report from 15<sup>th</sup> to 16<sup>th</sup> November 2022;
- 8. I am responsible for the preparation or supervision of preparation of all sections of this Technical Report;
- 9. I am independent of the Galantas Gold Corporation, their directors, senior management, and other advisers, and I have had no previous involvement with the property.
- 10. I confirm that I have read all the relevant sections of the Canadian National Instrument 43-101 and the Technical Report and confirm that this Report has been prepared in compliance with the instrument; and,
- 11. As of the date of this certificate, to the best of my knowledge, information, and belief, the "NI 43-101 Technical Report for the Mineral Resources Estimate on the Omagh Gold Project, County Tyrone, Northern Ireland" with effective date 22<sup>nd</sup> June 2023 contains all scientific and technical information that is required to be disclosed in order to make the Technical Report not misleading.

Liz de Klerk {signed and sealed}

Liz de Klerk, M.Sc., Pr.Sci.Nat. FIMMM (707850) (CP) Managing Director, Micon International Co Limited Effective Date: 22<sup>nd</sup> June 2023 Signed Date: 30<sup>th</sup> August 2023



# CERTIFICATE OF SENIOR RESOURCE GEOLOGIST RYAN LANGDON

As the co-author of this report entitled "NI 43-101 Technical Report for the Mineral Resources Estimate on the Omagh Gold Project, County Tyrone, Northern Ireland" with effective date 22<sup>nd</sup> June 2023, I, Ryan Langdon, do hereby certify that:

- I am employed as a Senior Resource Geologist by, and carried out this assignment for, Micon International Co Limited, Suite 10, Keswick Hall, Norwich, United Kingdom. tel. 0044(1603) 501 501, e-mail <u>rlangdon@micon-international.co.uk</u>.
- 2. I hold the following academic qualifications:

MEarthSci: Earth Sciences	University of Oxford, United Kingdom, 2010;
PhD Geology,	Camborne School of Mines, University of Exeter, 2015;
Applied Geostatistics Citation	University of Alberta, 2023;

- 3. I am a Fellow of The Geological Society of London and a registered Chartered Geologist (No. 1022491);
- 4. I have worked as a geologist in the minerals industry for over 11 years in the mining industry in Africa, Asia, Europe, and the United Kingdom.
- 5. I do, by reason of education, experience and professional registration, fulfil the requirements of a Senior Resource Geologist;
- 6. I have reviewed the geology, mineral resources, mineral reserves and site operations.
- 7. I visited the property that is the subject of this Technical Report from 15<sup>th</sup> to 16<sup>th</sup> November 2022;
- 8. I am responsible for the supervision of preparation of all sections of this Technical Report;
- 9. I am independent of the Galantas Gold Corporation, their directors, senior management, and other advisers, and I have had no previous involvement with the property.
- 10. I confirm that I have read all the relevant sections of the Canadian National Instrument 43-101 and the Technical Report and confirm that this Report has been prepared in compliance with the instrument; and,
- 11. As of the date of this certificate, to the best of my knowledge, information, and belief, the "NI 43-101 Technical Report for the Mineral Resources Estimate on the Omagh Gold Project, County Tyrone, Northern Ireland" with effective date 22<sup>nd</sup> June 2023 contains all scientific and technical information that is required to be disclosed in order to make the Technical Report not misleading.

Ryan Langdon {signed and sealed}

Ryan Langdon, PhD, MCSM, MEarthSci, CGeol, FGS Senior Resource Geologist, Micon International Co Limited Effective Date: 22<sup>nd</sup> June 2023 Signed Date: 30<sup>th</sup> August 2023



# 29.0 GLOSSARY AND ABBREVIATIONS

#### 29.1.1 Mineral Resources and Mineral Reserves Definitions

Mineral resource and mineral reserve definitions, according to the "CIM Standards on Mineral Resources and Reserves – Definitions and Guidelines", are given as follows.

#### 29.1.1.1 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.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which quantity and grade or quality are estimated on the basis of limited geological evidence and sampling. Geological evidence is sufficient to imply but not verify geological and grade or quality continuity.

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

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 and is sufficient to assume geological and grade or quality continuity between points of observation.

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 Mineral Reserve.

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 and is sufficient to confirm geological and grade or quality continuity between points of observation.

A Measured Mineral Resource has a higher level of confidence than that applying to either and Indicated Mineral Resource or an Inferred Mineral Resource. It may be converted to a Proven Mineral Reserve or to a Probable Mineral Reserve.



Modifying Factors are considerations used to convert Mineral Resources to Mineral Reserves. These include, but are not restricted to, mining, processing, metallurgical, infrastructure, economic, marketing, legal, environmental, social and governmental factors.

# 29.1.1.2 Mineral Reserve

A 'Mineral 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.

The reference point at which Mineral Reserves are defined, usually the point where the ore is delivered to the processing plant, must be stated. It is important that, in all situations where the reference point is different, such as for a saleable product, a clarifying statement is included to ensure that the reader is fully informed as to what is being reported.

The public disclosure of a Mineral Reserve must be demonstrated by a Pre-Feasibility Study or Feasibility Study.

A 'Probable Mineral 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 Mineral Reserve is lower than that applying to a Proven Mineral Reserve.

A 'Proven Mineral Reserve' is the economically mineable part of a Measured Mineral Resource. A Proven Mineral Reserve implies a high degree of confidence in the Modifying Factors.

#### 29.2 GLOSSARY

**Albite (NaAlSi**<sub>3</sub>**O**<sub>8</sub>): Sodium end member of the plagioclase feldspar minerals.

**Amphibolite:** A crystalloblastic rock consisting mainly of amphibole and plagioclase.

**Amphibolite facies:** Zone of medium to high grade metamorphic rocks characterised by moderate to high temperatures and moderate to high pressure metamorphism, typically 500°C to 750°C. Mineral suite typically consists of amphiboles and plagioclase with biotite, garnet, epidote and other amphibole minerals. Basic igneous rocks are often metamorphosed into amphibolite rocks.

**Ankerite** (Ca(Fe,Mg,Mn)(CO<sub>3</sub>)<sub>2</sub>): Calcium, iron, magnesium and manganese carbonate, often forms mineral veins sometimes with gold and sulphide minerals.

**Arsenopyrite (FeAsS)**: Iron arsenic sulphide. Commonly gold bearing mineral formed in high temperature veins.

**Basic rock:** A quartz free igneous rock containing feldspars, which are generally more calcic than sodic, with pyroxene and olivine the common ferromagnesian minerals. The silica content ranges between 45% to 55%.

Biotite (K(Mg,Fe)<sub>3</sub>(AlSi<sub>3</sub>O<sub>10</sub>)(F,OH)<sub>2</sub>): Mafic rich mica mineral.



**Block Models:** Three-dimensional representations of mineralisation created using regular-sized blocks and sub-blocks to represent volumes of rock and mineral types and topographic features.

**Breccia-Textured:** Fragmental rock whose components is angular and therefore, as distinguished from conglomerates, is not water worn.

**Brecciated (breccia):** Fragmented rock consisting of angular particles that have not been worn by water (unlike conglomerates).

**Calcite (CaCO**<sub>3</sub>): Calcium carbonate.

**Cambrian Period (541 Ma to 485 Ma):** The Cambrian Period is the first of the six periods of the Palaeozoic Era. It is preceded by the Precambrian Era and succeeded by the Ordovician Period.

**Carboniferous Period (359 Ma to 299 Ma):** The Carboniferous Period is the fifth of the six periods of the Palaeozoic Era. It is preceded by the Devonian Period and succeeded by the Permian Period. Especially known for its large coal deposits.

**Chalcopyrite** (**CuFeS**<sub>2</sub>): Copper iron sulphide important non-magnetic copper ore mineral.

**Chlorite** (Mg,Fe)<sub>3</sub>(Si,Al)<sub>4</sub>O<sub>10</sub>(OH)<sub>2</sub>.(Mg,Fe)<sub>3</sub>(OH)<sub>6</sub>: Sheet silicate mineral primarily found in weakly metamorphosed rocks from the alteration of either clays in sedimentary rocks or pyroxenes, amphiboles and micas in igneous rocks.

**Clay:** is a finely-grained sedimentary rock or soil material (particles <4  $\mu$ m) that consists of one or more clay minerals.

**Core:** A cylindrical rock monolith obtained by circular disruption of a drill hole bottom during drilling. Core is extracted onto the surface and is used as the principal material for studying the geological structure of the drill hole section.

**Cut-Off**: An assay cut-off is the break-even economic value of the ore; the block cut-off is the economic value that optimises the net present value of the operating assets.

**Cut-off criteria:** A set of requirements for the quality and quantity of a mineral in subsoil, for mining and other conditions of the deposit development that define the commercial value of the deposit. The cut-off criteria are used to calculate mineral resources and ore reserves.

**Cut-off grade:** The minimum concentration of a valuable component in a marginal sample of the mineral. The cut-off grade is used to delineate parts of the deposit to be mined.

**Cyanide leaching**: A method of extracting exposed gold or silver from crushed or ground ore by dissolution with a weak cyanide (CN) solution. It may be conducted in slurry in tanks or in large heaps of ore out of doors.

**Deposit:** An informal term for an accumulation of mineralisation or other valuable Earth material of any origin.



**Devonian Period (385 Ma to 359 Ma):** The Devonian Period is the fourth of the six periods of the Palaeozoic Era. It is preceded by the Silurian Period and succeeded by the Carboniferous Period.

**Dilution:** Waste rock that is, by necessity, removed along with the ore in the mining process subsequently lowering the grade of the ore.

**Diopside** (CaMgSi<sub>2</sub>O<sub>6</sub>): This is a type of clinopyroxene mineral commonly occurring in many metamorphic and basic igneous rocks.

**Dip angle:** The angle between the direction of the described geological structure and horizontal plane.

**Disseminated mineralisation:** This is where ore minerals are dispersed throughout a host rock this can be either as mineral crystals or grains, or as veinlets forming a complex called a stockwork.

**Dolerite**: A medium crystalline dark coloured basic intrusive igneous rock. The chemical composition of dolerite is the same as basalt or gabbro.

**Dolomite**: (CaMg(CO<sub>3</sub>)<sub>2</sub>): Calcium magnesium carbonate mineral.

**Doré:** The final saleable product from a gold mine; obtained by smelting the products from previous processes.

**Dyke:** An intrusive geological body with transversal contacts. The length of a dyke many times exceeds its width, whereas the planes are nearly parallel. As such, a dyke is a fracture that has been filled with magmatic melt.

**Epithermal:** Hydrothermal mineral deposit formed within one kilometre of the Earth's surface, in the temperature range of 50° to 200°C.

**Exploration:** Prospecting, sampling, mapping, diamond drilling and other work involved in searching for ore.

Fault: A fracture in a rock along which there has been an observable amount of displacement.

**Fault gouge:** Fine-grained, claylike substance produced when rock is crushed during fault movement.

**Feldspars:** A group of silicate minerals with four distinct categories, potassium feldspars (KAlSi<sub>3</sub>O<sub>4</sub>); sodium feldspars (NaAlSi<sub>3</sub>O<sub>8</sub>); calcium feldspars (CaAl<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>); and barium feldspars (BaAl<sub>2</sub>Si<sub>2</sub>O<sub>8</sub>).

**Fineness:** The proportion of pure gold or silver in jewellery or bullion expressed in parts per thousand.

**Flotation:** A mineral separation process whereby a froth created in water by a variety of reagents floats some finely crushed minerals whereas others sink.

**Foliation**: A parallel orientation of platy minerals or mineral banding producing a planar fabric within a rock.



Footwall: The rock on the underside of a vein or ore structure.

**Galena (PbS):** Lead sulphide mineral and the primary ore source for lead. Commonly occurs in hydrothermal veins and is often associated with fluorite, quartz, calcite, sphalerite and pyrite.

**Garnet (Mg,Ca,Fe)**<sub>3</sub>**Al**<sub>2</sub> (SiO<sub>4</sub>)<sub>3</sub>: Group of cubic silicate minerals with general formula  $X_3Z_2(SiO_4)_3$  where X can be Ca, Fe<sup>2+</sup>, Mg etc and Z can be Al, Cr, Mn<sup>3+</sup>. These minerals can be found in a variety of rocks from igneous to metamorphic and also sedimentary rocks.

**Geochemical Exploration:** Exploration or prospecting methods depending on chemical analysis of the rocks or soil, or of soil gas and plants.

**Graphite (C):** A soft black form of native crystalline form of carbon.

**Greenschist facies:** Zone of low-grade metamorphic rocks characterised by low temperature and moderate pressure metamorphism, typically 400°C to 500°C, at depths between 8 km to 50 km. Mineral suite typically consists of actinolite, epidote, chlorite, albite and quartz.

Hangingwall: The rock on the upper side of a vein or ore deposit.

**Hard rock deposit:** Primary accumulation of a mineral substance in subsoil that has not been altered or destroyed near the ground surface. Hard rock deposits are opposed to placer deposits formed by the result of disintegration of hard rock deposits and mineralised rock.

**Host rock:** Wall rock that confines the mineral occurrence zone.

**Hydrothermal:** Pertaining to or related to hot water deposition of minerals often associated with hot solutions produced by cooling magma.

**Igneous rock:** A rock formed by the solidification of magma.

**Inlier:** A limited area of older rocks completely surrounded by younger rocks.

**Intrusion:** A body of igneous rock that invades older rock. The invading rock may be a plastic solid or magma that pushes its way into the older rock.

**Jaw crusher:** A device in which rock is broken by a reciprocating compressive action between two steel plates.

**K-Feldspar (KAlSi<sub>3</sub>O<sub>8</sub>):** Potassium feldspar typically either microcline or orthoclase.

**Lineament:** A large-scale linear feature which expresses itself in terms of topography, which is in itself an expression of the underlying structural features. Such features may include: faulting or jointing, fronts of mountain ranges, ridges, hill ranges, straight coastlines either modern and ancient. Structural features associated with lineaments include fault zones, fracture zones, linear igneous intrusions, lines of volcanoes or volcanic fissure eruptions.

**Low-Grade Ore:** Ore which is relatively poor in the metal for which it is mined.



Magmatic: Consisting of, relating to or of magma origin.

**Magmatism:** Emplacement of magma within and/or on the surface of crustal rocks by igneous activity. Volcanism is the surface expression of magmatism.

**Mesothermal:** A hydrothermal ore deposit formed at intermediate temperatures (200°C to 300°C) and depths.

**Metamorphic rock:** A rock that has, in a solid state, undergone changes in mineralogy, texture, or chemical composition as a result of heat or pressure.

Metavolcanic: Metamorphosed volcanic rock.

**Mine:** A mineral mining enterprise. The term is often used to refer to an underground mine.

**Mineral Deposit:** A body of mineralisation that represents a concentration of valuable metals. The limits can be defined by geological contacts or assay cut-off grade criteria.

**Mineral Reserve:** The CIM defines a mineral reserve as "the economically mineable part of a Measured or Indicated mineral resource demonstrated by at least a Preliminary feasibility study. This study must include adequate information on mining, processing, metallurgical, economic and other relevant factors that demonstrate, at the time of reporting, that economic extraction can be justified. A Mineral Reserve includes diluting materials and allowances for losses that may occur when the material is mined".

**Mineral Resource:** The CIM defines a mineral resource as "a concentration or occurrence of material of intrinsic economic interest in or on the earth's crust in such form and quantity that there are reasonable prospects for eventual economic extraction". Subdivided into Measured, Indicated and Inferred categories depending on how well they are defined.

**Mining method:** A combination of technical solutions that define the geometry, technology and sequence of mining.

**Nappe:** A fold in which the axial plane is horizontal or sub-horizontal.

**NI 43-101:** Standards of Disclosure for Mineral Projects as dictated by the Canadian Institute of Mining (CIM).

**Nugget Effect:** The product of the clustering of metals in a given deposit. Where metals are very tightly clustered (nuggety), then finding the nugget will give an overestimation of the amount of metal, inversely missing it will underestimate the amount of metal.

**Open pit:** A mine that is entirely on surface; also referred to as open-cut or open-cast mine.

**Ophiolite:** An ophiolite is a section of oceanic crust and mantle that has been tectonically uncovered on land through the process of obduction, which occurs most frequently when an ocean basin closes. Oceanic rocks with varying degrees of alteration, such as marine sediments, oceanic crust, and a portion of the mantle, make up the ophiolite sequence.



**Ore:** Natural mineral formation that contains valuable components in such compounds and concentrations that make the mining technically and economically feasible.

**Ore body:** A natural accumulation of ore confined to a certain structural and geological element or a combination of such elements. A kimberlite pipe is a pipe-shaped ore body elongated in a nearly vertical direction.

**Ore field**: A collection of mines that exploit a common mineral deposit or cluster of closely related mineral deposits.

**Ordovician Period (485 Ma to 444 Ma):** The Ordovician Period is the second period of the Palaeozoic Era. It is preceded by the Cambrian Period and succeeded by the Silurian Period.

**Orogeny / Orogenic**: An orogeny (or orogenic is a period of mountain building leading to the formation of intensely deformed belts which constitute mountain ranges. An orogeny extends in time for some tens of millions of years.

**Overburden:** Waste rock overlying and hosting mineral deposits that is subject to excavation in the course of open-pit mining. The process of overburden removal to access and mine the mineral is called stripping.

**Palaeogene (66 Ma to 23 Ma):** Name given to the Palaeocene, Eocene and Oligocene Epochs of the Tertiary Period.

**Palaeozoic Era (541 Ma to 252 Ma):** One of the eras of geologic time occurring between the Late Precambrian and Mesozoic eras, comprises the Cambrian, Ordovician, Silurian, Devonian Carboniferous, Permian periods.

**Pelite:** A metamorphosed argillaceous rock.

**Pinch and swell structure:** A repetitive thinning and thickening of a body of rock usually caused by structural deformation, often related to fault movement.

**Plagioclase (NaAlSi**<sub>3</sub>**O**<sub>8</sub> – **CaAl**<sub>2</sub>**Si**<sub>2</sub>**O**<sub>8</sub>): Aluminium silicate, this type of feldspar mineral forms a solid solution series between end members.

**Plunge:** A fold is said to plunge if the axis is not horizontal, the amount of plunge being the angle between the axis and the horizontal line lying in a common vertical plane.

**Porphyritic (with porphyritic structure):** Rock that contains relatively large crystals (phenocrysts) cemented by a groundmass of smaller crystals, glassy or non-holocrystalline material.

**Porphyry:** An igneous rock with large crystals in a fine crystalline matrix.

**Processing:** A combination of processes for primary treatment of solid minerals in order to extract the products amenable to further technically and economically feasible chemical or metallurgical treatment or use.



**Psammite**: A term often used to describe metamorphosed sandstone containing mainly quartz, feldspar and mica.

**Proterozoic Eon (2,500 Ma to 541 Ma):** Proterozoic Eon is the last of the three major intervals of Precambrian time. It is preceded by the Archean Eon, and succeeded by the Phanerozoic Eon.

**Pyrite** (**FeS**<sub>2</sub>): Iron sulphide. Sulphide mineral which can contain refractory gold.

**Pyrrhotite** (Fe(1-x)S): Iron sulphide mineral with a variable iron content where x = 0 to 0.2.

**Quartz (SiO**<sub>2</sub>): One of the most common minerals on the Earth and is the important constituent of many rocks. Quartz is composed of silica and exists in several different forms, habits and colours. Quartz is commonly found in igneous, metamorphic and sedimentary rocks and frequently found in veins with metal ores.

**Quaternary Period (2.6 Ma to Present):** Third and last of the three periods of the Cenozoic Era the period we are currently living in.

**Sampling:** The process of studying the qualitative and quantitative composition and properties of natural formations comprising a deposit.

Sericite  $((KAl_2(AlSi_3O_{10})(F,OH)_2)$ : A finely crystalline variety of mica very similar to muscovite. This mineral is a common hydrothermal alteration product of feldspar minerals.

**Sericitisation:** Mineral alteration caused by hydrothermal fluids entering permeable country rock. Commonly altering the orthoclase and plagioclase feldspars within the rock to sericite.

**Run of Mine (RoM):** A term used loosely to describe ore of average grade as produced from the mine.

**Sandstone:** A group of detrital sedimentary rocks in which the particles range in size from to 0.0625 mm to 2 mm.

**Schist**: Medium grade metamorphic rock characterised by a parallel arrangement of the bulk constituent minerals.

**Sedimentary rock:** Rock formed by sedimentation of substances in water, less often from air and due to glacial actions on the land surface and within sea and ocean basins. Sedimentation can be mechanical (under the influence of gravity or environment dynamics changes), chemical (from water solutions upon their reaching saturation concentrations and as a result of exchange reactions), or biogenic (under the influence of biological activity).

**Shear zone:** A zone of ductile deformation between two undeformed blocks that have suffered relative shear displacement; the ductile analogue of a fault.

**Silurian Period (444 Ma to 416 Ma):** The Silurian Period is the third of the six periods of the Palaeozoic Era. It is preceded by the Ordovician Period and succeeded by the Devonian Period.

**Stockpile**: Broken ore heaped on surface, pending treatment or shipment.



**Stoping**: Underground mining method involving the opening of cavities for ore extraction.

**Strike:** The direction in which a horizontal line can be drawn on a plane. The strike is important in determining the direction in which to measure the true dip.

**Stripping ratio:** The relation of overburden volume to a mineral volume. A stripping ratio largely defines the economic feasibility of open-pit mining.

**Suite:** An aggregate of conformable rock beds with similar general properties that differentiate them from overlying or underlying rocks.

**Sulphide Ore:** Ore which is in its primary mineralised state and has not undergone the process of natural oxidation.

**Tailings:** Liquid wastes of mineral processing with valuable component grade lower than that of the initial material.

**Terrane:** A region of crust with well-defined margins, which differs significantly in tectonic evolution from neighbouring regions.

**Till**: This is an unsorted glacial sedimentary deposit, usually showing no stratification. It is composed of a heterogeneous mixture of poorly graded particles, often from the size of boulders to clay. Also known as glacial till or boulder clay.

**Trenching:** In geological exploration, a narrow, shallow ditch cut across a mineral showing or deposits to obtain samples or to observe character.

**Vein:** Tabular geological body formed as a result of mineral substance filling a fracture or due to metasomatic replacement of rock with mineral(s) along a fracture. Unlike dykes formed primarily by magmatic rock, a vein is composed of vein and ore minerals (quartz, carbonated, sulphides etc.).

**Volcanic:** Consists of all extrusive rocks, and these are rocks which are formed by the cooling of magma or molten rock on the Earth's surface.

**Wall rock:** Rock that forms the walls of an area where geological activity is taking place. Examples include rocks along the neck of volcanoes, edges of emplaced plutons, along fault planes, surrounding deposits, or where veins and embankments are emplaced.

#### **29.3 ABBREVIATIONS**

- ° degree (angle)
- °C degree Centigrade
- 2D Two dimensional
- 3D Three dimensional
- AAS Atomic Absorption Spectroscopy
- Ag silver
- ALS ALS Limited
- Apy arsenopyrite
- As arsenic



Au	gold
Bi	bismuth
BMA	bulk modal analysis
Са	calcium
Cd	cadmium
CEC	Crown Estate Commissioners
CIL	carbon-in-leach
CIM	Canadian Institute of Mining, Metallurgy and Petroleum
CRIRSCO	Committee for Mineral Reserves International Reporting Standards
CRM	Certified Reference Material
CSA	Canadian Securities Administrators
Cu	copper
CV	Coefficient of variation
DEM	Digital Elevation Model
DfE	Department for the Economy
DoE NI	Department of the Environment for Northern Ireland
EDA	Exploratory Data Analysis
EHS	environment, health and safety
EIA	Environmental Impact Assessment
ESIA	Environment and Social Impact Assessment
EGR	European Gold Resources
EUR	Euros
Fe	iron
g	Gram(s)
g/t	gramme/tonne
G&A	general and administration
Galantas	Galantas Gold Corporation
Gn	Galena
h	Hour(s)
ha	Hectare
Hg ICP-AES	mercury
ICP-AES	Inductively Coupled Plasma Atomic Emission Spectroscopy Inductively Coupled Plasma Mass Spectroscopy
	Inverse distance to the power of 0
ID <sup>3</sup>	Inverse distance to the power of 3
INAB	Irish National Accreditation Board
IP	Induced Polarisation
JORC	Joint Ore Reserves Committee
kg	kilogramme
km	kilometre
km <sup>2</sup>	square kilometre
k m <sup>3</sup>	thousand cubic metres
koz	thousand ounces
kt	thousand tonnes
kV	kilovolt
kW	Kilowatt(s)
LoM	Life of Mine
μm	micron
mm	millimetre



m	metre
m <sup>2</sup>	square metre
m <sup>3</sup>	cubic metre
Ма	Millions of years ago
Mg	magnesium
MIBC	methyl isobutyl carbinol
Micon	Micon International Co Limited
Mn	manganese
Мо	molybdenum
MRE	Mineral Resource estimate
MSO	Mineable Shape Optimiser
NI	Northern Ireland
Ni	nickel
NIEA	Northern Ireland Environment Agency
NSR	Net Smelter Return
ОК	Ordinary Kriging
OMAC	OMAC Laboratories Limited
OML	Omagh Minerals Limited
Р	phosphorus
PAX	potassium amyl xanthate
Pb	Lead
ppb	Parts per billion
ppm	Parts per million
PERC	Pan European Reserves and Resources Reporting Committee
PLS	particle liberation study
PSD	particle size distribution
Ру	pyrite
QAQC	Quality Assurance Quality Control
Report	technical report
Riofinex	Riofinex North Limited
RPEEE	Reasonable prospects for eventual economic extraction
RQD	rock quality designation
QP	Qualified Person
S	sulphur
SACNASP	South African Council for Natural Scientific Professionals
Sb	antimony
SD	Standard deviation
SEM	scanning electron microscope
Supervisor	Snowden Supervisor
SOP	standard operating procedure
t t/a	tonne
t/a	tonnes/year
t/d +/b	tonnes/day
t/h Tl	tonnes/hour thalium
TPS	
TSX	target phase search Toronto Stock Exchange
US\$	United States dollar
033 V	Volt(s)
•	



VATValue Added TaxVTEMVersatile Time Domain ElectromagneticWt%Weight percentyYear(s)Znzinc



#### 30.0 APPENDIX

#### 30.1 DRILL HOLE AND SURFACE CHANNEL SAMPLE DATA

#### Table 30.1: Drill Hole and Surface Channel Sample Collars for the Kearney and Joshua Vein Systems Used in the MRE

								Assayed	Logged	Minera	lised Intersects
Drill Campaign	Hole ID	Easting	Northing	Elevation	vation Depth Dip A	Azimuth	Au (%)	(%)	Count	Thickness (m)	
Kearney DH Riofinex 1987-1990	OMBHL039	240148.81	371344.95	156.49	128.50	-45	241	31%	100%	7	6.29
Kearney DH Riofinex 1987-1990	OMBHL040	240212.54	371241.01	155.33	180.00	-45	241	4%	100%	1	1.73
Kearney DH Riofinex 1987-1990	OMBHL042	240187.81	371062.45	164.00	152.40	-45	258.5	10%	100%	3	0.45
Kearney DH Riofinex 1987-1990	OMBHL043	240189.99	370579.91	161.09	80.75	-45	264	8%	100%	0	0.00
Kearney DH Riofinex 1987-1990	OMBHL044	240178.19	370968.68	163.00	180.55	-45	256	5%	100%	1	0.62
Kearney DH Riofinex 1987-1990	OMBHL045	240129.39	370573.00	160.91	36.60	-45	84	26%	100%	1	3.49
Kearney DH Riofinex 1987-1990	OMBHL046	240156.28	370676.06	163.14	27.75	-45	264	31%	100%	1	0.97
Kearney DH Riofinex 1987-1990	OMBHL049	240158.92	370809.38	163.78	71.35	-45	248	3%	100%	1	0.89
Kearney DH Riofinex 1987-1990	OMBHL050	240171.79	370781.93	164.22	63.75	-45	258	5%	100%	1	1.08
Kearney DH Riofinex 1987-1990	OMBHL052	240149.76	370881.72	163.00	63.90	-45	258	31%	100%	3	3.82
Kearney DH Riofinex 1987-1990	OMBHL054	240135.66	371018.82	172.00	53.45	-45	258	14%	100%	2	3.63
Kearney DH Riofinex 1987-1990	OMBHL055	240168.20	370735.38	164.00	63.10	-45	258	15%	100%	3	1.72
Kearney DH Riofinex 1987-1990	OMBHL056	240125.38	370626.18	162.20	40.25	-45	61	22%	100%	1	3.28
Kearney DH Riofinex 1987-1990	OMBHL062	240128.61	371164.80	172.57	88.50	-45	258.5	20%	100%	4	4.51
Kearney DH Riofinex 1987-1990	OMBHL063	240109.74	371265.25	165.29	113.45	-45	262.5	6%	100%	2	1.79
Kearney DH Riofinex 1987-1990	OMBHL064	240111.18	370539.71	161.29	62.30	-45	83.5	6%	100%	0	0.00
Kearney DH Riofinex 1987-1990	OMBHL065	240197.47	371370.45	152.33	250.75	-45	244	3%	100%	2	1.71
Kearney DH Riofinex 1987-1990	OMBHL066A	240268.60	370735.95	162.76	247.40	-45	269	2%	100%	0	0.00
Kearney DH Riofinex 1987-1990	OMBHL067	240231.57	371042.29	152.67	172.35	-45	261	8%	100%	5	2.37
Kearney DH Riofinex 1987-1990	OMBHL068	240238.87	370895.08	158.69	171.50	-45	261	1%	100%	1	0.68
Kearney DH Riofinex 1987-1990	OMBHL069	240086.84	370633.19	163.41	97.40	-45	82.5	3%	100%	1	0.19
Kearney DH Riofinex 1987-1990	OMBHL071	240157.51	371249.10	162.00	102.55	-45	258.5	4%	100%	2	0.97
Kearney DH Riofinex 1987-1990	OMBHL072	240228.69	370797.08	160.34	120.25	-45	259	4%	100%	1	2.47
Kearney DH Riofinex 1987-1990	OMBHL077	240233.70	370643.85	162.00	189.75	-45	268	5%	100%	0	0.00
Kearney DH Riofinex 1987-1990	OMBHL125	240362.11	371016.00	150.82	149.40	-45	263	0%	100%	0	0.00
Kearney DH Riofinex 1987-1990	OMBHL137	240358.19	370917.57	150.40	354.96	-43	283	7%	100%	0	0.00
Kearney DH Riofinex 1987-1990	OMBHL141	240139.03	371210.15	169.50	183.80	-45	261	2%	100%	2	0.88
Kearney DH Riofinex 1987-1990	OMBHL142	240193.41	370624.42	162.46	97.70	-45	265	33%	99%	1	0.11
Kearney DH Riofinex 1987-1990	OMBHL143	240186.98	370678.79	163.68	79.10	-45	264	10%	100%	2	1.55



								Assayed	Logged	Mineralised Intersects		
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)	
Kearney DH Riofinex 1987-1990	OMBHL144	240204.45	370545.35	159.60	67.70	-45	264	7%	100%	0	0.00	
Kearney DH Riofinex 1987-1990	OMBHL145	240211.38	370495.95	156.94	75.17	-45	264	11%	100%	0	0.00	
Kearney DH Riofinex 1987-1990	OMBHL146	240133.51	371064.29	175.17	101.00	-45	264	15%	100%	2	0.44	
Kearney DH Riofinex 1987-1990	OMBHL149	240140.26	371013.97	171.11	98.00	-45	265	13%	100%	3	4.11	
Kearney DH Riofinex 1987-1990	OMBHL150	240140.68	370952.87	166.89	64.55	-45	264	22%	80%	3	1.30	
Kearney DH Riofinex 1987-1990	OMBHL151	240159.25	370842.00	162.00	88.15	-45	264	11%	100%	2	2.76	
Kearney DH Riofinex 1987-1990	OMBHL152	240146.57	370916.04	164.97	72.50	-45	264	17%	100%	3	0.22	
Kearney DH Riofinex 1987-1990	OMBHL154	240154.42	370742.05	164.15	73.73	-45	277	23%	99%	2	0.99	
Kearney DH Riofinex 1987-1990	OMBHL155	240154.42	370742.05	164.15	70.23	-45	254	21%	100%	2	4.20	
Kearney DH Riofinex 1987-1990	OMBHL156	240155.49	370716.13	163.92	58.84	-45	247.5	25%	100%	2	4.73	
Kearney DH Riofinex 1987-1990	OMBHL157	240155.49	370716.13	163.92	58.36	-45	263	23%	100%	2	4.55	
Kearney DH Riofinex 1987-1990	OMBHL158	240155.49	370716.13	163.92	58.20	-45	283.5	14%	100%	1	3.72	
Kearney DH Riofinex 1987-1990	OMBHL159	240177.94	370656.96	163.21	58.72	-45	271	16%	100%	3	1.46	
Kearney DH Riofinex 1987-1990	OMBHL160	240131.69	370607.68	161.79	89.53	-45	121	7%	100%	1	0.53	
Kearney DH Riofinex 1987-1990	OMBHL161	240122.99	370567.07	161.38	85.39	-45	61	16%	100%	1	0.83	
Kearney DH Riofinex 1987-1990	OMBHL162	240124.52	370563.58	160.97	84.87	-45	76	23%	100%	1	1.02	
Kearney DH Riofinex 1987-1990	OMBHL163	240131.69	370607.68	161.79	69.30	-45	89.5	7%	100%	1	0.52	
Kearney DH Riofinex 1987-1990	OMBHL164	240181.19	370651.92	163.21	88.20	-45	231	13%	100%	3	0.65	
Kearney DH Riofinex 1987-1990	OMBHL165	240155.47	370708.51	163.76	50.14	-45	230.5	12%	100%	2	1.37	
Kearney DH Riofinex 1987-1990	OMBHL166	240184.26	370721.40	163.35	78.50	-45	273.5	2%	100%	1	0.49	
Kearney DH Riofinex 1987-1990	OMBHL167	240178.85	370736.76	163.73	74.00	-45	268.5	7%	100%	2	1.16	
Kearney DH Galantas 2006-2007	OM-DD-06-002	240127.73	371016.52	171.54	59.20	-45	270	27%	100%	4	5.13	
Kearney DH Galantas 2006-2007	OM-DD-06-003	240127.64	370989.34	168.96	58.20	-45	270	26%	98%	1	8.17	
Kearney DH Galantas 2006-2007	OM-DD-06-004	240153.35	370725.97	156.44	38.00	-46	247.5	31%	100%	2	1.87	
Kearney DH Galantas 2006-2007	OM-DD-06-005	240143.60	371113.60	172.65	97.00	-45	270	51%	100%	5	4.32	
Kearney DH Galantas 2006-2007	OM-DD-06-006	240128.80	371088.50	174.65	81.80	-45	280	32%	100%	4	7.40	
Kearney DH Galantas 2006-2007	OM-DD-06-014	240149.50	371145.20	169.62	122.00	-46.2	280	33%	93%	2	3.07	
Kearney DH Galantas 2006-2007	OM-DD-07-015	240138.00	371046.00	172.00	90.00	-42.1	270	16%	100%	3	1.50	
Kearney DH Galantas 2006-2007	OM-DD-07-016	240171.40	371039.00	164.64	120.00	-44.3	276	15%	100%	2	2.38	
Kearney DH Galantas 2006-2007	OM-DD-07-017	240209.80	371039.40	156.03	167.30	-45.2	270	21%	100%	6	1.90	
Kearney DH Galantas 2006-2007	OM-DD-07-018	240177.00	371090.80	165.30	154.60	-45	270	9%	100%	3	1.96	
Kearney DH Galantas 2006-2007	OM-DD-07-019	240205.00	370832.00	162.00	135.00	-45.2	275	20%	100%	4	5.11	
Kearney DH Galantas 2006-2007	OM-DD-07-022	240175.00	370800.00	159.00	102.00	-45	270	16%	100%	1	0.75	
Kearney DH Galantas 2006-2007	OM-DD-07-024	240190.00	370750.00	171.00	130.00	-47.6	270	9%	100%	2	0.94	
Kearney DH Galantas 2006-2007	OM-DD-07-026	240204.00	370725.00	173.00	164.20	-48.9	270	13%	100%	2	1.59	
Kearney DH Galantas 2006-2007	OM-DD-07-028	240190.00	370675.00	167.00	101.40	-50.3	270	19%	100%	3	3.23	



		<b>-</b>	No. alki sa		Baath		A *	Assayed	Logged	Mineralised Intersects		
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)	
Kearney DH Galantas 2006-2007	OM-DD-07-030	240188.00	370626.00	162.00	116.20	-50.3	270	18%	100%	1	0.54	
Kearney DH Galantas 2006-2007	OM-DD-07-031	240202.00	370850.00	161.00	143.40	-45	270	11%	100%	5	1.44	
Kearney DH Galantas 2006-2007	OM-DD-07-032	240155.00	370850.00	163.00	110.00	-45.3	267	12%	100%	1	1.69	
Kearney DH Galantas 2006-2007	OM-DD-07-033	240114.30	371322.40	159.20	120.00	-44.8	268	13%	100%	1	1.68	
Kearney DH Galantas 2006-2007	OM-DD-07-034	240180.00	370875.00	161.00	167.00	-49.2	271	15%	100%	5	0.82	
Kearney DH Galantas 2006-2007	OM-DD-07-035	240168.50	371208.90	162.24	153.00	-53.9	267	11%	100%	2	0.26	
Kearney DH Galantas 2006-2007	OM-DD-07-036	240176.00	370900.00	165.00	140.00	-48.8	275	14%	100%	4	1.06	
Kearney DH Galantas 2006-2007	OM-DD-07-037	240176.00	370925.00	159.00	134.00	-50	270	18%	98%	5	3.87	
Kearney DH Galantas 2006-2007	OM-DD-07-038	240117.30	370920.80	166.76	131.50	-45	270	3%	79%	3	1.05	
Kearney DH Galantas 2006-2007	OM-DD-07-039	240110.70	371140.70	174.64	110.00	-45	270	13%	90%	4	2.12	
Kearney DH Galantas 2006-2007	OM-DD-07-040	240172.10	370972.50	163.09	125.40	-45	270	16%	100%	4	3.95	
Kearney DH Galantas 2006-2007	OM-DD-07-041	240220.80	371121.50	158.32	281.70	-50.1	270	16%	100%	8	7.35	
Kearney DH Galantas 2006-2007	OM-DD-07-042	240136.00	370946.40	165.75	68.00	-45.1	270	15%	100%	2	2.49	
Kearney DH Galantas 2006-2007	OM-DD-07-043	240125.00	371175.00	177.00	102.00	-45.3	274	26%	100%	5	1.92	
Kearney DH Galantas 2006-2007	OM-DD-07-044	240171.80	371072.00	166.88	125.00	-45.2	270	18%	100%	1	0.08	
Kearney DH Galantas 2006-2007	OM-DD-07-045	240229.00	370678.00	159.00	144.15	-44.7	270	13%	100%	1	0.19	
Kearney DH Galantas 2006-2007	OM-DD-07-046	240240.60	371174.40	152.79	329.00	-44.5	270	14%	100%	1	1.46	
Kearney DH Galantas 2006-2007	OM-DD-07-047	240205.70	371093.20	166.00	243.00	-44	270	10%	100%	2	3.78	
Kearney DH Galantas 2006-2007	OM-DD-07-048	240229.40	371216.60	153.19	258.50	-45.5	270	9%	100%	2	8.77	
Kearney DH Galantas 2006-2007	OM-DD-07-049	240250.00	371275.00	165.00	252.00	-45	270	6%	97%	1	0.23	
Kearney DH Galantas 2011-2013	OM-DD-11-071	240357.15	370948.91	138.63	395.01	-50	270	2%	100%	0	0.00	
Kearney DH Galantas 2011-2013	OM-DD-11-079	240137.87	371206.68	166.89	85.00	-50	270	17%	100%	3	3.20	
Kearney DH Galantas 2011-2013	OM-DD-11-081	240138.77	371206.76	166.81	143.40	-75	270	8%	100%	1	3.65	
Kearney DH Galantas 2011-2013	OM-DD-11-084	240271.90	371090.00	142.53	353.50	-45	270	3%	100%	3	4.09	
Kearney DH Galantas 2011-2013	OM-DD-11-085	240296.64	371011.41	144.69	372.00	-45	280	5%	100%	3	0.93	
Kearney DH Galantas 2011-2013	OM-DD-11-089	240247.17	371141.99	150.58	336.00	-45.9	277.9	1%	100%	2	0.27	
Kearney DH Galantas 2011-2013	OM-DD-11-090	240273.31	371049.84	142.86	245.00	-44.1	277.8	7%	0%	2	2.04	
Kearney DH Galantas 2011-2013	OM-DD-11-092	240350.96	371189.90	140.42	402.00	-44.3	288	7%	0%	0	0.00	
Kearney DH Galantas 2011-2013	OM-DD-11-094	240329.30	371090.43	137.87	449.00	-45	275	2%	100%	1	0.13	
Kearney DH Galantas 2011-2013	OM-DD-12-097	240329.49	371139.96	139.69	408.00	-42.5	274.8	1%	0%	0	0.00	
Kearney DH Galantas 2011-2013	OM-DD-12-099B	240406.45	371198.03	141.27	435.00	-45	270	1%	0%	1	0.41	
Kearney DH Galantas 2011-2013	OM-DD-12-104	240406.20	371040.05	133.23	380.00	-45	275	0%	0%	0	0.00	
Kearney DH Galantas 2011-2013	OM-DD-12-106	240024.09	370710.01	162.90	330.00	-47	84	4%	0%	4	3.41	
Kearney DH Galantas 2011-2013	OM-DD-12-115	239997.41	370710.05	164.27	333.00	-45	100	1%	0%	0	0.00	
Kearney DH Galantas 2011-2013	OM-DD-12-124	239954.23	370782.36	165.54	376.00	-45	90	1%	0%	0	0.00	
Kearney DH Galantas 2011-2013	OM-DD-12-139	240074.86	370611.34	162.61	169.00	-46	71	3%	0%	0	0.00	



		<b></b>	N		D Ib		A 1	Assayed	Logged	Mineralised Intersects		
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)	
Kearney DH Galantas 2011-2013	OM-DD-12-142	240028.57	370981.92	167.55	212.00	-45	90	29%	0%	7	12.59	
Kearney DH Galantas 2011-2013	OM-DD-13-145	240047.85	371201.05	155.07	175.00	-50	90	0%	0%	0	0.00	
Kearney DH Galantas 2015-2016	OM-DD-15-159	240007.80	370930.27	174.70	354.40	-53	75	3%	0%	5	0.64	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-168	240100.56	370979.31	46.76	137.60	-43.3	140	8%	100%	2	2.78	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-170	240099.16	370982.38	46.77	139.73	-55	67	8%	99%	5	3.17	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-172	240105.12	371061.70	59.98	131.00	-66.1	287.7	7%	75%	3	2.27	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-174	240104.44	371065.62	59.97	114.58	-43	33	17%	100%	4	5.56	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-176	240105.31	371063.86	60.00	114.50	-55	55	11%	100%	2	3.29	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-177	240105.31	371063.86	60.00	113.00	-51.6	119	1%	100%	1	0.05	
Kearney UGDH Galantas 2021-2022	FR-DD-21-UG-178B	240087.70	371131.95	73.00	116.00	-55.4	87	2%	82%	1	0.39	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-179	240044.49	371112.69	90.00	185.00	-50.9	104.4	11%	19%	5	6.98	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-180	240042.52	371112.93	89.44	200.00	-51.2	77.5	6%	6%	3	3.02	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-181	240042.52	371112.93	89.44	252.00	-51	95	13%	16%	5	6.69	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-182	240044.49	371112.69	90.00	250.00	-51	118	2%	7%	1	0.97	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-183	240110.28	370968.95	46.68	60.50	-24	90	19%	17%	4	3.87	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-184	240110.28	370968.95	46.68	165.00	-62	90	6%	15%	4	1.73	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-185	240110.28	370968.95	46.68	124.50	-32	155	6%	6%	2	1.93	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-186	240110.28	370968.95	46.68	110.00	-36.8	39	14%	14%	4	5.41	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-187	240110.28	370968.95	46.68	102.50	-49.3	68	12%	18%	4	5.22	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-188	240110.28	370968.95	46.68	127.00	-62.4	112	5%	7%	2	0.32	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-189	240110.28	370968.95	46.70	73.00	-26	126	10%	13%	3	3.09	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-190	240110.28	370968.95	46.70	110.00	-45	103.5	8%	12%	3	2.36	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-191	240105.30	371146.60	84.19	129.00	-70	278	15%	18%	4	3.70	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-192	240105.10	371146.31	84.19	130.00	-66	258	19%	32%	4	4.35	
Kearney UGDH Galantas 2021-2022	FR-DD-22-UG-193	240105.30	371146.60	84.19	130.90	-41.15	50	0%	90%	0	0.00	
Kearney CS Galantas 2012	OM-CH-12/KY-01	240119.77	371147.07	154.24	2.00	90	0	100%	0%	1	1.35	
Kearney CS Galantas 2012	OM-CH-12/KY-02	240118.47	371151.96	153.91	2.00	90	0	100%	0%	1	0.17	
Kearney CS Galantas 2012	OM-CH-12/KY-03	240115.81	371156.60	153.70	2.00	90	0	100%	0%	1	0.55	
Kearney CS Galantas 2012	OM-CH-12/KY-04	240118.43	371167.49	153.54	2.00	90	0	50%	0%	1	0.22	
Kearney CS Galantas 2012	OM-CH-12/KY-05	240110.41	371189.68	153.37	2.00	90	0	50%	0%	1	0.18	
Kearney CS Galantas 2012	OM-CH-12/KY-06	240106.72	371193.68	152.93	5.10	90	0	100%	0%	1	0.84	
Kearney CS Galantas 2012	OM-CH-12/KY-07	240106.11	371198.49	153.04	5.00	90	0	100%	0%	1	0.68	
Kearney CS Galantas 2012	OM-CH-12/KY-08	240105.41	371203.11	153.25	3.00	90	0	100%	0%	1	0.52	
Kearney CS Galantas 2012	OM-CH-12/KY-09	240105.58	371208.49	153.25	2.00	90	0	100%	0%	1	0.63	
Kearney CS Galantas 2012	OM-CH-12/KY-10	240073.52	371250.41	139.52	2.00	0	66	100%	0%	1	0.77	
Kearney CS Galantas 2012	OM-CH-12/KY-11	240076.17	371245.48	139.40	1.00	0	72	100%	0%	1	0.30	



		E	No. alkina		<b>N</b> ext	5.	A 100 A	Assayed	Logged	Minera	lised Intersects
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)
Kearney CS Galantas 2012	OM-CH-12/KY-12	240077.63	371240.73	139.27	1.00	0	76	100%	0%	1	0.20
Kearney CS Galantas 2012	OM-CH-12/KY-13	240078.45	371235.89	139.03	2.30	0	79	100%	0%	1	1.08
Kearney CS Galantas 2012	OM-CH-12/KY-14	240079.96	371231.04	139.03	2.60	0	80	100%	0%	1	0.20
Kearney CS Galantas 2012	OM-CH-12/KY-15	240081.14	371226.01	139.00	2.50	0	82	100%	0%	1	0.30
Kearney CS Galantas 2012	OM-CH-12/KY-16	240082.27	371221.06	139.07	1.00	0	83	100%	0%	1	0.88
Kearney CS Galantas 2012	OM-CH-12/KY-17	240084.03	371215.99	139.04	1.00	0	85	100%	0%	1	0.39
Kearney CS Galantas 2012	OM-CH-12/KY-18	240084.47	371211.07	138.97	2.10	0	86	100%	0%	1	0.49
Kearney CS Galantas 2012	OM-CH-12/KY-19	240083.39	371205.91	138.89	2.00	0	87	100%	0%	1	0.19
Kearney CS Galantas 2012	OM-CH-12/KY-20	240083.86	371200.99	138.83	1.00	0	88	100%	0%	1	0.49
Kearney CS Galantas 2012	OM-CH-12/KY-21	240083.03	371252.24	139.62	1.00	0	83	100%	0%	1	0.29
Kearney CS Galantas 2012	OM-CH-12/KY-22	240083.94	371247.42	139.28	1.00	0	86	100%	0%	1	0.38
Kearney CS Galantas 2012	OM-CH-12/KY-23	240084.80	371242.37	139.29	1.00	0	87	100%	0%	1	0.10
Kearney CS Galantas 2012	OM-CH-12/KY-24	240085.06	371237.29	139.30	1.00	0	73	100%	0%	1	0.10
Kearney CS Galantas 2012	OM-CH-12/KY-25	240085.71	371232.43	139.11	3.00	0	84	100%	0%	1	0.09
Kearney CS Galantas 2012	OM-CH-12/KY-26	240086.40	371227.65	136.45	5.00	0	85	100%	0%	1	0.10
Kearney CS Galantas 2012	OM-CH-12/KY-27	240087.39	371222.60	136.45	3.00	0	85	100%	0%	2	0.39
Kearney CS Galantas 2012	OM-CH-12/KY-28	240088.37	371217.74	136.45	3.50	0	85	100%	0%	1	0.19
Kearney CS Galantas 2012	OM-CH-12/KY-29	240089.20	371212.73	136.45	9.00	0	85	100%	0%	3	2.14
Kearney CS Galantas 2012	OM-CH-12/KY-30	240090.88	371207.78	136.45	9.50	0	85	100%	0%	2	0.29
Kearney CS Galantas 2012	OM-CH-12/KY-31	240090.83	371202.83	136.45	10.50	0	85	100%	0%	2	0.30
Kearney CS Galantas 2012	OM-CH-12/KY-32	240091.83	371197.92	136.45	10.40	0	85	100%	0%	3	0.96
Joshua DH Riofinex 1987-1988	OMBHL051	239624.47	370849.94	168.98	95.55	-45	80	3%	100%	1	0.12
Joshua DH Riofinex 1987-1988	OMBHL053	239596.43	370891.69	176.50	125.95	-45	57.5	7%	100%	1	4.65
Joshua DH Riofinex 1987-1988	OMBHL057	239631.10	370882.51	173.33	85.50	-45	65	11%	100%	1	2.04
Joshua DH Riofinex 1987-1988	OMBHL070	239709.95	370954.14	174.74	114.90	-45	274	0%	100%	1	0.41
Joshua DH Riofinex 1987-1988	OMBHL073	239733.09	370831.38	165.46	144.05	-45	261	0%	100%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL075	239669.50	370992.60	182.33	66.55	-45	232	12%	100%	1	1.44
Joshua DH Riofinex 1987-1988	OMBHL079	239637.22	371013.38	185.60	109.40	-45	231	0%	100%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL084	239636.26	370829.02	167.58	108.55	-45	71	4%	100%	1	1.85
Joshua DH Riofinex 1987-1988	OMBHL086	239722.88	370762.04	164.17	83.10	-45	249	1%	100%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL088	239655.05	370711.45	166.52	75.65	-45	71	4%	100%	1	1.09
Joshua DH Riofinex 1987-1988	OMBHL090	239656.08	370621.40	172.00	66.80	-45	80	10%	100%	2	0.73
Joshua DH Riofinex 1987-1988	OMBHL093	239660.06	370568.94	173.89	71.65	-45	81	7%	100%	1	0.94
Joshua DH Riofinex 1987-1988	OMBHL094	239675.69	370522.22	173.76	58.90	-45	82	8%	100%	1	1.98
Joshua DH Riofinex 1987-1988	OMBHL096	239683.20	370473.15	173.78	69.00	-45	81	5%	100%	1	0.47
Joshua DH Riofinex 1987-1988	OMBHL098	239692.93	370425.25	173.59	73.35	-45	81	11%	100%	1	1.22



Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Assayed Au (%)	Logged (%)	Mineralised Intersects	
										Count	Thickness (m)
Joshua DH Riofinex 1987-1988	OMBHL099	239716.47	370379.10	171.56	108.25	-45	80	0%	100%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL099A	239735.70	370381.01	171.50	122.10	-45	81	3%	99%	1	0.28
Joshua DH Riofinex 1987-1988	OMBHL100A	239802.24	371175.64	173.71	149.50	-45	272	0%	100%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL102	239607.82	370955.91	185.50	42.60	-45	81	6%	100%	1	0.33
Joshua DH Riofinex 1987-1988	OMBHL104	239584.33	371001.67	189.48	117.30	-45	69	0%	84%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL105	239620.53	371182.05	184.65	152.25	-45	92	0%	100%	0	0.00
Joshua DH Riofinex 1987-1988	OMBHL115	239577.76	370882.18	178.40	156.55	-45	85	1%	100%	1	0.71
Joshua DH Riofinex 1987-1988	OMBHL118A	239570.52	370976.58	188.00	134.25	-45	85	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-051	239661.72	370914.46	173.42	59.25	-45	99.8	0%	0%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-052	239624.39	370917.55	175.28	50.25	-45	107.5	17%	105%	1	1.87
Joshua DH Galantas 2011-2013	OM-DD-11-053	239623.15	370917.88	175.34	100.40	-70	117	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-054	239624.69	370892.55	172.82	52.25	-45	95.5	13%	100%	1	1.09
Joshua DH Galantas 2011-2013	OM-DD-11-055	239626.81	370862.98	167.56	71.00	-45	95	8%	100%	1	0.47
Joshua DH Galantas 2011-2013	OM-DD-11-056	239634.85	370862.94	166.96	50.30	-45	93.7	11%	100%	1	1.05
Joshua DH Galantas 2011-2013	OM-DD-11-057	239695.94	370862.91	164.97	135.00	-45	93.7	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-058	239681.03	370835.79	163.01	50.25	-45	279.5	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-059	239680.64	370950.95	174.99	50.50	-45	282.3	0%	99%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-060	239680.92	370975.89	175.29	60.50	-45	277.2	9%	100%	1	1.32
Joshua DH Galantas 2011-2013	OM-DD-11-061	239612.89	370863.68	168.58	134.70	-45	99	5%	100%	1	1.48
Joshua DH Galantas 2011-2013	OM-DD-11-062	239618.76	370838.68	165.51	83.30	-45	90	5%	100%	1	1.18
Joshua DH Galantas 2011-2013	OM-DD-11-063	239699.73	370783.22	161.65	21.80	-45	279.4	39%	100%	1	3.72
Joshua DH Galantas 2011-2013	OM-DD-11-064	239705.99	370783.62	161.71	51.00	-75	270	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-065	239679.31	370780.24	161.99	30.13	-50	94.4	18%	100%	1	1.41
Joshua DH Galantas 2011-2013	OM-DD-11-070	239668.35	370756.53	161.42	50.50	-45	90	18%	100%	1	4.51
Joshua DH Galantas 2011-2013	OM-DD-11-072	239716.04	370761.29	161.25	85.00	-70	270	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-073	239668.19	370731.45	161.92	40.25	-45	90	9%	99%	1	1.43
Joshua DH Galantas 2011-2013	OM-DD-11-074	239670.91	370706.52	162.49	35.40	-44.1	88.7	19%	100%	1	1.83
Joshua DH Galantas 2011-2013	OM-DD-11-075	239667.30	370731.40	161.59	103.70	-70	90	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-076	239660.11	370969.10	178.35	44.30	-45	270	9%	100%	1	0.51
Joshua DH Galantas 2011-2013	OM-DD-11-077	239694.07	371000.00	173.11	73.00	-45	280	14%	88%	1	1.05
Joshua DH Galantas 2011-2013	OM-DD-11-078	239693.62	371000.25	173.10	64.90	-45	318	0%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-080	239660.13	371025.29	179.97	64.90	-50	270	13%	61%	1	0.32
Joshua DH Galantas 2011-2013	OM-DD-11-082	239660.29	371055.13	181.58	55.40	-45	270	20%	100%	1	0.24
Joshua DH Galantas 2011-2013	OM-DD-11-083	239660.59	371079.93	182.97	65.70	-45	270	17%	100%	1	0.42
Joshua DH Galantas 2011-2013	OM-DD-11-086	239668.66	371105.16	182.30	62.80	-45	261.4	11%	100%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-11-087	239670.16	371057.80	181.57	82.90	-45	270	9%	100%	1	0.64



		<b>-</b>	No. alkina		Baath		A 100 A	Assayed	Logged	Minera	lised Intersects
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)
Joshua DH Galantas 2011-2013	OM-DD-11-088	239672.84	371129.96	181.41	92.50	-45	277.5	6%	100%	2	1.50
Joshua DH Galantas 2011-2013	OM-DD-11-091	239710.30	371067.81	179.06	115.00	-45	277	4%	0%	1	0.97
Joshua DH Galantas 2011-2013	OM-DD-11-093	239704.59	371117.50	180.96	113.00	-46.4	267.5	3%	0%	1	0.99
Joshua DH Galantas 2011-2013	OM-DD-11-095	239709.97	371183.97	179.83	150.70	-45.1	266	3%	100%	3	0.57
Joshua DH Galantas 2011-2013	OM-DD-12-098	239711.33	371067.83	179.08	187.80	-66.6	277.9	1%	0%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-12-100	239598.92	370790.12	166.25	200.00	-48.8	91.8	4%	100%	2	1.91
Joshua DH Galantas 2011-2013	OM-DD-12-101A	239673.04	371154.98	182.12	120.00	-45.9	281.8	4%	0%	2	1.63
Joshua DH Galantas 2011-2013	OM-DD-12-102	239672.76	371180.02	183.06	134.00	-46.1	278.4	3%	98%	2	0.76
Joshua DH Galantas 2011-2013	OM-DD-12-103	239597.97	370790.12	166.30	279.00	-71	93.4	16%	100%	2	5.06
Joshua DH Galantas 2011-2013	OM-DD-12-105	239672.96	371202.99	182.77	142.00	-45	280	2%	100%	1	0.22
Joshua DH Galantas 2011-2013	OM-DD-12-108	239672.52	371223.23	182.33	151.00	-45	274	1%	0%	1	0.17
Joshua DH Galantas 2011-2013	OM-DD-12-110	239608.25	370765.00	165.56	189.00	-44	90	2%	0%	1	0.74
Joshua DH Galantas 2011-2013	OM-DD-12-111	239674.04	371155.00	182.12	168.00	-70	273	8%	0%	3	1.69
Joshua DH Galantas 2011-2013	OM-DD-12-112	239835.88	371171.95	171.44	495.00	-45	272	0%	0%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-12-113	239581.58	370864.53	169.01	160.00	-45	90	1%	0%	1	0.38
Joshua DH Galantas 2011-2013	OM-DD-12-114B	239610.63	370740.04	165.19	321.00	-65	90	3%	0%	2	1.30
Joshua DH Galantas 2011-2013	OM-DD-12-117	239583.12	370893.80	174.93	135.00	-45	90	4%	100%	1	1.87
Joshua DH Galantas 2011-2013	OM-DD-12-118	239646.71	370690.03	165.89	218.00	-50	96	4%	0%	1	2.30
Joshua DH Galantas 2011-2013	OM-DD-12-119	239582.01	370893.79	174.82	494.20	-70	88	1%	0%	0	0.00
Joshua DH Galantas 2011-2013	OM-DD-12-120	239575.48	370814.99	166.19	140.00	-45	89.5	7%	100%	1	2.90
Joshua DH Galantas 2011-2013	OM-DD-12-121	239645.75	370690.10	165.55	152.00	-70	98	9%	100%	1	2.44
Joshua DH Galantas 2011-2013	OM-DD-12-122	239590.14	370637.99	171.71	173.00	-46	90	9%	10%	3	2.16
Joshua DH Galantas 2011-2013	OM-DD-12-123	239625.40	370715.09	165.25	109.00	-45	90	7%	0%	1	2.70
Joshua DH Galantas 2011-2013	OM-DD-12-125	239623.98	370715.16	165.38	121.00	-70	90	4%	0%	1	0.89
Joshua DH Galantas 2011-2013	OM-DD-12-126	239630.52	370662.00	169.16	117.00	-45	90	1%	0%	1	0.40
Joshua DH Galantas 2011-2013	OM-DD-12-129	239711.78	370915.03	171.67	96.30	-45	270	3%	100%	1	0.79
Joshua DH Galantas 2011-2013	OM-DD-12-131	239624.03	370605.96	170.47	120.10	-45	82	9%	100%	2	1.13
Joshua DH Galantas 2011-2013	OM-DD-12-132	239696.33	370949.96	173.99	98.40	-50	272	8%	100%	1	1.30
Joshua DH Galantas 2011-2013	OM-DD-12-134	239714.89	370638.09	166.33	88.00	-50	278	7%	0%	2	1.30
Joshua DH Galantas 2011-2013	OM-DD-12-135	239697.21	370949.90	173.95	158.00	-70	272	3%	0%	1	1.10
Joshua DH Galantas 2011-2013	OM-DD-12-136	239719.12	370555.02	169.58	120.00	-52	275	8%	0%	3	1.32
Joshua DH Galantas 2011-2013	OM-DD-12-138	239642.66	371132.02	183.69	73.00	-45	275	12%	27%	2	0.38
Joshua DH Galantas 2011-2013	OM-DD-12-140	239720.43	370579.85	168.51	78.00	-46	276	9%	95%	2	0.39
Joshua DH Galantas 2011-2013	OM-DD-12-141	239624.55	370820.04	164.08	91.00	-45	86	3%	0%	1	0.78
Joshua DH Galantas 2011-2013	OM-DD-12-143	239721.06	370579.83	168.45	120.00	-60	273	12%	0%	3	0.33
Joshua DH Galantas 2011-2013	OM-DD-12-144	239719.95	370530.03	169.75	110.00	-45	277	5%	84%	3	1.19



		E	N I		Baath	5.		Assayed	Logged	Minera	Mineralised Intersects	
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)	
Joshua DH Galantas 2011-2013	OM-DD-13-146	239825.82	370638.05	156.99	237.70	-45	275	0%	0%	0	0.00	
Joshua DH Galantas 2011-2013	OM-DD-13-147	239603.59	370740.10	165.25	171.00	-70	90	4%	5%	1	1.86	
Joshua DH Galantas 2011-2013	OM-DD-13-148	239610.93	370741.08	165.24	101.00	-53	90	3%	0%	1	1.46	
Joshua DH Galantas 2015-2016	GW6	239719.95	370530.03	169.75	155.00	-90	360	0%	0%	0	0.00	
Joshua DH Galantas 2015-2016	OM-DD-15-150	239826.00	370638.00	166.00	503.00	-55	270	1%	11%	0	0.00	
Joshua DH Galantas 2015-2016	OM-DD-15-152	239803.72	370916.84	170.10	411.60	-55	288	1%	1%	0	0.00	
Joshua DH Galantas 2015-2016	OM-DD-15-153	239574.90	370815.12	166.30	285.00	-70	95	3%	9%	2	4.10	
Joshua DH Galantas 2015-2016	OM-DD-15-154	239568.93	370650.94	170.50	400.00	-53	80	1%	3%	3	0.54	
Joshua DH Galantas 2015-2016	OM-DD-15-155	239749.36	370912.90	170.60	255.00	-50	270	14%	19%	2	5.10	
Joshua DH Galantas 2015-2016	OM-DD-15-156	239577.29	370815.82	166.60	271.50	-55	75	3%	0%	2	2.04	
Joshua DH Galantas 2015-2016	OM-DD-15-157	239567.93	370650.94	170.50	143.00	-70	80	2%	0%	1	0.25	
Joshua DH Galantas 2015-2016	OM-DD-15-158	239858.26	371082.02	171.14	435.00	-45	270	1%	1%	0	0.00	
Joshua DH Galantas 2015-2016	OM-DD-15-160	239634.79	370742.52	167.46	146.90	-50	260	5%	0%	1	1.00	
Joshua DH Galantas 2015-2016	OM-DD-15-161	239724.73	371046.95	172.80	191.50	-45	270	2%	0%	1	0.45	
Joshua DH Galantas 2015-2016	OM-DD-16-162	239624.13	370818.80	164.27	151.50	-45	260	0%	0%	0	0.00	
Joshua DH Galantas 2015-2016	OM-DD-16-163	239735.14	370979.98	173.90	177.00	-50	265	0%	0%	0	0.00	
Joshua DH Galantas 2021-2022	FR-DD-21-164	239693.83	370890.04	170.68	65.70	-48	258.8	6%	100%	1	2.24	
Joshua DH Galantas 2021-2022	FR-DD-21-165	239694.89	370890.32	170.72	128.20	-70.9	259.3	6%	100%	3	0.98	
Joshua DH Galantas 2021-2022	FR-DD-21-166	239749.96	370912.90	171.00	148.90	-46.1	278.9	4%	100%	1	2.34	
Joshua DH Galantas 2021-2022	FR-DD-21-167	239749.96	370912.90	171.00	260.60	-59	275	0%	100%	0	0.00	
Joshua DH Galantas 2021-2022	FR-DD-21-169	239731.47	370940.21	172.80	183.80	-56	271	2%	101%	1	0.16	
Joshua DH Galantas 2021-2022	FR-DD-21-171	239715.80	370812.43	168.68	120.60	-49	259	12%	100%	3	2.13	
Joshua DH Galantas 2021-2022	FR-DD-21-173	239715.80	370812.43	168.68	219.35	-65.5	258.3	1%	100%	1	0.06	
Joshua DH Galantas 2021-2022	FR-DD-21-175	239709.98	370931.39	174.05	134.70	-56.9	275.7	12%	100%	1	5.11	
Joshua CS Galantas 2011	OM-CH-11/JA-01	239645.63	370880.16	165.09	2.00	72	0	100%	0%	1	1.36	
Joshua CS Galantas 2011	OM-CH-11/JA-02	239645.32	370881.25	165.26	2.00	74	0	100%	0%	1	1.13	
Joshua CS Galantas 2011	OM-CH-11/JA-03	239644.98	370882.17	165.39	2.00	76	0	100%	0%	1	0.94	
Joshua CS Galantas 2011	OM-CH-11/JA-04	239644.70	370883.05	165.59	2.00	72	0	100%	0%	1	0.77	
Joshua CS Galantas 2011	OM-CH-11/JA-05	239644.33	370883.99	165.78	2.00	73	0	100%	0%	1	0.69	
Joshua CS Galantas 2011	OM-CH-11/JA-06	239643.95	370884.86	165.94	2.00	72	0	100%	0%	1	0.97	
Joshua CS Galantas 2011	OM-CH-11/JA-07	239643.55	370885.80	166.16	2.00	74	0	100%	0%	1	0.73	
Joshua CS Galantas 2011	OM-CH-11/JA-08	239643.27	370886.64	166.35	2.00	69	0	100%	0%	1	0.49	
Joshua CS Galantas 2011	OM-CH-11/JA-09	239642.85	370887.53	166.59	2.00	69	0	100%	0%	1	0.74	
Joshua CS Galantas 2011	OM-CH-11/JA-10	239642.51	370888.59	166.84	2.00	74	0	100%	0%	1	1.02	
Joshua CS Galantas 2011	OM-CH-11/JA-11	239642.22	370889.61	167.11	2.00	75	0	100%	0%	1	1.35	
Joshua CS Galantas 2011	OM-CH-11/JA-12	239642.08	370890.53	167.38	2.00	73	0	100%	0%	1	1.38	



		<b>F</b>	No. alk <sup>1</sup> or		<b>N</b> ext	5.	A 100 A	Assayed	Logged	Mineralised Intersects		
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)	
Joshua CS Galantas 2011	OM-CH-11/JA-13	239641.69	370891.45	167.59	2.00	70	0	100%	0%	1	1.70	
Joshua CS Galantas 2011	OM-CH-11/JA-14	239641.27	370892.39	167.80	2.00	70	0	100%	0%	1	1.66	
Joshua CS Galantas 2011	OM-CH-11/JA-15	239640.95	370893.29	168.00	2.00	67	0	100%	0%	1	1.57	
Joshua CS Galantas 2011	OM-CH-11/JA-16	239640.64	370894.31	168.18	2.00	69	0	100%	0%	1	1.64	
Joshua CS Galantas 2011	OM-CH-11/JA-17	239640.38	370895.37	168.34	2.00	71	0	100%	0%	1	1.34	
Joshua CS Galantas 2011	OM-CH-11/JA-18	239639.99	370896.32	168.57	2.00	71	0	100%	0%	1	0.86	
Joshua CS Galantas 2011	OM-CH-11/JA-19	239639.68	370897.26	168.82	2.00	72	0	100%	0%	1	1.09	
Joshua CS Galantas 2011	OM-CH-11/JA-20	239639.35	370898.23	169.07	2.00	70	0	100%	0%	1	1.07	
Joshua CS Galantas 2011	OM-CH-11/JA-21	239639.12	370899.28	169.33	2.00	74	0	100%	0%	1	1.08	
Joshua CS Galantas 2011	OM-CH-11/JA-22	239638.87	370900.21	169.55	2.00	72	0	100%	0%	1	1.31	
Joshua CS Galantas 2011	OM-CH-11/JA-23	239638.53	370901.22	169.78	2.00	74	0	100%	0%	1	1.65	
Joshua CS Galantas 2011	OM-CH-11/JA-24	239638.29	370902.21	169.99	2.00	73	0	100%	0%	1	1.92	
Joshua CS Galantas 2011	OM-CH-11/JA-25	239638.00	370903.16	170.31	2.00	74	0	100%	0%	1	1.86	
Joshua CS Galantas 2011	OM-CH-11/JA-26	239637.79	370904.19	170.59	2.00	76	0	100%	0%	1	1.79	
Joshua CS Galantas 2011	OM-CH-11/JA-27	239637.61	370905.24	170.79	2.00	79	0	100%	0%	1	1.59	
Joshua CS Galantas 2011	OM-CH-11/JA-28	239637.41	370906.29	171.02	2.00	78	0	100%	0%	1	1.79	
Joshua CS Galantas 2011	OM-CH-11/JA-29	239637.21	370907.34	171.13	2.00	82	0	100%	0%	1	1.76	
Joshua CS Galantas 2011	OM-CH-11/JA-30	239637.31	370908.47	171.31	2.00	87	0	100%	0%	1	1.92	
Joshua CS Galantas 2011	OM-CH-11/JA-31	239636.99	370909.53	171.28	2.20	86	0	100%	0%	1	2.05	
Joshua CS Galantas 2011	OM-CH-11/JA-32	239636.93	370910.52	171.42	2.20	87	0	100%	0%	1	2.08	
Joshua CS Galantas 2011	OM-CH-11/JA-33	239636.90	370911.52	171.53	2.20	84	0	100%	0%	1	2.07	
Joshua CS Galantas 2011	OM-CH-11/JA-34	239636.78	370912.51	171.56	2.20	83	0	100%	0%	1	2.05	
Joshua CS Galantas 2011	OM-CH-11/JA-35	239636.70	370913.56	171.62	2.20	85	0	100%	0%	1	1.58	
Joshua CS Galantas 2011	OM-CH-11/JA-36	239636.60	370914.60	171.62	2.00	84	0	100%	0%	1	0.89	
Joshua CS Galantas 2011	OM-CH-11/JA-37	239636.45	370915.61	171.64	2.00	85	0	100%	0%	1	0.97	
Joshua CS Galantas 2011	OM-CH-11/JA-38	239636.37	370916.65	171.64	2.00	83	0	100%	0%	1	0.87	
Joshua CS Galantas 2011	OM-CH-11/JA-39	239636.20	370917.66	171.65	2.20	83	0	100%	0%	1	1.49	
Joshua CS Galantas 2011	OM-CH-11/JS-01	239693.12	370704.61	152.88	3.00	81	0	100%	0%	1	1.46	
Joshua CS Galantas 2011	OM-CH-11/JS-02	239692.52	370709.75	152.95	3.00	103	0	100%	0%	1	1.54	
Joshua CS Galantas 2011	OM-CH-11/JS-03	239694.45	370714.41	152.90	2.00	105	0	100%	0%	1	0.93	
Joshua CS Galantas 2011	OM-CH-11/JS-04	239694.48	370719.39	152.98	4.08	94	0	98%	0%	1	1.36	
Joshua CS Galantas 2011	OM-CH-11/JS-05	239694.59	370724.15	153.10	4.05	88	0	99%	0%	1	1.97	
Joshua CS Galantas 2011	OM-CH-11/JS-06	239693.57	370729.06	153.37	6.56	89	0	91%	0%	1	3.50	
Joshua CS Galantas 2011	OM-CH-11/JS-07	239696.89	370734.09	153.33	6.20	94	0	97%	0%	1	2.73	
Joshua CS Galantas 2011	OM-CH-11/JS-08	239696.56	370739.08	153.11	6.07	94	0	99%	0%	1	4.13	
Joshua CS Galantas 2011	OM-CH-11/JS-09	239700.27	370747.42	152.35	4.05	110	0	99%	0%	1	1.37	



				_				Assayed	Logged	Minera	lised Intersects
Drill Campaign	Hole ID	Easting	Northing	Elevation	Depth	Dip	Azimuth	Au (%)	(%)	Count	Thickness (m)
Joshua CS Galantas 2011	OM-CH-11/JS-10	239700.63	370751.00	152.51	5.05	94	0	99%	0%	1	2.48
Joshua CS Galantas 2011	OM-CH-11/JS-11	239700.54	370754.82	152.57	4.00	71	0	100%	0%	1	0.59
Joshua CS Galantas 2011	OM-CH-11/JS-12	239698.22	370759.20	152.67	5.00	71	0	100%	0%	1	2.69
Joshua CS Galantas 2011	OM-CH-11/JS-13	239695.83	370763.57	152.97	6.00	68	0	100%	0%	1	2.91
Joshua CS Galantas 2011	OM-CH-11/JS-14	239693.79	370768.19	153.04	6.00	69	0	100%	0%	1	2.49
Joshua CS Galantas 2011	OM-CH-11/JS-15	239692.10	370772.97	153.17	6.00	70	0	100%	0%	1	3.58
Joshua CS Galantas 2011	OM-CH-11/JS-16	239689.44	370777.36	153.33	6.00	69	0	100%	0%	1	4.54
Joshua CS Galantas 2011	OM-CH-11/JS-17	239686.93	370781.76	153.44	6.00	68	0	100%	0%	1	4.31
Joshua CS Galantas 2011	OM-CH-11/JS-18	239684.96	370786.43	153.80	5.00	68	0	100%	0%	1	3.89
Joshua CS Galantas 2011	OM-CH-11/JS-19	239682.64	370790.85	153.83	6.00	68	0	100%	0%	1	3.73
Joshua CS Galantas 2011	OM-CH-11/JS-20	239680.99	370795.63	154.05	5.00	64	0	100%	0%	1	2.78
Joshua CS Galantas 2011	OM-CH-11/JS-21	239678.86	370799.96	154.20	5.00	63	0	100%	0%	1	3.29
Joshua CS Galantas 2011	OM-CH-11/JS-22	239676.20	370804.29	154.35	4.12	68	0	97%	0%	1	1.75
Joshua CS Galantas 2011	OM-CH-11/JS-23	239675.27	370809.41	154.41	3.04	69	0	99%	0%	1	1.27
Joshua CS Galantas 2011	OM-CH-11/JS-24	239673.05	370814.09	154.57	3.00	73	0	100%	0%	1	1.17
Joshua CS Galantas 2011	OM-CH-11/JS-25	239671.22	370818.53	154.88	3.06	73	0	98%	0%	1	1.07
Joshua CS Galantas 2011	OM-CH-11/JS-26	239669.83	370823.23	150.57	3.00	70	0	100%	0%	1	1.21
Joshua CS Galantas 2011	OM-CH-11/JS-27	239667.60	370827.67	150.96	2.03	72	0	99%	0%	1	0.29
Joshua CS Galantas 2011	OM-CH-11/JS-28	239666.43	370832.31	151.33	2.00	75	0	100%	0%	1	0.57
Joshua CS Galantas 2011	OM-CH-11/JS-29	239664.37	370837.17	151.93	2.00	75	0	100%	0%	1	0.28
Joshua CS Galantas 2011	OM-CH-11/JS-30	239662.46	370841.42	152.82	2.50	69	0	100%	0%	1	0.85
Joshua CS Galantas 2011	OM-CH-11/JS-31	239659.75	370845.76	153.87	3.00	72	0	100%	0%	1	0.87
Joshua CS Galantas 2011	OM-CH-11/JS-32	239658.94	370850.62	154.64	2.02	68	0	99%	0%	1	1.33
Joshua CS Galantas 2011	OM-CH-11/JS-33	239656.82	370855.20	155.00	3.00	72	0	100%	0%	1	0.59
Joshua CS Galantas 2011	OM-CH-11/JS-34	239655.32	370860.19	155.58	3.00	78	0	100%	0%	1	0.87
Joshua CS Galantas 2011	OM-CH-11/JS-35	239654.59	370864.72	155.85	2.21	68	0	90%	0%	1	0.94
Joshua CS Galantas 2011	OM-CH-11/JS-36	239654.35	370870.19	156.03	2.00	75	0	100%	0%	1	0.48
Joshua CS Galantas 2011	OM-CH-11/JS-37	239652.68	370874.78	156.28	2.00	70	0	100%	0%	1	0.84
Joshua CS Galantas 2011	OM-CH-11/JS-38	239650.70	370879.39	156.68	2.03	71	0	99%	0%	1	0.09

Note: Mineralised intersect thickness is total true thickness. Sample types – DH = Drill Hole; UGDH = Underground Drill Hole; CS = Surface Channel Samples.



Table 30.2: Drill Hole and Surface Channel Mineralised Intercepts Within the Modelled Wireframes for
the Kearney and Joshua Vein Systems

Vein	Vein Structure	Hole ID	Easting	Northing	Elevation	Au	Thickr	ness (m)
System	venistracture	Hote ib	Lusting	Northing	Licoution	(ppm)	True	Drilled
Kearney	vein_1	OMBHL045	240148.38	370575.00	141.81	2.68	2.67	3.80
Kearney	vein_1	OMBHL142	240143.68	370619.14	109.03	2.52	0.20	0.30
Kearney	vein_1	OMBHL160	240150.80	370596.19	137.85	0.15	0.36	0.65
Kearney	vein_1	OMBHL161	240143.90	370578.66	136.61	1.01	0.60	1.00
Kearney	vein_1	OMBHL162	240144.47	370566.45	140.45	3.99	0.74	1.07
Kearney	vein_1	OMBHL163	240153.05	370607.86	140.42	2.49	0.48	0.68
Kearney	vein_1	OMBHL164	240147.82	370624.89	120.27	0.21	0.41	0.74
Kearney	vein_1	OM-DD-07-030	240139.86	370625.37	94.17	3.97	1.30	2.45
Kearney	vein_3	OMBHL039	240077.40	371305.37	74.84	6.40	1.12	1.81
Kearney	vein_3	OMBHL049	240125.95	370805.20	127.34	2.64	0.72	1.10
Kearney	vein_3	OMBHL050	240133.43	370781.25	121.36	1.05	0.83	1.27
Kearney	vein_3	OMBHL052	240113.13	370873.93	125.56	2.92	2.70	3.90
Kearney	vein_3	OMBHL054	240100.49	371011.34	136.04	9.72	3.60	5.20
Kearney	vein_3	OMBHL055	240138.00	370730.79	131.80	16.57	0.93	1.40
Kearney	vein_3	OMBHL056	240133.78	370630.28	152.67	9.52	3.52	5.50
Kearney	vein_3	OMBHL062	240079.99	371154.46	122.86	1.48	1.66	2.40
Kearney	vein_3	OMBHL063	240077.57	371261.01	132.85	0.39	0.53	0.75
Kearney	vein_3	OMBHL069	240138.37	370635.51	108.70	1.36	0.19	0.28
Kearney	vein_3	OMBHL143	240143.58	370672.74	117.94	0.89	0.30	0.45
Kearney	vein_3	OMBHL146	240087.28	371058.85	126.95	1.07	0.25	0.37
Kearney	vein_3	OMBHL149	240098.93	371010.36	129.62	5.55	5.03	7.14
Kearney	vein_3	OMBHL150	240114.98	370949.40	140.14	3.24	0.88	1.30
Kearney	vein_3	OMBHL151	240122.75	370837.80	122.82	3.54	1.35	2.06
Kearney	vein_3	OMBHL152	240112.17	370912.52	128.23	4.81	0.04	0.06
Kearney	vein_3	OMBHL154	240132.25	370744.60	141.82	1.28	0.61	0.87
Kearney	vein_3	OMBHL155	240132.94	370735.70	142.09	4.98	3.37	4.91
Kearney	vein_3	OMBHL156	240132.43	370706.58	137.57	6.17	6.62	10.73
Kearney	vein_3	OMBHL157	240130.92	370712.21	138.18	3.43	5.18	7.72
Kearney	vein_3	OMBHL158	240130.42	370721.52	137.68	3.93	3.41	5.02
Kearney	vein_3	OMBHL159	240141.65	370660.39	126.62	0.73	0.35	0.50
Kearney	vein_3	OMBHL164	240139.35	370618.03	109.36	1.09	0.22	0.40
Kearney	vein_3	OMBHL165	240134.30	370689.51	134.87	5.52	0.60	1.20
Kearney	vein_3	OMBHL167	240143.06	370735.82	127.05	1.71	0.70	1.01
Kearney	vein_3	OM-DD-06-002	240093.68	371016.52	137.49	3.83	3.54	5.00
Kearney	vein_3	OM-DD-06-003	240101.02	370989.34	142.34	5.40	7.65	10.82
Kearney	vein_3	OM-DD-06-004	240131.70	370717.22	132.26	1.68	0.19	0.30
Kearney	vein_3	OM-DD-06-005	240082.93	371113.60	111.98	18.14	1.25	1.77
Kearney	vein_3	OM-DD-06-006	240080.92	371096.94	126.03	10.05	4.56	6.55
Kearney	vein_3	OM-DD-06-014	240082.07	371140.92	81.90	5.74	3.14	6.30
Kearney	vein_3	OM-DD-07-015	240090.98	371046.00	124.98	1.07	0.71	1.00
Kearney	vein_3	OM-DD-07-016	240101.13	371048.83	92.01	20.61	1.70	2.50
Kearney	vein_3	OM-DD-07-019	240136.27	370840.03	75.43	1.39	0.62	1.06
Kearney	vein_3	OM-DD-07-022	240133.07	370803.87	112.77	4.39	0.57	0.89
Kearney	vein_3	OM-DD-07-024	240144.93	370756.67	112.52	2.10	0.41	0.70
Kearney	vein_3	OM-DD-07-026	240138.90	370723.93	79.25	2.40	0.84	1.55
Kearney	vein_3	OM-DD-07-028	240139.70	370671.34	101.63	9.94	2.17	3.85
Kearney	vein_3	OM-DD-07-031	240131.25	370852.51	85.28	1.56	0.52	0.80
Kearney	vein_3	OM-DD-07-032	240123.97	370848.51	129.19	3.90	1.58	2.45
Kearney	vein_3	OM-DD-07-033	240086.71	371320.40	132.60	2.53	1.74	2.45
Kearney	vein_3	OM-DD-07-034	240127.25	370871.59	86.42	2.53	0.31	0.60
Kearney	vein_3	OM-DD-07-036	240125.82	370899.00	90.32	6.32	0.30	0.59
,			240122.73	370924.09	82.45	15.28	0.24	0.45
Kearney	vein_3	OM-DD-07-037	240122.13		02. <del>T</del> J	13.20	0.24	



Vein	Vein Structure	Hole ID	Easting	Northing	Elevation	Au	Thick	ness (m)
System	vemstructure	note ib	Lusting	Northing	Lievation	(ppm)	True	Drilled
Kearney	vein_3	OM-DD-07-039	240079.83	371141.43	144.72	1.89	1.43	2.00
Kearney	vein_3	OM-DD-07-040	240113.59	370974.05	98.83	18.29	2.63	4.10
Kearney	vein_3	OM-DD-07-041	240093.04	371130.74	-19.33	8.31	1.88	3.35
Kearney	vein_3	OM-DD-07-042	240112.06	370947.06	140.85	2.07	0.62	0.90
Kearney	vein_3	OM-DD-07-043	240077.65	371180.58	125.52	6.44	0.14	0.22
Kearney	vein_3	OM-DD-07-047	240095.20	371094.67	28.93	18.18	1.62	2.85
Kearney	vein_3	OM-DD-07-048	240085.32	371212.01	-39.43 -68.16	1.01	0.19	0.35
Kearney	vein_3	OM-DD-11-084	240094.83	371115.36		4.44	1.14	2.05
Kearney Kearney	vein_3 vein_3	OM-DD-11-085 OM-DD-11-094	240107.42 240096.56	371052.58 371121.47	-158.23 -175.88	0.74	0.08	0.22
Kearney	vein_3	OM-DD-11-004	240030.50	370721.17	43.28	1.82	2.77	4.18
Kearney	vein_3	OM-DD-12-142	240134.32	370982.17	80.93	2.75	0.39	0.58
Kearney	vein_3	OM-DD-15-159	240116.29	370941.38	-16.79	1.26	0.33	0.58
Kearney	vein_3	FR-DD-21-UG-168	240113.66	370963.46	27.29	8.67	2.54	5.56
Kearney	vein_3	FR-DD-21-UG-170	240109.92	370986.86	29.94	20.82	1.50	2.87
Kearney	vein_3	FR-DD-21-UG-172	240097.66	371064.08	42.30	10.54	1.07	2.77
Kearney	vein_3	FR-DD-22-UG-179	240094.13	371098.44	28.44	3.15	2.37	3.88
Kearney	vein_3	FR-DD-22-UG-180	240076.98	371120.67	43.59	1.89	1.50	2.63
Kearney	vein_3	FR-DD-22-UG-181	240094.00	371106.25	10.37	12.50	7.34	15.02
Kearney	vein_3	FR-DD-22-UG-182	240095.93	371081.11	6.66	8.88	1.01	2.12
Kearney	vein_3	FR-DD-22-UG-183	240117.72	370968.47	42.95	21.38	2.11	2.37
Kearney	vein_3	FR-DD-22-UG-184	240114.78	370968.51	38.03	6.76	1.28	2.77
Kearney	vein_3	FR-DD-22-UG-185	240116.89	370952.26	37.01	4.33	0.64	1.97
Kearney	vein_3	FR-DD-22-UG-186	240114.78	370974.53	41.32	10.36	1.65	3.30
Kearney	vein_3	FR-DD-22-UG-187	240115.61	370970.58	40.22	11.47	1.77	2.83
Kearney	vein_3	FR-DD-22-UG-189	240120.20	370960.80	40.41	3.81	0.80	1.15
Kearney	vein_3	FR-DD-22-UG-190	240115.88	370966.82	41.04	6.40	0.60	0.88
Kearney	vein_3	FR-DD-22-UG-191	240080.33	371150.05	7.08	16.76	1.03	3.81
Kearney	vein_3	FR-DD-22-UG-192	240077.12 240074.25	371141.80	17.49	1.63	1.69 0.73	4.56
Kearney Kearney	vein_3 vein_3	OM-CH-12/KY-10 OM-CH-12/KY-11	240074.25	371250.74 371245.62	139.52 139.40	2.03 1.28	0.73	0.80
Kearney	vein_3	OM-CH-12/KY-12	240078.12	371245.02	139.40	1.23	0.19	0.30
Kearney	vein_3	OM-CH-12/KY-13	240079.28	371236.05	139.03	1.39	1.08	1.10
Kearney	vein_3	OM-CH-12/KY-14	240081.24	371231.27	139.03	2.12	0.20	0.20
Kearney	vein_3	OM-CH-12/KY-15	240081.68	371226.09	139.00	3.19	0.30	0.30
Kearney	vein_3	OM-CH-12/KY-16	240082.72	371221.11	139.07	3.53	0.89	0.90
Kearney	vein_3	OM-CH-12/KY-17	240084.53	371216.03	139.04	1.08	0.40	0.40
Kearney	vein_3	OM-CH-12/KY-18	240086.12	371211.19	138.97	2.01	0.50	0.50
Kearney	vein_3	OM-CH-12/KY-19	240084.59	371205.97	138.89	1.35	0.20	0.20
Kearney	vein_3	OM-CH-12/KY-20	240084.31	371201.01	138.83	1.44	0.50	0.50
Kearney	vein_5	OMBHL159	240157.25	370658.23	142.42	20.00	0.71	1.01
Kearney	vein_5	OMBHL164	240157.83	370633.00	133.15	1.56	0.18	0.33
Kearney	vein_9	OMBHL039	240081.34	371307.55	79.35	1.16	1.74	2.81
Kearney	vein_9	OMBHL042	240110.39	371027.32	56.34	4.38	0.18	0.44
Kearney	vein_9	OMBHL044	240127.43	370949.95	99.87	1.22	0.42	0.80
Kearney	vein_9	OMBHL046	240147.10	370675.10	153.92	0.46	0.91	1.30
Kearney	vein_9	OMBHL052	240123.09	370876.05	135.74	2.53	0.41	0.60
Kearney	vein_9	OMBHL055	240140.11	370730.99	134.14	3.85	0.27	0.40
Kearney	vein_9	OMBHL062	240090.28	371156.65	133.38	0.79	1.08	1.56
Kearney	vein_9	OMBHL068	240155.22	370881.83	48.99	1.86	0.54	1.06
Kearney Kearney	vein_9 vein_9	OMBHL071 OMBHL072	240099.21 240156.02	371237.77 370782.39	95.18 77.29	0.48 6.37	0.49 2.00	0.80
Kearney	vein_9	OMBHL072 OMBHL141	240156.02	371200.89	121.87	0.52	0.58	0.85
Kearney	vein_9	OMBHL141 OMBHL143	240092.37	370674.84	131.86	1.38	0.38	1.32
Kearney	vein_9	OMBHL143 OMBHL149	240130.30	371011.09	131.86	27.39	0.89	0.08
Kearney	vein_9	OMBHL149 OMBHL150	240107.33	371011.09	138.08	7.18	0.08	0.08
Kearney	vein_9	OMBHL150 OMBHL152	240113.11	370949.91	143.30	2.33	0.14	0.20
Kearney	vein_9	OMBHL152 OMBHL159	240113.28	370658.50	139.94	2.33	0.11	0.10



Vein	Vein Structure	Hole ID	Easting	Northing	Elevation	Au	Thick	ness (m)
System	vemstructure	note ib	Lusting	Northing	Lievation	(ppm)	True	Drilled
Kearney	vein_9	OMBHL165	240141.73	370696.56	145.37	2.99	0.48	0.93
Kearney	vein_9	OMBHL166	240148.51	370721.53	126.17	10.32	0.41	0.60
Kearney	vein_9	OM-DD-06-002	240100.79	371016.52	144.60	2.85	0.37	0.53
Kearney	vein_9	OM-DD-06-004	240144.65	370722.46	146.73	1.90	1.71	2.65
Kearney	vein_9	OM-DD-06-005	240094.46	371113.60	123.51	4.25	1.30	1.84
Kearney	vein_9	OM-DD-06-006	240088.53	371095.60	133.76	5.00	0.10	0.15
Kearney	vein_9	OM-DD-06-014	240090.67	371141.83	96.71	0.42	0.51	1.00
Kearney	vein_9	OM-DD-07-015	240093.52	371046.00	127.52	6.44	0.14	0.20
Kearney Kearney	vein_9 vein_9	OM-DD-07-016 OM-DD-07-017	240107.77 240103.06	371047.78 371052.47	99.07 46.46	0.32 3.06	0.68	1.00 0.23
Kearney	vein_9	OM-DD-07-017	240103.00	371097.31	73.80	3.47	1.33	2.05
Kearney	vein_9	OM-DD-07-019	240032.07	370839.55	82.21	1.83	2.67	4.55
Kearney	vein_9	OM-DD-07-024	240148.15	370756.26	116.99	7.27	0.35	0.60
Kearney	vein 9	OM-DD-07-026	240150.09	370724.44	95.96	3.11	0.74	1.32
Kearney	vein_9	OM-DD-07-028	240159.33	370673.70	128.74	12.27	1.04	1.72
Kearney	vein_9	OM-DD-07-031	240133.99	370852.42	88.42	4.19	0.10	0.15
Kearney	vein_9	OM-DD-07-034	240138.54	370872.79	104.94	1.69	0.08	0.15
Kearney	vein_9	OM-DD-07-035	240096.09	371201.27	54.22	1.56	0.11	0.20
Kearney	vein_9	OM-DD-07-036	240127.91	370899.10	93.93	1.27	0.23	0.45
Kearney	vein_9	OM-DD-07-037	240134.59	370924.60	101.36	2.76	2.40	4.50
Kearney	vein_9	OM-DD-07-039	240089.65	371141.25	154.30	7.76	0.18	0.25
Kearney	vein_9	OM-DD-07-040	240116.68	370973.98	102.54	2.31	0.22	0.35
Kearney	vein_9	OM-DD-07-042	240116.59	370946.98	145.68	3.09	1.54	2.25
Kearney	vein_9	OM-DD-07-043	240087.98	371179.53	137.55	18.13	0.46	0.70
Kearney	vein_9	OM-DD-07-045	240170.34	370679.52	99.78	5.44	0.16	0.23
Kearney	vein_9	OM-DD-11-079	240095.07	371204.82	112.72	5.03	2.41	4.05
Kearney	vein_9	OM-DD-11-085	240135.18	371044.23	-90.55	28.48	0.08	0.20
Kearney	vein_9	OM-DD-12-106	240174.09	370725.20	-1.71	43.00	0.23	0.35
Kearney	vein_9	OM-DD-12-142 OM-DD-15-159	240126.01 240143.71	370981.89 370942.12	63.75	2.39 1.73	6.71	10.00
Kearney Kearney	vein_9 vein_9	FR-DD-21-UG-168	240143.71 240139.45	370942.12	-90.96 -12.84	1.73	0.08	0.26
Kearney	vein_9	FR-DD-21-UG-108	240139.45	370930.70	13.42	5.84	0.00	1.33
Kearney	vein_9	FR-DD-21-UG-172	240099.84	371063.38	47.48	5.05	0.31	1.70
Kearney	vein 9	FR-DD-22-UG-179	240099.22	371096.93	22.04	32.68	0.53	0.86
Kearney	vein_9	FR-DD-22-UG-183	240121.79	370968.21	40.90	7.53	1.01	1.13
Kearney	vein_9	FR-DD-22-UG-184	240120.26	370967.97	27.50	13.89	0.40	0.87
Kearney	vein_9	FR-DD-22-UG-185	240141.99	370884.89	-5.78	1.93	0.70	2.52
Kearney	vein_9	FR-DD-22-UG-186	240119.66	370980.66	35.45	29.32	1.96	3.95
Kearney	vein_9	FR-DD-22-UG-187	240121.32	370972.32	33.31	5.51	1.09	1.75
Kearney	vein_9	FR-DD-22-UG-188	240136.04	370953.84	-10.65	12.18	0.83	2.16
Kearney	vein_9	FR-DD-22-UG-189	240123.15	370958.37	38.51	4.67	1.33	1.92
Kearney	vein_9	FR-DD-22-UG-190	240122.83	370964.19	33.97	3.54	0.57	0.85
Kearney	vein_9	FR-DD-22-UG-191	240087.44	371149.11	31.24	3.62	0.31	1.05
Kearney	vein_9	FR-DD-22-UG-192	240097.98	371145.16	67.79	2.35	0.30	0.76
Kearney	vein_9	OM-CH-12/KY-21	240083.48	371252.29	139.62	2.17	0.30	0.30
Kearney	vein_9	OM-CH-12/KY-22	240084.44	371247.45	139.28	2.36	0.40	0.40
Kearney	vein_9	OM-CH-12/KY-23	240085.05	371242.38	139.29	1.38	0.10	0.10
Kearney	vein_9	OM-CH-12/KY-24	240085.78	371237.51	139.30	0.71	0.10	0.10
Kearney	vein_9	OM-CH-12/KY-25	240087.45	371232.61	139.11	1.05	0.10	0.10
Kearney Kearney	vein_9 vein_9	OM-CH-12/KY-26 OM-CH-12/KY-27	240088.54 240088.64	371227.84 371222.71	136.45 136.45	1.02 2.35	0.10	0.10
Kearney	vein_9	OM-CH-12/KY-27 OM-CH-12/KY-28	240088.84	371222.71	136.45	1.95	0.30	0.30
Kearney	vein_9	OM-CH-12/KY-29	240090.98	371217.97	136.45	0.97	0.20	0.20
Kearney	vein_9	OM-CH-12/KY-30	240090.13	371212.01	136.45	2.26	0.30	0.20
Kearney	vein_9	OM-CH-12/KY-31	240091.43	371202.86	136.45	1.45	0.20	0.20
Kearney	vein_9	OM-CH-12/KY-32	240091.13	3711202.00	136.45	0.89	0.20	0.20
Kearney	vein_10	OMBHL052	240109.12	370873.08	121.46	12.24	0.20	0.20
Kearney	vein_10	OMBHL150	240110.49	370948.62	135.28	3.63	0.11	0.17



Vein	Vein Structure	Hole ID	Easting	Northing	Elevation	Au	Thick	ness (m)
System	venistructure	note ib	Easting	Northing	Elevation	(ppm)	True	Drilled
Kearney	vein_10	OMBHL152	240107.55	370912.07	122.94	1.28	0.03	0.05
Kearney	vein_10	OM-DD-07-019	240132.31	370840.38	69.99	13.48	0.25	0.43
Kearney	vein_10	OM-DD-07-031	240123.73	370852.78	76.58	2.81	0.33	0.50
Kearney	vein_10	OM-DD-07-034	240123.80	370871.17	80.46	5.60	0.05	0.10
Kearney	vein_10	OM-DD-07-036	240116.60	370898.59	74.51	80.00	0.05	0.10
Kearney	vein_10	OM-DD-07-037	240121.07	370924.02	79.81	1.54	0.05	0.10
Kearney	vein_10	OM-DD-07-040	240110.63	370974.13	95.28	1.20	0.10	0.15
Kearney Kearney	vein_10 vein_10	OM-DD-12-142 OM-DD-15-159	240107.36 240115.64	370982.22 370941.42	84.32 -15.11	10.01 2.15	0.45	0.67 0.34
Kearney	vein_10	OM-DD-13-139 OM-DD-07-031	240115.84	370941.42	68.50	20.16	0.12	0.34
Kearney	vein_11	OM-DD-07-034	240116.76	370869.98	67.41	7.92	0.10	0.15
Kearney	vein 11	OM-DD-07-036	240115.43	370898.53	72.48	5.56	0.15	0.30
Kearney	vein_11	OM-DD-07-037	240113.34	370923.75	67.30	11.84	0.10	0.20
Kearney	 vein_11	OM-DD-07-038	240082.23	370919.70	128.49	4.95	0.10	0.15
Kearney	vein_12	OM-DD-07-038	240059.67	370918.80	101.82	1.93	0.60	0.95
Kearney	vein_12	OM-DD-15-159	240050.84	370939.25	112.67	5.72	0.54	1.03
Kearney	vein_13	OMBHL151	240121.48	370837.64	121.36	0.79	1.03	1.57
Kearney	vein_13	OM-DD-07-019	240134.71	370840.17	73.30	1.02	0.44	0.75
Kearney	vein_13	OM-DD-07-031	240130.28	370852.54	84.16	1.39	0.10	0.15
Kearney	vein_14	OMBHL146	240083.93	371058.41	123.31	3.06	0.13	0.19
Kearney	vein_14	OMBHL149	240087.97	371009.40	118.62	12.32	0.15	0.21
Kearney	vein_14	OM-DD-06-002	240089.31	371016.52	133.12	13.38	0.96	1.36
Kearney	vein_14	OM-DD-06-006	240076.09	371097.79	121.13	1.04	0.29	0.41
Kearney	vein_14	OM-DD-07-015	240089.16	371046.00	123.16	11.38	0.46	0.65
Kearney	vein_14 vein 14	OM-DD-07-039 OM-DD-07-040	240044.59 240107.70	371140.79 370974.18	107.10 91.76	2.27 3.21	0.23	0.35
Kearney Kearney	vein_14 vein_14	OM-DD-07-040	240107.70	371131.46	-34.41	2.79	0.98	0.17
Kearney	vein_14	OM-DD-07-041	240033.03	371094.97	1.05	6.48	1.61	2.91
Kearney	vein_14	OM-DD-12-142	240100.85	370982.30	91.46	3.75	1.01	1.76
Kearney	vein_14	FR-DD-21-UG-170	240106.87	370985.61	34.73	5.61	0.10	0.20
Kearney	 vein_14	FR-DD-21-UG-172	240078.68	371070.32	-3.58	3.06	0.34	0.92
Kearney	vein_14	FR-DD-22-UG-191	240074.90	371150.73	-13.05	7.49	0.03	0.13
Kearney	vein_14	FR-DD-22-UG-192	240068.59	371140.44	-4.28	75.20	0.08	0.21
Kearney	vein_15	OM-DD-07-039	240058.46	371141.32	122.82	1.03	0.14	0.20
Kearney	vein_15	OM-DD-07-041	240088.80	371131.04	-25.66	20.81	3.03	5.49
Kearney	vein_15	FR-DD-22-UG-179	240082.06	371101.94	43.63	2.49	2.21	3.61
Kearney	vein_15	FR-DD-22-UG-181	240085.42	371107.62	25.47	3.96	2.95	5.95
Kearney	vein_15	FR-DD-22-UG-191	240077.91	371150.36	-1.68	2.84	0.53	2.01
Kearney	vein_15	FR-DD-22-UG-192	240074.24	371141.34	10.22	30.09	0.72	1.96
Kearney Kearney	vein_18 vein_18	OMBHL067 OM-DD-07-017	240138.10 240126.56	371027.94 371048.52	37.75 70.56	4.64 7.73	1.55	2.73 0.89
Kearney	vein_18 vein_18	OM-DD-07-017 OM-DD-07-034	240126.56	371048.52	108.56	26.88	0.61 0.08	0.89
Kearney	vein_18	OM-DD-07-034	240140.80	370924.78	108.36	3.01	0.08	0.15
Kearney	vein_18	OM-DD-07-041	240135.10	371127.90	37.45	8.66	0.00	1.33
Kearney	vein_18	OM-DD-11-084	240135.60	371108.32	-12.00	5.36	0.56	0.92
Kearney	vein_18	OM-DD-11-090	240139.18	371072.11	-55.90	1.19	0.29	0.73
Kearney	vein_18	OM-DD-12-142	240146.76	370981.55	40.63	4.42	2.27	3.41
Kearney	vein_18	FR-DD-21-UG-170	240144.48	371000.44	-26.72	0.52	0.19	0.38
Kearney	vein_18	FR-DD-21-UG-174	240134.94	371108.33	8.24	6.02	1.38	3.29
Kearney	vein_18	FR-DD-21-UG-176	240131.70	371082.44	12.64	4.51	1.94	4.31
Kearney	vein_18	FR-DD-22-UG-179	240140.31	371084.38	-30.56	0.99	1.72	2.89
Kearney	vein_18	FR-DD-22-UG-181	240138.35	371100.93	-78.67	2.26	0.05	0.12
Kearney	vein_18	FR-DD-22-UG-184	240146.34	370965.37	-22.74	1.46	0.09	0.21
Kearney	vein_18	FR-DD-22-UG-186	240136.90	371002.55	14.61	8.35	0.47	0.94
Kearney	vein_18	FR-DD-22-UG-187	240134.93	370976.52	16.56	8.22	0.90	1.48
Kearney	vein_18	FR-DD-22-UG-188	240140.09	370951.34	-20.16	6.56	0.06	0.17
Kearney	vein_18	FR-DD-22-UG-189	240132.08	370950.98	32.68	0.98	1.12	1.63
Kearney	vein_18	FR-DD-22-UG-190	240133.41	370960.20	22.91	5.62	1.01	1.53



Kearney         vein_19         OMBHL039         240085.41         371309.81         84.01         1.36         O           Kearney         vein_19         OMBHL040         240117.11         371189.02         31.81         7.49         1           Kearney         vein_19         OMBHL062         240106.95         371160.19         150.42         0.84         0           Kearney         vein_19         OMBHL067         240141.10         371028.31         42.06         2.00         0           Kearney         vein_19         OM-DD-07.017         240140.06         371047.03         84.53         0.95         0           Kearney         vein_19         OM-DD-07.041         24015.45         371127.06         58.28         3.34         0         0.20         0           Kearney         vein_19         OM-DD-07.048         240125.67         37121.378         122.06         3.08         5         5.20         1           Kearney         vein_19         OM-DD-11.079         240135.67         371213.78         122.06         3.08         5         2.21         0         0         0         1.04         0         0         1.04         0         1.04         0         1.04	True         Drilled           0.31         0.50           1.01         1.88           0.13         0.24           0.53         0.76           0.68         1.19           0.28         0.40           0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33           1.92         4.80
Kearney         vein_19         OMBHL040         240117.11         371189.02         31.81         7.49         1           Kearney         vein_19         OMBHL042         240133.18         371042.92         96.06         1.60         0           Kearney         vein_19         OMBHL067         240141.10         371023.31         42.06         2.00         0           Kearney         vein_19         OM-DD-07-017         240141.10         371023.31         42.06         2.00         0           Kearney         vein_19         OM-DD-07-035         240101.27         371201.86         62.50         0.57         0           Kearney         vein_19         OM-DD-07-041         240045.45         371127.06         58.28         3.34         0         0.20         0           Kearney         vein_19         OM-DD-07-048         240035.17         371171.37         25.75         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.20         1         5.	1.01         1.88           0.13         0.24           0.53         0.76           0.68         1.19           0.28         0.40           0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OMBHL042         240133.18         371042.92         96.06         1.60         C           Kearney         vein_19         OMBHL067         240140.695         371160.19         150.42         0.84         C           Kearney         vein_19         OMBL067         240141.10         371028.31         42.06         2.00         C           Kearney         vein_19         OM-D0-07-017         240140.06         371047.03         84.53         0.95         C           Kearney         vein_19         OM-D0-07-041         240145.45         37117.06         58.28         3.34         C           Kearney         vein_19         OM-D0-07-044         240135.17         371171.37         25.75         5.20         1           Kearney         vein_19         OM-D0-07-048         240125.67         371213.78         22.06         3.08         5           Kearney         vein_19         OM-D0-11-079         240097.61         371205.11         119.03         1.04         C           Kearney         vein_19         OM-D0-11-081         24012.40         371204.29         34.82         1.30         C           Kearney         vein_19         OM-D0-11-081         24	0.13         0.24           0.53         0.76           0.68         1.19           0.28         0.40           0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OMBHL062         240106.95         371160.19         150.42         0.84         C           Kearney         vein_19         OMBHL067         240141.10         371028.31         42.06         2.00         C           Kearney         vein_19         OM-DD-07-017         240140.06         371047.03         84.53         0.95         C           Kearney         vein_19         OM-DD-07-041         240145.45         371127.06         58.28         3.34         C           Kearney         vein_19         OM-DD-07-041         240145.45         371127.06         58.28         3.34         C           Kearney         vein_19         OM-DD-07-046         240135.17         371171.37         25.75         5.20         D           Kearney         vein_19         OM-DD-07-046         240133.67         371205.11         119.03         1.04         C           Kearney         vein_19         OM-DD-11-079         240099.76         371205.11         119.03         1.04         C           Kearney         vein_19         OM-DD-11-081         240112.40         371024.29         34.82         1.30         C         Kearney         vein_19         OM-DD-12.042         240143.16	0.53         0.76           0.68         1.19           0.28         0.40           0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OMBHL067         240141.10         371028.31         42.06         2.00         C           Kearney         vein_19         OM-DD-07-017         240140.06         371047.03         84.53         0.95         C           Kearney         vein_19         OM-DD-07-035         240101.27         371201.86         62.50         0.57         C           Kearney         vein_19         OM-DD-07-043         240097.94         371177.03         94.87         0.20         C           Kearney         vein_19         OM-DD-07-043         240097.94         371171.37         25.75         5.20         1           Kearney         vein_19         OM-DD-07-048         240125.67         371201.81         19.50         2.21         C           Kearney         vein_19         OM-DD-11.079         240099.76         371201.21         119.03         1.04         C           Kearney         vein_19         OM-DD-11.081         240112.40         371204.29         34.82         1.30         C           Kearney         vein_19         OM-DD-11.082         24016.58         371039.14         -46.59         1.25         C           Kearney         vein_19         OM-DD-12.106	0.68         1.19           0.28         0.40           0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-017         240140.06         371047.03         84.53         0.95         C           Kearney         vein_19         OM-DD-07-035         240101.27         371201.86         62.50         0.57         C           Kearney         vein_19         OM-DD-07-041         240145.45         371171.37         DS.57         C           Kearney         vein_19         OM-DD-07-043         240097.94         371171.37         DS.57         D         C           Kearney         vein_19         OM-DD-07-046         240135.17         371171.37         DS.57         D.20         C           Kearney         vein_19         OM-DD-07-048         240125.67         371213.78         22.06         3.08         S           Kearney         vein_19         OM-DD-11-079         240099.76         371205.11         119.03         1.04         C           Kearney         vein_19         OM-DD-11-084         240140.34         371071.13         46.59         1.25         C           Kearney         vein_19         OM-DD-11-089         240143.16         371071.13         46.52         9.46         1           Kearney         vein_19         OM-DD-12-092         240143.16	0.28         0.40           0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-035         240101.27         371201.86         62.50         0.57         C           Kearney         vein_19         OM-DD-07-041         240145.45         371127.06         58.28         3.34         C           Kearney         vein_19         OM-DD-07-043         240097.94         371178.39         148.70         0.20         C           Kearney         vein_19         OM-DD-07-048         240135.17         371171.37         25.75         5.20         1           Kearney         vein_19         OM-DD-07-048         240135.67         371201.378         22.06         3.08         5           Kearney         vein_19         OM-DD-11-079         240099.76         371205.11         119.03         1.04         C           Kearney         vein_19         OM-DD-11-081         240140.34         371107.65         -5.98         1.09         2           Kearney         vein_19         OM-DD-11-085         240156.58         371071.13         -46.82         9.46         11           Kearney         vein_19         OM-DD-12-099B         240173.52         371198.03         -125.65         3.76         C           Kearney         vein_19         FR-DD-21-UG-	0.13         0.25           0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-041         240145.45         371127.06         58.28         3.34         C           Kearney         vein_19         OM-DD-07-043         240097.94         371178.39         148.70         0.20         C           Kearney         vein_19         OM-DD-07-046         240135.17         371171.37         25.75         5.20         1           Kearney         vein_19         OM-DD-07-048         240125.67         371217.8         22.06         3.08         5           Kearney         vein_19         OM-DD-07-049         240133.67         371201.78         22.06         3.08         5           Kearney         vein_19         OM-DD-11-079         2400197.65         371205.11         119.03         1.04         C           Kearney         vein_19         OM-DD-11-081         24012.40         371204.29         34.82         1.30         C           Kearney         vein_19         OM-DD-11-085         240140.34         371071.13         -46.59         1.25         C           Kearney         vein_19         OM-DD-12-099B         240143.66         370981.51         37.42         3.38         1           Kearney         vein_19         FR-DD-21-UG-170 </td <td>0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33</td>	0.06         0.10           0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-043         240097.94         371178.39         148.70         0.20         0           Kearney         vein_19         OM-DD-07-046         240135.17         371171.37         25.75         5.20         11           Kearney         vein_19         OM-DD-07-048         240125.67         371213.78         22.06         3.08         55           Kearney         vein_19         OM-DD-07-049         24013.67         371205.12         19.50         2.21         00           Kearney         vein_19         OM-DD-11-079         240099.76         371205.12         19.50         2.21         00           Kearney         vein_19         OM-DD-11-081         240112.40         371205.29         34.82         1.30         00           Kearney         vein_19         OM-DD-11-084         240140.34         37107.13         -46.59         1.25         00           Kearney         vein_19         OM-DD-11-090         240143.16         371071.13         -46.82         9.46         10           Kearney         vein_19         OM-DD-12-099B         240173.52         371198.03         -128.20         6.50         00           Kearney         vein_19         FR-DD-21	0.40         0.60           1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-046         240135.17         371171.37         25.75         5.20         1           Kearney         vein_19         OM-DD-07-048         240125.67         371213.78         22.06         3.08         5           Kearney         vein_19         OM-DD-07-049         240133.67         371261.92         19.50         2.21         0           Kearney         vein_19         OM-DD-11-079         240099.76         371205.11         119.03         1.04         0           Kearney         vein_19         OM-DD-11-084         240140.34         371107.65         -5.98         1.09         2           Kearney         vein_19         OM-DD-11-085         240156.58         371039.14         -46.59         1.25         0           Kearney         vein_19         OM-DD-12-099B         240173.52         371198.03         -125.65         3.76         0           Kearney         vein_19         OM-DD-12-142         240149.60         370981.51         37.42         3.38         1           Kearney         vein_19         FR-DD-21-UG-170         240146.80         37101.35         -30.73         0.75         0           Kearney         vein_19         FR-DD-21-UG-	1.16         2.08           5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-048         240125.67         371213.78         22.06         3.08         5           Kearney         vein_19         OM-DD-07-049         240133.67         371261.92         19.50         2.21         0           Kearney         vein_19         OM-DD-11-079         240099.76         371205.11         119.03         1.04         0           Kearney         vein_19         OM-DD-11-081         240112.40         371204.29         34.82         1.30         0           Kearney         vein_19         OM-DD-11-085         240156.58         371039.14         -46.59         1.25         0           Kearney         vein_19         OM-DD-11-090         240143.16         371071.13         -46.82         9.46         1           Kearney         vein_19         OM-DD-12-0998         240173.52         371198.03         -125.65         3.76         0           Kearney         vein_19         OM-DD-12-142         240149.60         370981.51         37.42         3.38         1           Kearney         vein_19         FR-DD-21-UG-170         240146.80         37101.35         -30.73         0.75         0           Kearney         vein_19         FR-DD-21-UG	5.34         9.73           0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-07-049         240133.67         371261.92         19.50         2.21         C           Kearney         vein_19         OM-DD-11-079         240099.76         371205.11         119.03         1.04         C           Kearney         vein_19         OM-DD-11-081         240112.40         371204.29         34.82         1.30         C           Kearney         vein_19         OM-DD-11-084         240140.34         371107.65         -5.98         1.09         2           Kearney         vein_19         OM-DD-11-085         240156.58         371091.13         -46.82         9.46         1           Kearney         vein_19         OM-DD-12-099B         240143.16         371071.13         -46.82         9.46         1           Kearney         vein_19         OM-DD-12-099B         240173.52         371198.03         -125.65         3.76         C           Kearney         vein_19         OM-DD-15-159         240155.10         370941.82         -128.20         6.50         C           Kearney         vein_19         FR-DD-21-UG-176         240148.03         37101.35         -30.73         0.75         C           Kearney         vein_19         FR-DD-21	0.13         0.26           0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearneyvein_19OM-DD-11-079240099.76371205.11119.031.04CKearneyvein_19OM-DD-11-081240112.40371204.2934.821.30CKearneyvein_19OM-DD-11-084240140.34371107.65-5.981.0922Kearneyvein_19OM-DD-11-085240156.58371039.14-46.591.25CKearneyvein_19OM-DD-11-090240143.16371071.13-46.829.461Kearneyvein_19OM-DD-12-199B240173.52371198.03-125.653.76CKearneyvein_19OM-DD-12-142240149.60370981.5137.423.381Kearneyvein_19OM-DD-15-159240155.1037041.82-128.206.50CKearneyvein_19FR-DD-21-UG-170240146.80371001.35-30.730.75CKearneyvein_19FR-DD-21-UG-176240138.63371087.53-0.7412.082Kearneyvein_19FR-DD-21-UG-177240146.00371083.45-2.183.12CKearneyvein_19FR-DD-21-UG-178240131.09371134.117.6310.71CKearneyvein_19FR-DD-22-UG-181240144.30371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-181240144.31371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240153.04370964.77-32.976.8	0.23         0.38           0.97         5.50           2.29         3.70           0.61         1.33
Kearney         vein_19         OM-DD-11-081         240112.40         371204.29         34.82         1.30         C           Kearney         vein_19         OM-DD-11-084         240140.34         371107.65         -5.98         1.09         22           Kearney         vein_19         OM-DD-11-085         240156.58         371039.14         -46.59         1.25         C           Kearney         vein_19         OM-DD-11-090         240143.16         371071.13         -46.82         9.46         1           Kearney         vein_19         OM-DD-12-09B         240173.52         371198.03         -125.65         3.76         C           Kearney         vein_19         OM-DD-12-142         240149.60         370981.51         37.42         3.38         1           Kearney         vein_19         OM-DD-15-159         240155.10         370941.82         -128.20         6.50         C           Kearney         vein_19         FR-DD-21-UG-170         240146.80         371001.35         -30.73         0.75         C           Kearney         vein_19         FR-DD-21-UG-174         240138.86         371087.53         -0.74         12.08         2           Kearney         vein_19         FR-DD	0.975.502.293.700.611.33
Kearney         vein_19         OM-DD-11-084         240140.34         371107.65         -5.98         1.09         2           Kearney         vein_19         OM-DD-11-085         240156.58         371039.14         -46.59         1.25         0           Kearney         vein_19         OM-DD-11-090         240143.16         371071.13         -46.82         9.46         1           Kearney         vein_19         OM-DD-12-099B         240173.52         371198.03         -125.65         3.76         0           Kearney         vein_19         OM-DD-12-142         240149.60         370981.51         37.42         3.38         1           Kearney         vein_19         OM-DD-15-159         240151.10         370941.82         -128.20         6.50         0           Kearney         vein_19         FR-DD-21-UG-170         240146.80         371001.35         -30.73         0.75         0           Kearney         vein_19         FR-DD-21-UG-176         240138.86         371087.53         -0.74         12.08         2           Kearney         vein_19         FR-DD-21-UG-177         240146.00         371038.45         -2.18         3.12         0           Kearney         vein_19         FR	2.293.700.611.33
Kearney         vein_19         OM-DD-11-085         240156.58         371039.14         -46.59         1.25         C           Kearney         vein_19         OM-DD-11-090         240143.16         371071.13         -46.82         9.46         1           Kearney         vein_19         OM-DD-12-099B         240173.52         371198.03         -125.65         3.76         C           Kearney         vein_19         OM-DD-12-142         240149.60         370981.51         37.42         3.38         1           Kearney         vein_19         OM-DD-15-159         240155.10         370941.82         -128.20         6.50         C           Kearney         vein_19         FR-DD-21-UG-170         240146.80         371001.35         -30.73         0.75         C           Kearney         vein_19         FR-DD-21-UG-174         240138.93         371113.84         1.61         1.37         22           Kearney         vein_19         FR-DD-21-UG-176         240148.00         371038.45         -2.18         3.12         C           Kearney         vein_19         FR-DD-21-UG-178         240141.00         371134.11         7.63         10.71         C           Kearney         vein_19	0.61 1.33
Kearneyvein_19OM-DD-11-090240143.16371071.13-46.829.461Kearneyvein_19OM-DD-12-099B240173.52371198.03-125.653.760Kearneyvein_19OM-DD-12-142240149.60370981.5137.423.381Kearneyvein_19OM-DD-15-159240155.10370941.82-128.206.500Kearneyvein_19FR-DD-21-UG-170240146.80371001.35-30.730.750Kearneyvein_19FR-DD-21-UG-174240138.93371113.841.611.3722Kearneyvein_19FR-DD-21-UG-176240146.00371087.53-0.7412.0822Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.3622Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-183240150.3537096.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240053.04370982.27-7.042.160Kearneyvein_19FR-DD-22-UG-187240053.04370982.27-7.0	1.92 4.80
Kearneyvein_19OM-DD-12-142240149.60370981.5137.423.381Kearneyvein_19OM-DD-15-159240155.10370941.82-128.206.500Kearneyvein_19FR-DD-21-UG-170240146.80371001.35-30.730.750Kearneyvein_19FR-DD-21-UG-174240138.93371113.841.611.372Kearneyvein_19FR-DD-21-UG-176240138.86371087.53-0.7412.082Kearneyvein_19FR-DD-21-UG-176240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-186240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.04	
Kearneyvein_19OM-DD-15-159240155.10370941.82-128.206.500Kearneyvein_19FR-DD-21-UG-170240146.80371001.35-30.730.750Kearneyvein_19FR-DD-21-UG-174240138.93371113.841.611.372Kearneyvein_19FR-DD-21-UG-176240138.86371087.53-0.7412.082Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-177240144.00371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.6337109.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240148.7337107.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337123.23136	0.30 0.54
Kearneyvein_19FR-DD-21-UG-170240146.80371001.35-30.730.750Kearneyvein_19FR-DD-21-UG-174240138.93371113.841.611.372Kearneyvein_19FR-DD-21-UG-176240138.86371087.53-0.7412.082Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337123.23136.451.121Kearneyvein_19OM-CH-12/KY-28240094.9337123.301	1.14 1.72
Kearneyvein_19FR-DD-21-UG-174240138.93371113.841.611.372Kearneyvein_19FR-DD-21-UG-176240138.86371087.53-0.7412.082Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337123.23136.451.121Kearneyvein_19OM-CH-12/KY-28240094.93371203.301	0.02 0.09
Kearneyvein_19FR-DD-21-UG-176240138.86371087.53-0.7412.082Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337123.23136.451.121Kearneyvein_19OM-CH-12/KY-29240094.93371203.30136.450.540	0.10 0.21
Kearneyvein_19FR-DD-21-UG-177240146.00371038.45-2.183.120Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337122.82136.454.930Kearneyvein_19OM-CH-12/KY-29240094.9337123.20136.450.540	2.68 6.36
Kearneyvein_19FR-DD-21-UG-178B240131.09371134.117.6310.710Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240144.34371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-187240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337122.82136.454.930Kearneyvein_19OM-CH-12/KY-21240096.16371203.30136.450.540	2.26 5.10
Kearneyvein_19FR-DD-22-UG-179240144.80371083.06-36.482.362Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240144.34371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-186240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337122.82136.454.930Kearneyvein_19OM-CH-12/KY-29240094.9337123.30136.450.540	0.07 0.15
Kearneyvein_19FR-DD-22-UG-180240144.34371137.43-60.387.141Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240140.30371100.77-83.272.830Kearneyvein_19FR-DD-22-UG-181240154.63371099.47-118.958.810Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-186240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-187240153.04370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337122.82136.454.930Kearneyvein_19OM-CH-12/KY-29240094.9337123.30136.450.540Kearneyvein_19OM-CH-12/KY-3124096.16371203.30136.450.540	0.40 0.75
Kearney         vein_19         FR-DD-22-UG-181         240140.30         371100.77         -83.27         2.83         00           Kearney         vein_19         FR-DD-22-UG-181         240154.63         37109.47         -118.95         8.81         00           Kearney         vein_19         FR-DD-22-UG-183         240150.35         370966.36         26.57         19.90         00           Kearney         vein_19         FR-DD-22-UG-184         240151.56         370964.77         -32.97         6.81         00           Kearney         vein_19         FR-DD-22-UG-186         240148.73         371017.58         0.30         2.07         00           Kearney         vein_19         FR-DD-22-UG-187         240153.04         370982.27         -7.04         2.16         00           Kearney         vein_19         OM-CH-12/KY-27         240089.93         37122.82         136.45         4.93         00           Kearney         vein_19         OM-CH-12/KY-29         240094.93         37123.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         00	2.60 4.37
Kearney         vein_19         FR-DD-22-UG-181         240154.63         371099.47         -118.95         8.81         O           Kearney         vein_19         FR-DD-22-UG-183         240150.35         370966.36         26.57         19.90         O           Kearney         vein_19         FR-DD-22-UG-183         240151.56         370964.37         -32.97         6.81         O           Kearney         vein_19         FR-DD-22-UG-184         240151.56         370964.77         -32.97         6.81         O           Kearney         vein_19         FR-DD-22-UG-186         240148.73         371017.58         0.30         2.07         O           Kearney         vein_19         FR-DD-22-UG-187         240153.04         370982.27         -7.04         2.16         O           Kearney         vein_19         OM-CH-12/KY-27         240089.93         37122.82         136.45         4.93         O           Kearney         vein_19         OM-CH-12/KY-29         240094.93         371213.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         O	1.76 3.35
Kearneyvein_19FR-DD-22-UG-183240150.35370966.3626.5719.900Kearneyvein_19FR-DD-22-UG-184240151.56370964.77-32.976.810Kearneyvein_19FR-DD-22-UG-186240148.73371017.580.302.070Kearneyvein_19FR-DD-22-UG-186240148.73370982.27-7.042.160Kearneyvein_19OM-CH-12/KY-27240089.9337122.82136.454.930Kearneyvein_19OM-CH-12/KY-29240094.93371213.23136.451.121Kearneyvein_19OM-CH-12/KY-31240096.16371203.30136.450.540	0.37 0.94
Kearney         vein_19         FR-DD-22-UG-184         240151.56         370964.77         -32.97         6.81         00           Kearney         vein_19         FR-DD-22-UG-186         240148.73         371017.58         0.30         2.07         00           Kearney         vein_19         FR-DD-22-UG-186         240153.04         370982.27         -7.04         2.16         00           Kearney         vein_19         OM-CH-12/KY-27         240089.93         37122.82         136.45         4.93         00           Kearney         vein_19         OM-CH-12/KY-29         240094.93         371213.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         00	0.66 1.86
Kearney         vein_19         FR-DD-22-UG-186         240148.73         371017.58         0.30         2.07         0           Kearney         vein_19         FR-DD-22-UG-187         240153.04         370982.27         -7.04         2.16         0           Kearney         vein_19         OM-CH-12/KY-27         240089.93         37122.82         136.45         4.93         0           Kearney         vein_19         OM-CH-12/KY-29         240094.93         371213.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         0	0.29 0.32 0.21 0.47
Kearney         vein_19         FR-DD-22-UG-187         240153.04         370982.27         -7.04         2.16         O           Kearney         vein_19         OM-CH-12/KY-27         240089.93         371222.82         136.45         4.93         O           Kearney         vein_19         OM-CH-12/KY-27         240094.93         371213.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         O	0.15 0.31
Kearney         vein_19         OM-CH-12/KY-27         240089.93         371222.82         136.45         4.93         O           Kearney         vein_19         OM-CH-12/KY-29         240094.93         371213.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         0	0.56 0.97
Kearney         vein_19         OM-CH-12/KY-29         240094.93         371213.23         136.45         1.12         1           Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         0	0.10 0.10
Kearney         vein_19         OM-CH-12/KY-31         240096.16         371203.30         136.45         0.54         O	1.30 1.30
	0.10 0.10
	0.50 0.50
	0.07 0.12
	0.03 0.05
	1.67 2.53
Kearney         vein_20         FR-DD-22-UG-183         240152.43         370966.22         25.53         7.43         0	0.59 0.67
	0.18 0.30
	0.75 1.07
	0.12 0.20
	0.10 0.15
	0.07 0.13
	0.11 0.15
	0.110.150.240.34
	0.110.150.240.340.080.12
	0.110.150.240.340.080.120.230.35
	0.110.150.240.340.080.120.230.350.280.50
	0.11         0.15           0.24         0.34           0.08         0.12           0.23         0.35           0.28         0.50           0.17         0.36
	0.11         0.15           0.24         0.34           0.08         0.12           0.23         0.35           0.28         0.50           0.17         0.36           0.82         1.98
	0.11         0.15           0.24         0.34           0.08         0.12           0.23         0.35           0.28         0.50           0.17         0.36           0.82         1.98           0.21         0.39
	0.11         0.15           0.24         0.34           0.08         0.12           0.23         0.35           0.28         0.50           0.17         0.36           0.82         1.98           0.21         0.39           0.83         1.18
Kearney         Vein_23         OM-DD-07-017         240116.81         371050.12         60.66         7.64         C           Kearney         vein_23         OM-DD-07-018         240105.91         371096.52         89.01         3.01         0	0.11         0.15           0.24         0.34           0.08         0.12           0.23         0.35           0.28         0.50           0.17         0.36           0.82         1.98           0.21         0.39



Vein	Vein Structure	Hole ID	Easting	Northing	Elevation	Au	Thickr	ness (m)
System	Vemberacture	note ib	Lusting	Northing	Lievation	(ppm)	True	Drilled
Kearney	vein_23	OM-DD-07-041	240111.67	371129.41	8.51	8.16	0.33	0.60
Kearney	vein_23	OM-DD-07-044	240111.84	371081.74	89.44	18.48	0.06	0.12
Kearney	vein_23	OM-DD-11-089	240112.59	371155.97	-43.81	10.20	0.07	0.16
Kearney	vein_23	FR-DD-21-UG-174	240121.77	371089.98	30.40	50.63	0.92	2.24
Kearney	vein_24	OMBHL039	240089.19	371311.90	88.32	21.89	0.99	1.60
Kearney	vein_24	OMBHL063	240101.08	371264.11	156.55	2.92	1.05	1.50
Kearney	vein_24	OMBHL071	240118.50	371241.52	119.08	17.60	0.37	0.58
Kearney	vein_24	OMBHL141	240115.66	371205.98	145.76	2.20	0.17	0.25
Kearney	vein_24	OM-DD-06-005	240127.21	371113.60	156.26	12.16	0.26	0.37
Kearney	vein_24	OM-DD-07-043	240107.71	371177.15	159.14	2.10	0.42	0.60
Kearney	vein_24	OM-CH-12/KY-01	240120.92	371147.07	154.24	2.56	1.50	1.50
Kearney	vein_24	OM-CH-12/KY-02	240119.27	371151.96	153.91	2.21	0.20	0.20
Kearney	vein_24	OM-CH-12/KY-03	240116.61	371156.60	153.70	4.04	0.60	0.60
Kearney	vein_24	OM-CH-12/KY-04	240118.68	371167.49	153.54	8.64	0.30	0.30
Kearney	vein_24	OM-CH-12/KY-05	240110.81	371189.68	153.37	6.49	0.20	0.20
Kearney	vein_24	OM-CH-12/KY-06	240111.12	371193.68	152.93	5.69	1.00	1.00
Kearney	vein_24	OM-CH-12/KY-07	240110.26	371198.49	153.04	0.99	0.90	0.90
Kearney	vein_24	OM-CH-12/KY-08	240107.26	371203.11	153.25	2.00	0.70	0.70
Kearney	vein_24	OM-CH-12/KY-09	240106.78	371208.49	153.25	11.49	0.80	0.80
Kearney	vein_26	OMBHL039	240086.94	371310.66	85.75	4.91	0.72	1.17
Kearney	vein_26	OMBHL062	240108.98	371160.63	152.50	1.37	0.95	1.38
Kearney	vein_26	OM-DD-07-043	240100.79	371178.03	151.84	0.14	0.27	0.40
Kearney	vein_26	OM-DD-11-079	240101.68	371205.23	121.57	3.62	0.14	0.24
Kearney	vein_26	OM-CH-12/KY-29	240097.72	371213.48	136.45	1.12	0.10	0.10
Kearney	vein_26	OM-CH-12/KY-30	240098.90	371208.48	136.45	0.51	0.10	0.10
Kearney	vein_26	OM-CH-12/KY-32	240100.65	371198.69	136.45	2.61	0.30	0.30
Kearney	vein_27	OMBHL039	240134.63	371337.09	140.27	2.83	0.59	0.95
Kearney	vein_27	OMBHL065	240134.54	371354.13	77.56	7.01	0.17	0.28
Kearney	vein_28	OMBHL039	240136.22	371337.98	142.10	2.12	0.12	0.19
Kearney	vein_28	OMBHL065	240139.28	371354.33	83.53	2.99	1.50	2.41
Kearney	vein_29	OMBHL055	240135.67	370730.59	129.20	13.74	0.13	0.20
Kearney	vein_29	OMBHL156	240127.75	370704.64	131.86	3.95	0.07	0.12
Kearney	vein_29	OMBHL157	240127.44	370711.50	134.37	1.39	0.39	0.58
Kearney	vein_29	OMBHL167	240138.10	370735.69	121.83	3.63	0.33	0.48
Kearney	vein_29	OM-DD-07-028	240134.38	370670.53	93.86	3.32	0.14	0.25
Kearney	vein_29	OM-DD-12-106	240111.79	370718.81	68.68	0.91	0.21	0.31
Kearney	vein_30	OMBHL154	240114.76	370746.38	124.24	4.51	0.25	0.35
Kearney	vein_30	OMBHL155	240119.16	370731.44	128.25	1.34	0.19	0.27
Kearney	vein_30	OM-DD-12-106	240110.07	370718.64	70.59	1.81	0.20	0.30
Joshua	vein_1	OMBHL051	239673.15	370858.53	119.55	3.11	0.12	0.17
Joshua	vein_1	OMBHL053	239662.99	370934.09	97.59	8.93	4.29	7.20
Joshua	vein_1	OMBHL057	239646.58	370887.51	156.82	4.58	5.24	7.95
Joshua	vein_1	OMBHL070	239649.28	370958.95	108.97	0.95	0.29	0.45
Joshua	vein_1	OMBHL075	239637.37	370969.21	139.68	2.04	1.27	2.33
Joshua Joshua	vein_1 vein_1	OMBHL084 OMBHL088	239678.16 239679.15	370843.44 370719.85	120.41 139.90	2.26 1.68	1.72	2.75 1.36
Joshua Joshua							0.87	
Joshua Joshua	vein_1 vein_1	OMBHL090 OMBHL093	239683.37 239699.64	370624.73 370576.60	142.62 130.52	1.09 1.52	0.26	0.40
Joshua	vein_1	OMBHL093 OMBHL094	239699.64	370526.74	130.52	1.52	2.15	3.37
Joshua	vein_1	OMBHL094 OMBHL096	239707.83	370326.74	138.40	0.28	0.42	0.64
Joshua	vein_1	OMBHL098	239721.06	370479.14	129.73	0.28	1.08	1.55
Joshua	vein_1	OMBHL098 OMBHL099A	239754.81	370383.97	129.73	0.38	0.24	0.36
Joshua	vein_1	OMBHL099A OMBHL102	239754.81	370958.14	171.20	1.70	0.24	0.30
Joshua	vein_1	OMBHL102 OMBHL115	239621.95	370958.14	78.35	0.51	0.45	1.10
Joshua	vein_1	OMBHL115 OM-DD-11-052	239639.04 239641.14	370889.78	157.72	2.40	3.46	5.13
Joshua	vein_1	OM-DD-11-052 OM-DD-11-054	239641.14	370912.27	137.72	5.43	2.53	3.60
Joshua	vein_1	OM-DD-11-054 OM-DD-11-055	239652.84 239671.79	370889.84	144.54	5.43	1.06	3.60
Joshua		OM-DD-11-055 OM-DD-11-056	239671.79	370859.05	122.41	9.61	2.40	3.40
JUSHUd	vein_1	000-11-020	233000.13	210001.21	141.01	3.01	2.40	5.40



Vein	Vein Structure	Hole ID	Easting	Northing	Elevation	Au	Thickr	ness (m)
System	vemstructure		Lasting	Northing	Lievation	(ppm)	True	Drilled
Joshua	vein_1	OM-DD-11-060	239645.84	370980.32	139.93	2.48	1.05	1.50
Joshua	vein_1	OM-DD-11-061	239669.51	370853.43	110.50	10.94	1.09	1.70
Joshua	vein_1	OM-DD-11-062	239670.40	370836.53	112.66	9.97	0.84	1.20
Joshua	vein_1	OM-DD-11-063	239690.07	370784.82	151.86	14.90	3.70	5.30
Joshua	vein_1	OM-DD-11-065	239691.73	370779.28	147.15	4.51	1.19	1.85
Joshua	vein_1	OM-DD-11-070	239693.61	370757.54	138.24	4.82	3.39	4.60
Joshua	vein_1	OM-DD-11-073	239691.67	370731.84	139.36	3.37	1.16	1.60
Joshua	vein_1	OM-DD-11-074	239687.16	370706.70	146.49	0.21	1.30	1.84
Joshua Joshua	vein_1 vein_1	OM-DD-11-076 OM-DD-11-077	239633.35 239653.82	370971.77 371006.94	151.55 130.78	2.46 1.20	0.38 0.75	0.56
Joshua	vein_1	OM-DD-11-077	239642.18	371000.94	159.55	0.90	0.75	0.38
Joshua	vein 1	OM-DD-11-080	239631.09	371023.57	151.00	4.09	0.23	0.33
Joshua	vein_1	OM-DD-11-083	239630.57	371080.65	151.74	11.72	0.22	0.55
Joshua	vein_1	OM-DD-11-087	239632.89	371054.32	143.31	0.68	0.46	0.69
Joshua	vein_1	OM-DD-11-088	239616.56	371137.37	124.64	10.02	0.30	0.43
Joshua	vein 1	OM-DD-11-091	239645.26	371075.05	112.90	5.71	0.82	1.18
Joshua	vein_1	OM-DD-11-093	239633.29	371110.32	102.89	0.34	0.78	1.19
Joshua	vein_1	OM-DD-11-095	239615.41	371174.04	78.25	1.80	0.15	0.24
Joshua	vein_1	OM-DD-12-100	239653.79	370787.50	98.18	4.06	1.19	2.04
Joshua	vein_1	OM-DD-12-101A	239605.29	371165.16	108.76	21.60	0.21	0.33
Joshua	vein_1	OM-DD-12-102	239596.38	371189.05	98.07	12.90	0.19	0.30
Joshua	vein_1	OM-DD-12-103	239642.10	370783.03	-7.00	8.44	4.26	26.63
Joshua	vein_1	OM-DD-12-105	239588.67	371213.89	92.63	1.99	0.21	0.32
Joshua	vein_1	OM-DD-12-108	239582.74	371227.44	85.31	0.72	0.16	0.25
Joshua	vein_1	OM-DD-12-110	239662.15	370769.60	111.30	10.53	0.49	0.74
Joshua	vein_1	OM-DD-12-111	239630.24	371155.91	65.19	14.13	0.36	1.15
Joshua	vein_1	OM-DD-12-113	239661.37	370864.58	75.67	1.54	0.28	0.49
Joshua	vein_1	OM-DD-12-114B	239648.48	370739.38	72.38	6.50	1.04	3.04
Joshua	vein_1	OM-DD-12-117	239661.76	370899.17	90.07	1.53	1.69	2.54
Joshua Joshua	vein_1 vein 1	OM-DD-12-118 OM-DD-12-120	239674.29 239648.35	370686.73 370814.90	136.51 86.43	7.09 14.23	1.59 2.06	2.37 3.32
Joshua	vein_1	OM-DD-12-120 OM-DD-12-121	239648.33	370687.49	113.52	3.30	1.40	4.33
Joshua	vein_1	OM-DD-12-121 OM-DD-12-122	239678.20	370633.39	58.55	11.47	1.40	3.63
Joshua	vein_1	OM-DD-12-122 OM-DD-12-123	239667.99	370715.90	119.90	12.47	1.03	2.90
Joshua	vein_1	OM-DD-12-125	239652.76	370714.03	78.98	2.79	0.73	2.75
Joshua	vein 1	OM-DD-12-126	239669.10	370664.17	126.97	2.10	0.30	0.47
Joshua	 vein_1	OM-DD-12-129	239658.68	370914.44	116.07	13.41	0.61	0.89
Joshua	vein_1	OM-DD-12-131	239684.04	370610.81	103.35	3.96	0.20	0.32
Joshua	vein_1	OM-DD-12-132	239649.87	370952.45	113.01	3.20	0.95	1.64
Joshua	vein_1	OM-DD-12-134	239674.07	370643.66	115.03	46.93	1.13	1.87
Joshua	vein_1	OM-DD-12-135	239666.89	370951.96	82.76	1.29	0.55	1.78
Joshua	vein_1	OM-DD-12-136	239697.05	370557.37	140.58	1.99	0.91	1.55
Joshua	vein_1	OM-DD-12-138	239602.47	371134.71	141.59	0.91	0.15	0.22
Joshua	vein_1	OM-DD-12-140	239692.16	370582.76	138.70	4.62	0.29	0.43
Joshua	vein_1	OM-DD-12-141	239672.33	370821.77	114.45	10.39	0.54	0.80
Joshua	vein_1	OM-DD-12-143	239695.29	370582.10	122.70	0.96	0.18	0.37
Joshua	vein_1	OM-DD-12-144	239704.49	370531.93	154.00	3.16	1.03	1.50
Joshua	vein_1	OM-DD-13-147	239644.44	370729.08	22.71	12.85	1.17	5.39
Joshua	vein_1	OM-DD-13-148	239651.73	370734.20	101.61	2.23	0.83	1.95
Joshua	vein_1	OM-DD-15-153	239634.69	370806.22	-46.77	1.32	1.96	8.08
Joshua Joshua	vein_1 vein_1	OM-DD-15-154 OM-DD-15-155	239670.48 239652.55	370665.16 370920.36	25.93 47.42	1.25 10.08	0.06 10.36	0.10
Joshua	vein_1	OM-DD-15-155 OM-DD-15-156	239652.55	370920.36	64.80	1.90	1.43	2.66
Joshua	vein_1	OM-DD-15-161	239658.71	371054.40	104.49	3.56	0.38	0.55
Joshua	vein_1	FR-DD-21-164	239659.71	371034.40	131.90	7.70	1.72	2.66
Joshua	vein_1	FR-DD-21-164	239659.96	370883.11	65.49	2.23	0.32	1.06
Joshua	vein_1	FR-DD-21-165	239658.81	370883.83	61.90	1.93	0.32	0.66
Joshua	vein_1	FR-DD-21-165	239655.61	370883.30	51.81	5.07	0.05	0.16



Vein System	Vein Structure	Hole ID	Easting	Northing	Elevation	Au (ppm)	Thickness (m)	
							True	Drilled
Joshua	vein_1	FR-DD-21-166	239665.11	370925.24	78.03	1.94	2.48	3.78
Joshua	vein_1	FR-DD-21-169	239655.42	370943.54	45.31	0.30	0.11	0.25
Joshua	vein_1	FR-DD-21-171	239685.96	370806.36	135.77	4.02	0.31	0.47
Joshua	vein_1	FR-DD-21-171	239660.04	370801.14	106.68	1.01	0.19	0.29
Joshua	vein_1	FR-DD-21-171	239651.43	370799.42	96.86	9.78	4.40	6.75
Joshua	vein_1	FR-DD-21-173	239641.09	370798.09	-4.27	1.06	0.06	0.16
Joshua	vein_1	FR-DD-21-175	239658.90	370936.44	94.42	17.31	6.87	13.06
Joshua	vein_1	OM-CH-11/JA-01	239646.82	370880.55	165.09	7.54	1.43	1.50
Joshua	vein_1	OM-CH-11/JA-02	239646.28	370881.53	165.26	4.91	1.15	1.20
Joshua	vein_1	OM-CH-11/JA-03	239645.85	370882.39	165.39	5.35	0.97	1.00
Joshua	vein_1	OM-CH-11/JA-04	239645.37	370883.27	165.59	6.98	0.76	0.80
Joshua	vein_1	OM-CH-11/JA-05	239644.95	370884.18	165.78	5.47	0.67	0.70
Joshua	vein_1	OM-CH-11/JA-06	239644.76	370885.12	165.94	2.56	1.05	1.10
Joshua	vein_1	OM-CH-11/JA-07	239644.22	370885.99	166.16	3.59	0.77	0.80
Joshua	vein_1	OM-CH-11/JA-08	239643.69	370886.80	166.35	2.88	0.47	0.50
Joshua	vein_1	OM-CH-11/JA-09	239643.50	370887.78	166.59	1.04	0.75	0.80
Joshua	vein_1	OM-CH-11/JA-10	239643.33	370888.82	166.84	1.94	1.06	1.10
Joshua	vein_1	OM-CH-11/JA-11	239643.09	370889.84	167.11	1.85	1.35	1.40
Joshua	vein_1	OM-CH-11/JA-12	239642.85	370890.76	167.38	1.15	1.34	1.40
Joshua	vein_1	OM-CH-11/JA-13	239642.63	370891.79	167.59	1.79	1.69	1.80
Joshua	vein_1	OM-CH-11/JA-14	239642.35	370892.78	167.80	2.25	1.60	1.70
Joshua	vein_1	OM-CH-11/JA-15	239642.05	370893.76	168.00	3.28	1.47	1.60
Joshua	vein_1	OM-CH-11/JA-16	239641.71	370894.72	168.18	5.40	1.59	1.70
Joshua	vein_1	OM-CH-11/JA-17	239641.33	370895.70	168.34	6.76	1.51	1.60
Joshua	vein_1	OM-CH-11/JA-18	239641.27	370896.76	168.57	15.64	0.85	0.90
Joshua	vein_1	OM-CH-11/JA-19	239640.54	370897.54	168.82	6.72	1.14	1.20
Joshua	vein_1	OM-CH-11/JA-20	239640.24	370898.55	169.07	4.14	1.03	1.10
Joshua	vein_1	OM-CH-11/JA-21	239639.94	370899.51	169.33	2.21	1.06	1.10
Joshua	vein_1	OM-CH-11/JA-22	239639.73	370900.49	169.55	6.74	1.33	1.40
Joshua	vein_1	OM-CH-11/JA-23	239639.59	370901.52	169.78	4.72	1.73	1.80
Joshua	vein_1	OM-CH-11/JA-24	239639.25	370902.50	169.99	9.11	1.91	2.00
Joshua	vein_1	OM-CH-11/JA-25	239639.01	370903.45	170.31	16.27	1.83	1.90
Joshua	vein_1	OM-CH-11/JA-26	239638.71	370904.42	170.59	14.66	1.84	1.90
Joshua	vein_1	OM-CH-11/JA-27	239638.40	370905.39	170.79	22.32	1.57	1.60
Joshua	vein_1	OM-CH-11/JA-28	239638.34	370906.49	171.02	9.50	1.86	1.90
Joshua	vein_1	OM-CH-11/JA-29	239638.10	370907.47	171.13	21.49	1.78	1.80
Joshua	vein_1	OM-CH-11/JA-30	239638.31	370908.52	171.31	16.03	2.00	2.00
Joshua	vein_1	OM-CH-11/JA-31	239638.04	370909.60	171.28	22.78	2.09	2.10
Joshua	vein_1	OM-CH-11/JA-32	239637.98	370910.58	171.42	23.24	2.10	2.10
Joshua	vein_1	OM-CH-11/JA-33	239637.94	370911.63	171.53	21.29	2.09	2.10
Joshua	vein_1	OM-CH-11/JA-34	239637.82	370912.64	171.56	14.42	2.08	2.10
Joshua	vein_1	OM-CH-11/JA-35	239637.75	370913.65	171.62	5.42	2.09	2.10
Joshua	vein_1	OM-CH-11/JA-36	239637.05	370914.65	171.62	35.26	0.90	0.90
Joshua	vein_1	OM-CH-11/JA-37	239636.95	370915.65	171.64	22.12	1.00	1.00
Joshua	vein_1	OM-CH-11/JA-38	239636.82	370916.70	171.64	14.96	0.89	0.90
Joshua	vein_1	OM-CH-11/JA-39	239637.29	370917.79	171.65	7.16	1.99	2.00
Joshua	vein_1	OM-CH-11/JS-01	239694.80	370704.88	152.88	10.58	1.98	2.00
Joshua	vein_1	OM-CH-11/JS-02	239693.64	370709.49	152.95	5.12	2.24	2.30
Joshua	vein_1	OM-CH-11/JS-03	239695.13	370714.23	152.90	3.49	1.16	1.20
Joshua	vein_1	OM-CH-11/JS-04	239696.48	370719.25	152.98	8.37	1.80	1.80
Joshua	vein_1	OM-CH-11/JS-05	239695.99	370724.20	153.10	4.18	2.40	2.40
Joshua	vein_1	OM-CH-11/JS-06	239696.57	370729.11	153.37	1.30	5.20	5.20
Joshua	vein_1	OM-CH-11/JS-07	239700.73	370733.82	153.33	4.37	3.09	3.10
Joshua	vein_1	OM-CH-11/JS-08	239699.95	370738.84	153.11	1.62	4.99	5.00
Joshua	vein_1	OM-CH-11/JS-09	239702.06	370746.77	152.35	9.49	1.32	1.40
Joshua	vein_1	OM-CH-11/JS-10	239703.57	370750.79	152.51	3.04	2.89	2.90
Joshua	vein_1	OM-CH-11/JS-11	239703.38	370755.80	152.57	3.06	0.57	0.60
Joshua	vein_1	OM-CH-11/JS-12	239700.87	370760.11	152.67	2.16	2.84	3.00



Vein System	Vein Structure	Hole ID	Easting	Northing	Elevation	Au (ppm)	Thickness (m)	
							True	Drilled
Joshua	vein_1	OM-CH-11/JS-13	239698.80	370764.77	152.97	1.53	2.78	3.00
Joshua	vein_1	OM-CH-11/JS-14	239696.73	370769.32	153.04	3.42	2.33	2.50
Joshua	vein_1	OM-CH-11/JS-15	239695.01	370774.03	153.17	8.75	3.57	3.80
Joshua	vein_1	OM-CH-11/JS-16	239692.19	370778.42	153.33	7.23	4.76	5.10
Joshua	vein_1	OM-CH-11/JS-17	239689.62	370782.85	153.44	10.92	4.27	4.60
Joshua	vein_1	OM-CH-11/JS-18	239687.19	370787.33	153.80	16.03	3.71	4.00
Joshua	vein_1	OM-CH-11/JS-19	239685.65	370792.07	153.83	5.97	3.62	3.90
Joshua	vein_1	OM-CH-11/JS-20	239683.42	370796.81	154.05	6.99	2.52	2.80
Joshua	vein_1	OM-CH-11/JS-21	239680.78	370800.94	154.20	7.23	3.12	3.50
Joshua	vein_1	OM-CH-11/JS-22	239678.61	370805.26	154.35	12.16	1.67	1.80
Joshua	vein_1	OM-CH-11/JS-23	239676.62	370809.93	154.41	10.31	1.21	1.30
Joshua	vein_1	OM-CH-11/JS-24	239674.39	370814.50	154.57	16.19	1.15	1.20
Joshua	vein_1	OM-CH-11/JS-25	239672.61	370818.95	154.88	5.64	1.05	1.10
Joshua	vein_1	OM-CH-11/JS-26	239671.10	370823.69	150.57	3.05	1.22	1.30
Joshua	vein_1	OM-CH-11/JS-27	239668.69	370828.03	150.96	4.00	0.29	0.30
Joshua	vein_1	OM-CH-11/JS-28	239667.30	370832.54	151.33	10.47	0.58	0.60
Joshua	vein_1	OM-CH-11/JS-29	239665.29	370837.42	151.93	3.28	0.29	0.30
Joshua	vein_1	OM-CH-11/JS-30	239663.35	370841.76	152.82	6.01	0.84	0.90
Joshua	vein_1	OM-CH-11/JS-31	239661.89	370846.46	153.87	5.44	0.86	0.90
Joshua	vein_1	OM-CH-11/JS-32	239659.68	370850.92	154.64	5.10	1.30	1.40
Joshua	vein_1	OM-CH-11/JS-33	239658.44	370855.73	155.00	6.03	0.57	0.60
Joshua	vein_1	OM-CH-11/JS-34	239657.03	370860.55	155.58	17.85	0.88	0.90
Joshua	vein_1	OM-CH-11/JS-35	239655.42	370865.06	155.85	1.39	0.93	1.00
Joshua	vein_1	OM-CH-11/JS-36	239654.98	370870.36	156.03	4.92	0.48	0.50
Joshua	vein_1	OM-CH-11/JS-37	239653.48	370875.07	156.28	4.89	0.85	0.90
Joshua	vein_1	OM-CH-11/JS-38	239651.60	370879.70	156.68	2.22	0.09	0.10
Joshua Joshua	vein_2	OMBHL090 OM-DD-12-122	239681.09 239675.37	370624.57 370633.90	145.20 63.25	3.96 1.34	0.33	0.50
	vein_2		239675.37				0.20	1.37
Joshua Joshua	vein_2 vein_2	OM-DD-12-131 OM-DD-12-134	239672.49	370610.64 370643.82	110.49 112.97	1.01 3.95	0.88	0.79
Joshua	vein_2	OM-DD-12-134 OM-DD-12-136	239672.49	370558.95	108.34	2.33	0.48	0.79
Joshua	vein_2	OM-DD-12-138 OM-DD-12-140	239679.89	3705583.79	108.34	0.51	0.30	0.11
Joshua	vein_2	OM-DD-12-140	239675.02	370581.47	84.64	0.48	0.08	0.11
Joshua	vein_2	OM-DD-12-143	239673.17	370535.74	117.35	29.74	0.19	0.42
Joshua	vein_2	OM-DD-12-144 OM-DD-11-088	239623.17	371136.50	131.31	7.07	1.02	1.45
Joshua	vein 3	OM-DD-11-095	239641.47	371130.30	107.89	49.20	0.09	0.13
Joshua	vein_3	OM-DD-12-111	239641.17	371156.24	96.99	9.25	0.05	0.13
Joshua	vein_3	OM-DD-12-138	239629.17	371132.95	169.94	3.62	0.20	0.31
Joshua	vein_3	OM-DD-12-138	239626.02	371132.55	90.52	33.50	0.21	0.31
Joshua	vein_4	OM-DD-12-101A	239613.76	371164.41	118.50	10.71	1.06	1.60
Joshua	vein_4	OM-DD-12-101/(	239618.78	371186.98	124.29	3.18	0.40	0.62
Joshua	vein_4	OM-DD-12-111	239631.93	371155.98	70.24	22.10	0.26	0.82
Joshua	vein_5	OM-DD-12-122	239673.16	370634.30	66.87	40.79	0.57	1.10
Joshua	vein_5	OM-DD-12-136	239663.20	370559.53	91.15	0.80	0.09	0.17
Joshua	vein_5	OM-DD-12-143	239672.95	370581.33	80.55	1.65	0.05	0.11
Joshua	vein_5	OM-DD-12-144	239664.33	370536.86	105.59	1.56	0.04	0.07
Joshua	 vein_6	OM-DD-12-100	239631.06	370788.91	128.37	3.24	0.19	0.30
Joshua	 vein_6	OM-DD-12-103	239637.56	370784.38	20.39	1.70	0.03	0.17
Joshua	vein_6	OM-DD-12-114B	239625.08	370739.79	131.47	22.90	0.12	0.30
Joshua	vein_6	OM-DD-15-154	239638.16	370661.76	71.45	6.71	0.13	0.22
Joshua	vein_6	OM-DD-15-155	239635.70	370921.29	25.04	1.19	0.38	0.64
Joshua	vein_6	OM-DD-15-156	239641.57	370832.03	68.04	43.00	0.09	0.17
Joshua	vein_kestrel	OM-DD-15-153	239598.80	370813.03	89.12	12.58	0.18	0.65
Joshua	vein_kestrel	OM-DD-15-154	239599.21	370656.33	128.13	48.96	0.41	0.72
Joshua	vein_kestrel	OM-DD-15-157	239600.43	370654.72	82.19	3.01	0.26	0.76
Joshua	vein_kestrel	OM-DD-15-160	239578.47	370732.88	95.42	3.85	0.94	1.65