

## Updated Mineral Resource for the Marg Project Defines High Grade Core to the Deposit

### Highlights

- An updated mineral resource estimate has been completed for the Marg Project, located east of Keno City in the Yukon Territory, Canada.
- The total 2015 Resource estimate for the Marg, at a 0.5% Cu cut-off is:
  - Indicated*
    - 3.7 Mt @ 1.5% Cu, 2.0% Pb, 3.8% Zn, 48 g/t Ag, 0.76 g/t Au
  - Inferred*
    - 6.1 Mt @ 1.2% Cu, 1.7% Pb, 3.4% Zn, 44 g/t Ag, 0.74 g/t Au
  - Total*
    - 9.8 Mt @ 1.3% Cu, 1.8% Pb, 3.5% Zn, 46 g/t Ag, 0.75 g/t Au
- The updated mineral resource was completed based on a refined geological interpretation of the Marg Deposit.
- The overall copper equivalent grade for the Marg mineral resource has increased by 10% in comparison to the previous resource estimate completed in 2013.
- A tighter sample selection criteria was employed based on a minimum of 2.0% CuEq and a minimum of 2.0m downhole width and through this, a high grade, robust, continuous core to the Marg deposit was delineated.
- The high-grade core is likely to significantly enhance the overall economics of the project.
- MinQuest will complete a Scoping Study on the Marg Project prior to the end of 2015.

6 October 2015

#### DIRECTORS

David Deloub  
Chairman

Jeremy Read  
Managing Director

Paul Niardone  
Non-Executive Director

Adam Davey  
Non-Executive Director

Stephen Kelly  
Company Secretary

#### SHARE INFORMATION

ASX Code: MNQ  
Issued Capital:  
220,230,116 Fully Paid  
Shares  
72,936,522 Unlisted  
Options

#### CONTACT INFORMATION

Registered Office:  
Unit 1, 47 Park Road  
Milton, QLD 4064  
T: +61 7 3511 6570  
F: +61 7 3369 3305  
[www.minquest.com.au](http://www.minquest.com.au)

MinQuest Limited  
ACN: 146 035 127

## INTRODUCTION

MinQuest Limited (**"MinQuest" or "The Company"**) (ASX:MNQ) is pleased to announce an updated Mineral Resource for the Marg Project, located in the Yukon Territory, Canada.

MinQuest's Managing Director Mr Jeremy Read said, "The Marg deposit is a high grade Mineral Resource with a copper equivalent grade of 3.5% which has increased nearly 10% as a result of the new mineral resource estimation."

"A more detailed geological interpretation completed by MinQuest, defined a high grade core to the Marg deposit which is likely to significantly enhance the overall economics of the project."

"MinQuest will now complete, before the end of 2015, a Scoping Study on the Marg Project, utilising the new high-grade mineral resource, to determine if the mineral resource could sustain a stand alone mining operation."

"If the Scoping Study is positive then MinQuest will look to undertake a Pre-Feasibility Study on the Marg Project in 2016", said Mr. Read.

The Marg project is located in the central Yukon, approximately 40km east of Keno City (Figure 1). The property consists of 402 quartz mining claims covering over 8400 hectares adjacent to the Category A land of the Na-cho Nyak Dun First Nation (Figure 1).

MinQuest Limited has entered into a farm-in joint venture agreement with Golden Predator Corp. (Golden Predator); under this agreement MinQuest has acquired the right to earn up to a 75% interest in the project.

## SUMMARY

IMC Mining Pty Ltd (IMC) was engaged by MinQuest Limited (MinQuest) to undertake an independent Mineral Resource estimate of the Marg VMS Cu-Au-Zn deposit central Yukon Territory, Canada, under the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (2012 JORC Code) guidelines.

The total 2015 Resource estimate for the for Marg at a **0.5% Cu cut-off** is

### *Indicated*

3.7 Mt @ 1.5% Cu, 2.0% Pb, 3.8% Zn, 48 g/t Ag, 0.76 g/t Au, 3.8% CuEq

### *Inferred*

6.1 Mt @ 1.2% Cu, 1.7% Pb, 3.4% Zn, 44 g/t Ag, 0.74 g/t Au, 3.3% CuEq

### **Total**

**9.8 Mt @ 1.3% Cu, 1.8% Pb, 3.5% Zn, 46 g/t Ag, 0.75 g/t Au, 3.5% CuEq**



There has been no additional drilling at the Marg deposit since the last resource estimate published within the NI43-101 report in 2013.

This update is based on MinQuest's improved geological interpretation which now includes the known structural understanding of the deposit and a more selective lens interpretation more suited for underground mining assessments.

The resource estimate was completed by IMC an independent consulting group.

This update will be the basis for a Scoping Study on the potential for open-pit and underground mining operations and will help focus future exploration activities.

## LOCATION

The Marg deposit is located in central Yukon 40 km east of Keno City (Figure 1).

Access is by a 45 km winter access track from Keno City, by light aircraft to a 380 m airstrip located on the property or by helicopter.

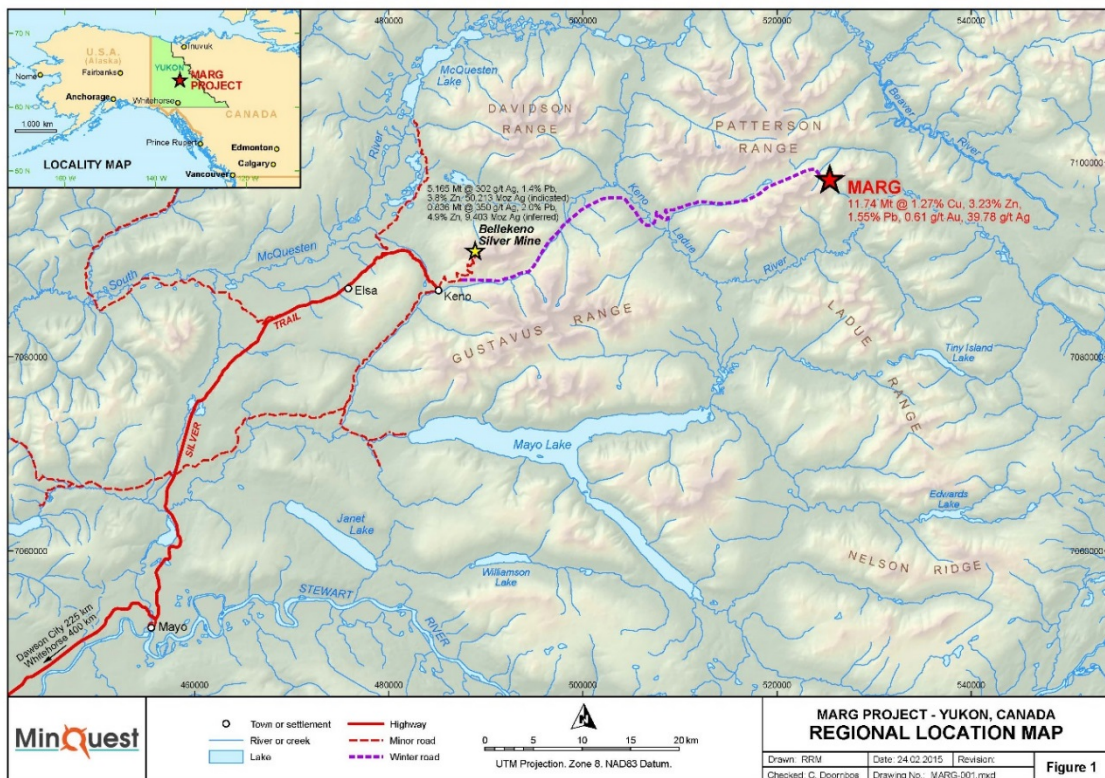


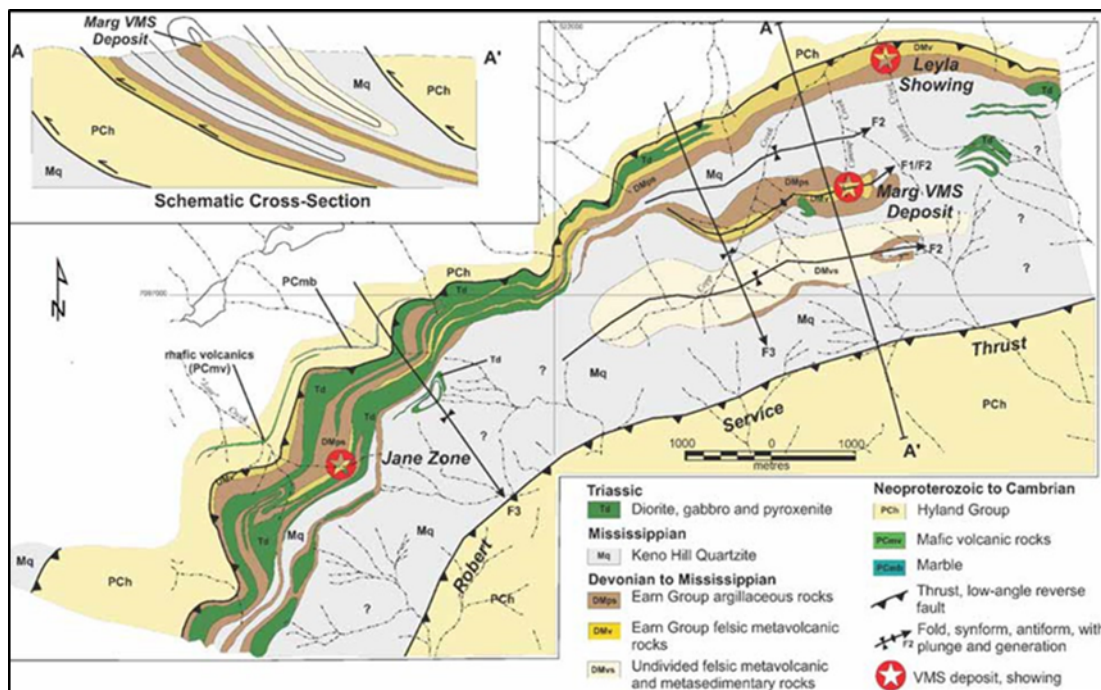
Figure 1: Marg Deposit Location

## GEOLOGY

The Marg property lies near the northern margin of Selwyn Basin, a region of deep water off shelf sedimentation that persisted from late Precambrian to Middle Devonian time.

The immediately adjacent areas of exploration interest to the Marg Property lie within a convex arc of south to southeast dipping strata that consist of intensely sheared and penetratively deformed lower to middle greenschist facies, Palaeozoic metasedimentary and metavolcanic rocks.

These are bracketed by two northerly-directed regional scale thrust faults - the Robert Service and Tombstone Faults (Figure 2).

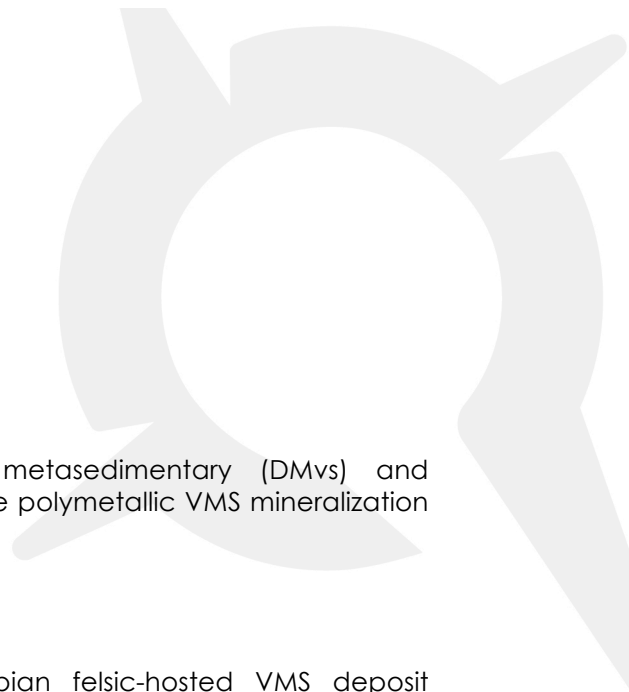


**Figure 2: Geological Plan Map of the Marg Property**

The Marg property is underlain by a sequence of metavolcanic and metasedimentary rocks that lie between the Robert Service and Tombstone thrust faults. This succession consists of four major tectonostratigraphic units within the property area.

Relative ages of the separate units are derived from relationships established through regional scale geological mapping by government geologists. Simplified stratigraphy is presented below, from oldest to youngest:

- Late Precambrian to Lower Cambrian Hyland Group metasedimentary rocks,



- Devonian to Mississippian Earn Group metasedimentary (DMvs) and metavolcanic rocks (DMv). This unit hosts the polymetallic VMS mineralization at the Marg and Jane Zones,
- Mississippian Keno Hill Quartzite (Ma); and
- Triassic diorite to gabbro dykes and sills.

The Marg deposit is a Devonian and Mississippian felsic-hosted VMS deposit associated with the Cordillera from Mexico to Alaska. These deposits are often referred to as Kuroko or Noranda Type massive sulphide deposits.

The Marg Deposit consists of a series of continuous to discontinuous sheets of massive and semi-massive sulphide mineralization. The mineralized sheets or horizons are sub parallel, trend from 060° to 090° and dip from 30° to 50° south and generally plunge to the east at 40°. The horizons are up to 23m thick but average 3m to 4m. Drilling has defined the mineralization for over 1400m along strike, and 700m down dip. Mineralization is open along strike, down dip and down plunge.

Mineralization occurs at, or near the contact between footwall volcanoclastic rocks and hanging wall argillaceous sediments. Mineralization is hosted within a wedge-shaped succession dominated by felsic metavolcanic rocks that appears to be tightly folded by two major deformation events that have both over-thickened the mineralisation in the fold hinge and separated the mineralisation in places along the fold limbs (Figure 3 and Figure 4).

Sulphide minerals consist of pyrite, sphalerite, chalcopyrite, galena, tetrahedrite and arsenopyrite in a gangue of quartz, ferroan carbonate, muscovite and rare barite. Magnetite is notably absent.

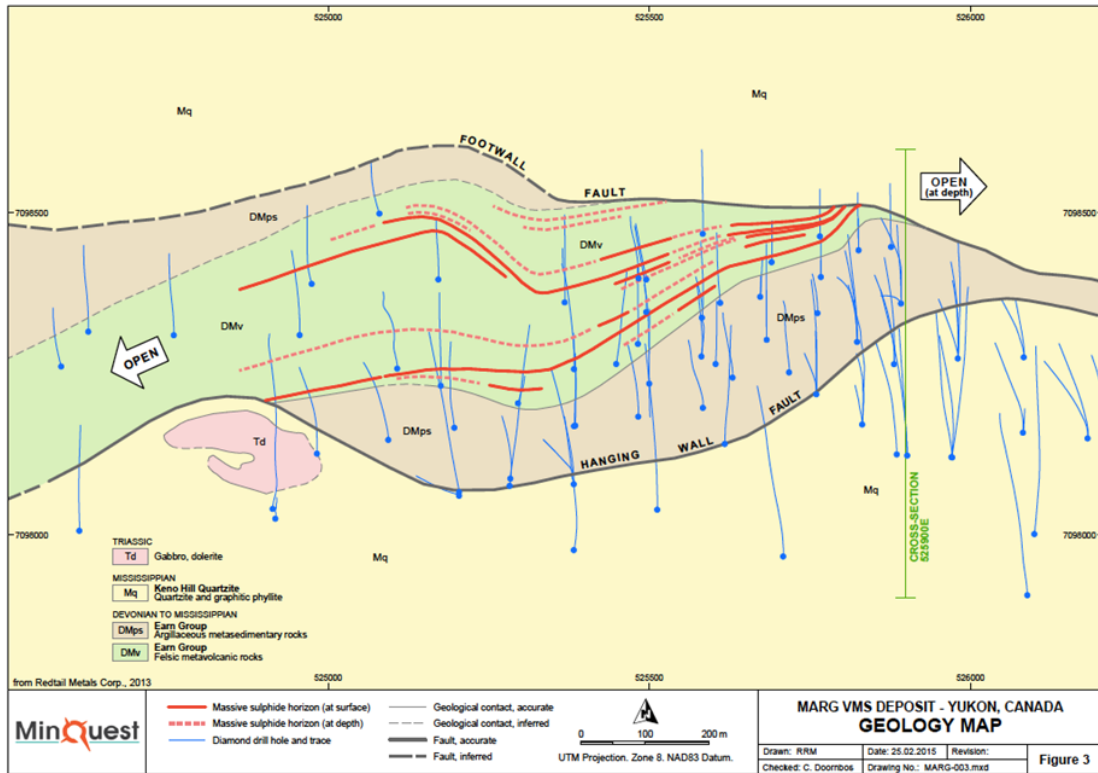
## **DRILLING**

115 diamond drill holes (33,620 m) were completed at the Marg Deposit between 1988 and 2008 by three companies, Marg JV, NDU Resources and Yukon Gold Corp Ltd.

Drilling was exclusively diamond drilling using a Longyear 38 (1988 to 2007), a JKS 300 hydraulic-helicopter-portable drill (2007) and a helicopter-portable Zinex A5 B20 drill (2008).

Most holes started with HQ and then reduced down to NQ, with almost all of the sulphide zones cored with NQ diameter, with a few exceptions of BQ (37 mm) size core. No holes were orientated.

For personal use only

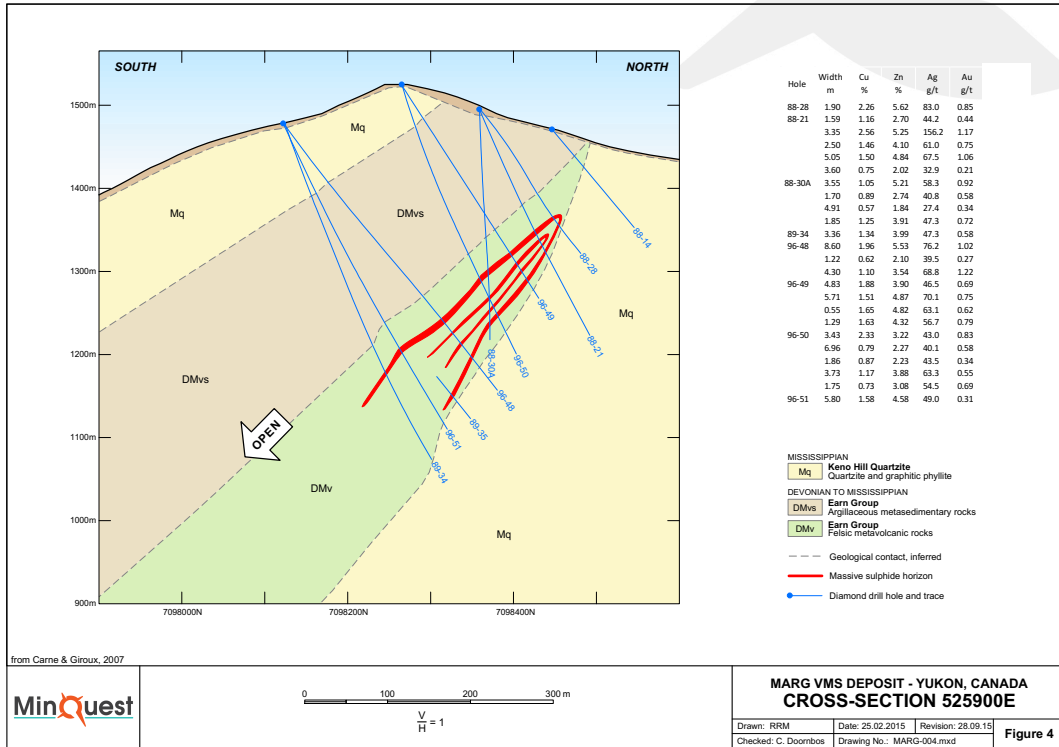


**Figure 3: Plan Map of Mineralisation at the Marg Property**

All drilling programs, except 2008 which was completed by the property holder at that time, were completed by Archer Cathro and Associates. Data quality and consistency were upheld throughout the various programs and several relogging and resampling efforts have been undertaken over the years that add confidence to the original drilling data.

### SAMPLING

Mineralised samples were split on site using either a manual core splitter or diamond-saw, with half the sample placed in plastic bags for shipment to the laboratory. Normal quality control and assurance procedures were in place at the time of drilling.



**Figure 4: Cross Section at 525900mE Looking West**

The sample size varied according to the sampled drill core lengths. These lengths were determined by the lithology and mineralogy of the drill core based upon geological and geotechnical logging results. Minimum core diameters were many times greater than the maximum mineralization crystal size with mineralised samples ranging from 0.15 m to 3.1 m. The average sample size was 1 m.

### SAMPLE ANALYSIS

All nine drill programs used ALS Chemex Labs of North Vancouver BC for drill core analysis, a commercial laboratory certified to ISO 9001:2000.

Sample preparation consistently used normal procedures that included weighed, dried and crushed to 70% minus 2 mm, before a 250g split was taken and pulverized to at least 85% minus 75 microns. A 50g split of the pulverized fraction was dissolved in aqua regia and analysed for 50 elements by a combination of ICPMS and ICPAES techniques. Samples over the detection limit for copper, lead, zinc and silver values were determined using atomic absorption spectroscopy (AAS). A 30g split was analysed for gold with a fire assay preparation and AAS finish.

In the 2008 program ALS Chemex completed multi element analysis by the ME-MS41 method for all samples. Gold was analysed by fire assay and atomic absorption finish using the ALS method Au-AA23 method on 30g pulp portions. Samples that recorded over 1% for Cu, Pb and Zn were analysed using the Cu-OG46, Zn-OG46 and Pb-OG46 methods.

## **DATA REVIEW AND QA/QC**

MinQuest imported all the available historical drilling data into an acQuire® database. IMC reviewed the data in detail (logging, down hole surveys, geotechnical and assay data) and found no material or fundamental errors with the data provided.

IMC also reviewed the available QA/QC data and noted that all results were within accepted ranges and tolerances. IMC also reconciled this data to the larger assay data population via statistical analysis and Q-Q plots, and found no significant bias.

IMC consider the data to be suitable for resource estimation purposes.

## **GEOLOGICAL INTERPRETATION**

A full geological review of the available data for the Marg Project was completed in order to develop the mineral resource contained herein. This included the geologic surface mapping from 2000 and 2005 and the drilling data (lithological, assay, etc.) that was completed between 1988 and 2008. There is no down hole structural data captured on the project. The structural data and interpretation completed during the surface mapping campaign added significantly to the updated geological interpretation.

The logged lithologies were simplified into 4 units: the Keno Hill Quartzite (Mq), The Devonian Earn group upper unit, volcanic metasediments (DMvs) and lower unit, felsic volcanics (DMv); as well as a massive sulphide mineralization unit (SULF). Units such as diorite, faults, veining and unknown units were assigned groupings on a hole-by-hole basis from the interpreted model. Mineralization is generally confined to the lower Earn Group.

A total of 21 north-south oriented cross sections were used for the geological modeling. Cross-section orientations were selected based on drill hole orientation, which are generally perpendicular to the strike of mineralization. The sections vary between 50 to 150 m.

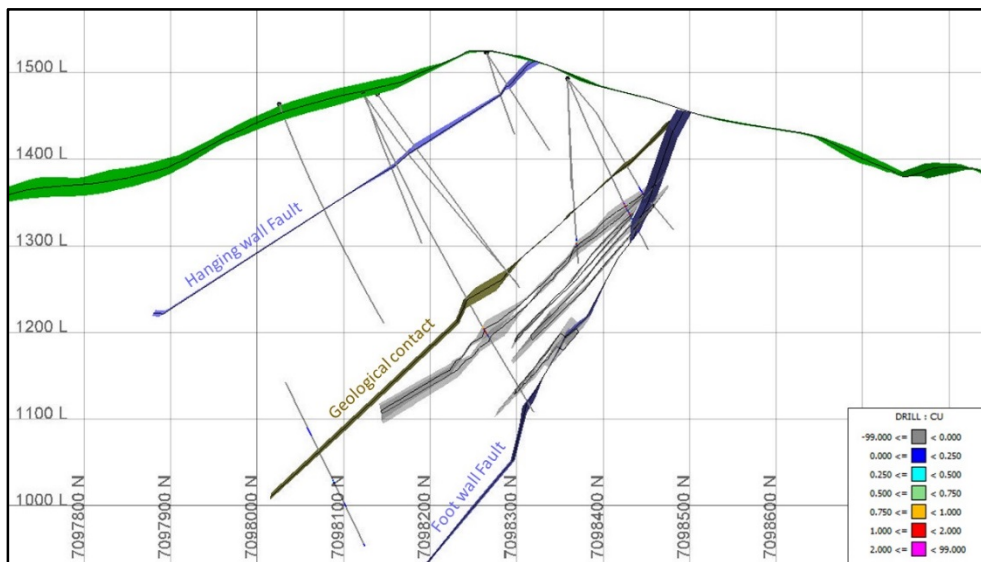
The geological logs for each drill hole in the sections were examined to clarify the geological interpretation and to identify missing or erroneous lithology codes, which could affect the interpretation.

Strings were constructed to define the contacts between the Keno Hill and Upper Earn (DMvs) units, the Upper Earn (DMvs) and Lower Earn (DMv) units and the massive sulphide mineralised units. The strings were then connected through triangulation to

create 3D surfaces and solids, which were then trimmed by an overburden surface to create a finalized model.

The geological model was utilized as a guide to the mineralization model, which was completed using a nominal section spacing of 50 m, though in places 25 m and 10 m sections were used where complex geometry required more detail. Two mineralisation models were completed, one of which encompasses the high-grade mineralised core whilst the other comprises a low-grade envelope surrounding the high-grade core. Both grade and width criteria were used in assigning material into either the high- or low-grade wireframes. For the high-grade mineralisation a minimum CuEq percentage of 2.0% and a minimum width of 2 m downhole were utilized. The criteria for the low-grade wireframe consisted of a minimum 0.5% CuEq over a minimum width of 1 m downhole. Using the above criteria, a total of seventeen high-grade and 9 low-grade discrete wireframes were created.

The previous 2013 interpretation and NI43-101 resource estimate had focused on the stacked echelon nature of the mineralization, truncated by the footwall fault. This did not adequately consider the pervasive folding of the area and separated the mineralization in broad zones (Figure 5).

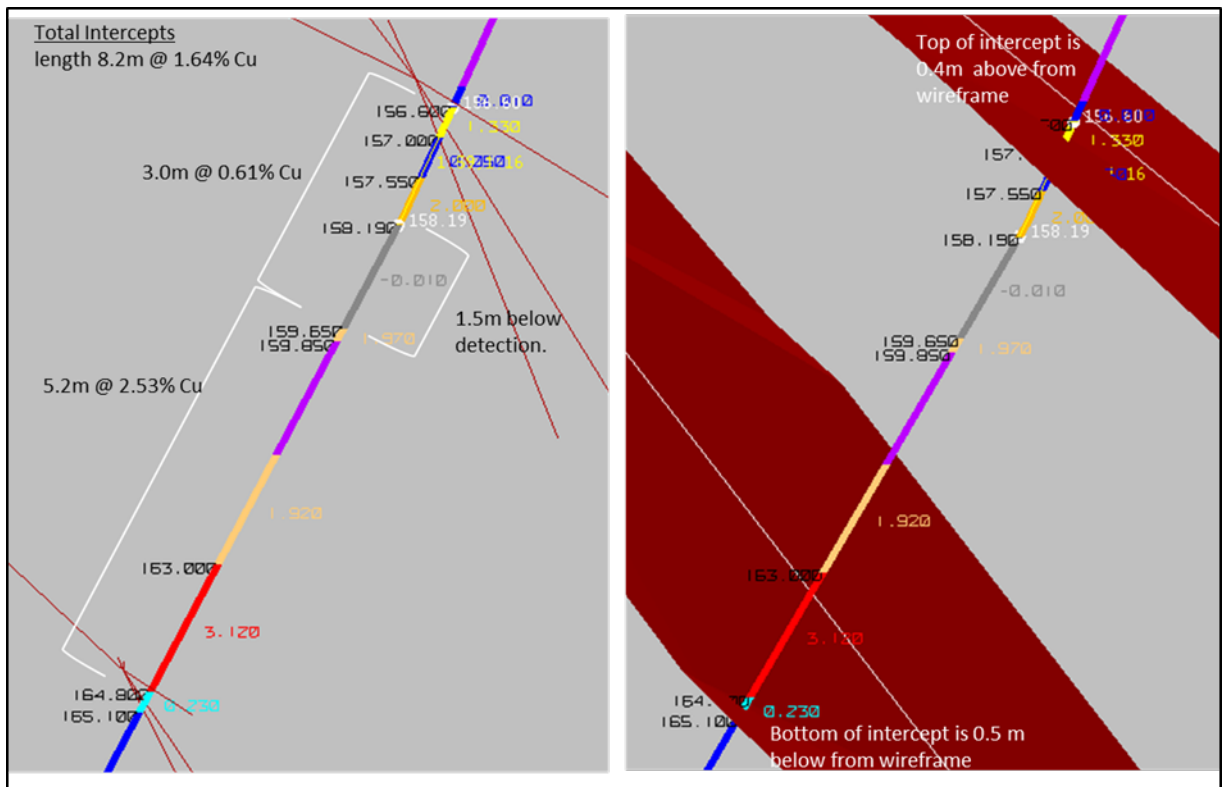


**Figure 5: 2013 Echelon Mineralisation Interpretation of Marg (525900mE looking west)**

The 2013 interpretation also incorporated significant dilution that made the estimate problematic for an underground mining assessment (Figure 6). Issues noted with the previous interpretation included:

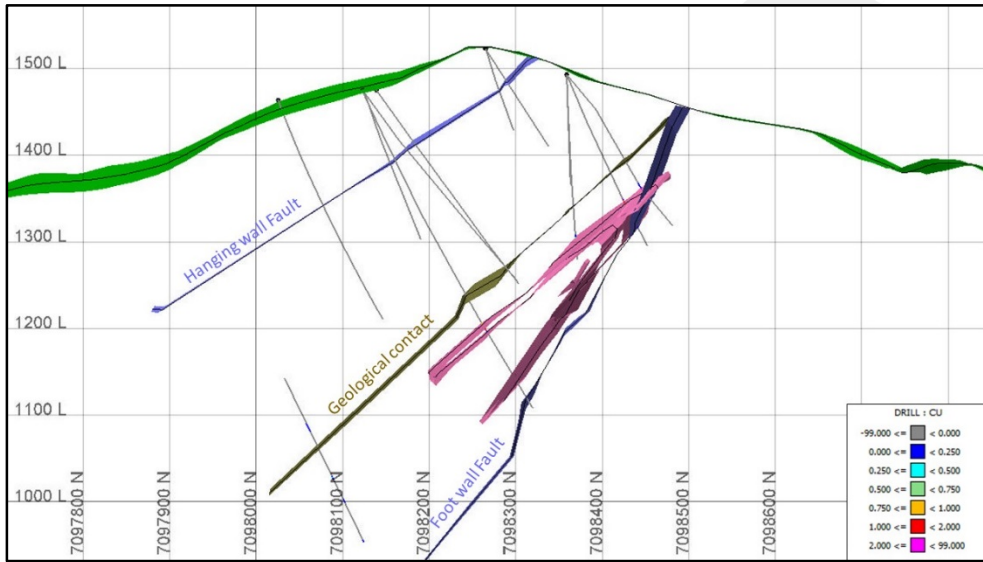
- There was no segregation of the high and low-grade material thus effectively diluting the grade. The dilution has further been exacerbated with what

- appears to be inaccurate snapping of drill hole intercepts to the wireframe, including and excluding mineralisation that would be otherwise economic.
- The interpretation did not consider the folding structure of the deposit.

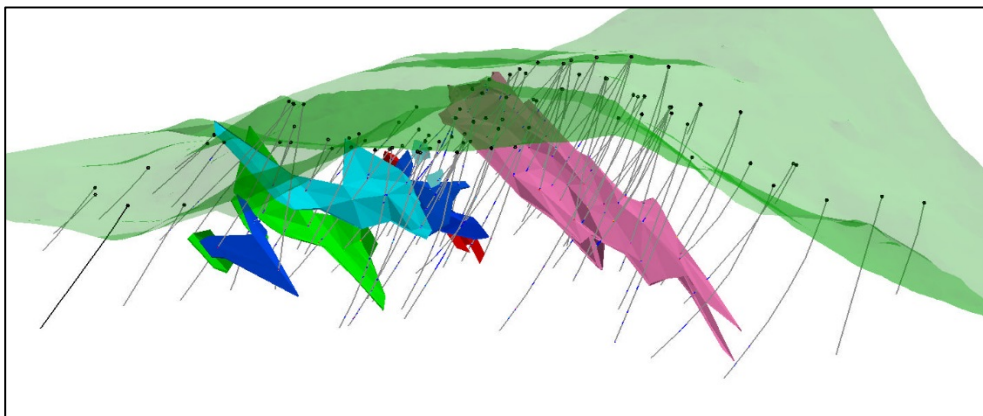


**Figure 6: Drill Hole ID-021 (525885N) showing internal dilution and wireframes not snapped to drilling**

The revised interpretation has focused on constraining the high-grade material and the folded nature of the deposit as shown in Figure 7 and adhered to strict sample selection criteria to create high and low-grade zones.



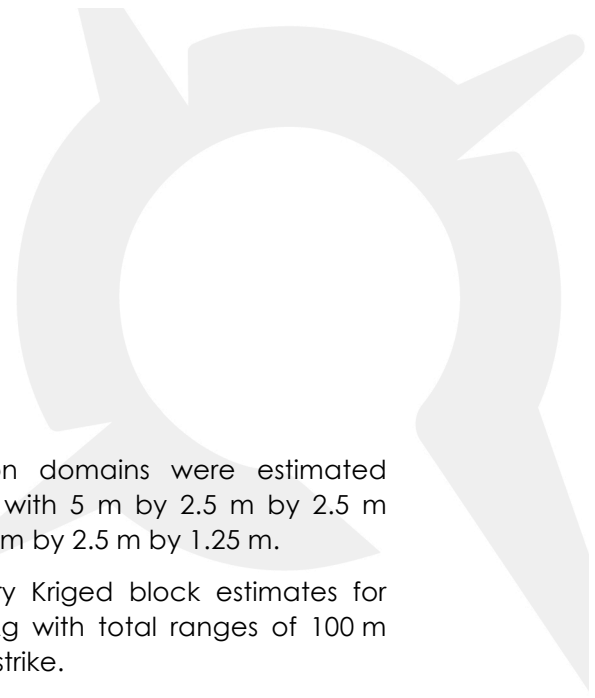
**Figure 7: Revised 2015 folded interpretation of high-grade mineralisation interpretation of Marg (525900mE looking west)**



**Figure 8: Orthogonal view of 2015 high-grade wireframes looking north east**

## ESTIMATION PARAMETERS

The Mineral Resource estimate was developed from data that is unchanged since the previous work in 2013 and published as an NI43-101 report in 2013. MinQuest completed a database migration from the original Microsoft Access database into an acquire database model. Through this effort, the original assay certificates were incorporated where digitally available and the data was further validated for simple integrity issues such as overlapping intervals, etc.



Three low-grade and nine high-grade mineralisation domains were estimated independently and used to populate a block model with 5 m by 2.5 m by 2.5 m parent blocks in the mineralised areas sub-blocked to 5 m by 2.5 m by 1.25 m.

Semi-variogram models provide the basis for Ordinary Kriged block estimates for potentially economic elements Cu, Au, Pb, Zn and Ag with total ranges of 100 m along strike (east-west), 60 m down dip and 6 m across strike.

Estimation of the block grades was by Ordinary Kriging using variograms models and discretisation of 6 by 3 by 3 points in two passes with a search range of 90 m by 60 m by 20 m, then 180 m by 120 m by 40 m. Search orientations were varied locally within the model anisotropy based on a simplified structural model that followed the out limb extent of the tight folded structure. Parameters include a maximum of eight 2 m composites and two composites per drill hole with the first pass requiring a minimum of three drill holes.

Validation of the block estimates used visual review, SWATH plots and statistical comparisons to the original samples.

Sample density displays a strong relationship with a combined Cu, Pb, Zn grade. A linear regression was used in 2013 to assign block density from the estimated grades. The linear regression was reviewed and found to be consistent with samples inside the current high-grade zones. Hence, the existing model was retained. The relationship predicts dry bulk density values of between 2.8 t/m<sup>3</sup> in barren silicate rocks and up to 4.5 t/m<sup>3</sup> in sulphide-dominated material. The average dry bulk density for the high-grade mineralisation reported is 3.5 t/m<sup>3</sup>.

Tonnages and grades were estimated on a dry in-situ basis. No Moisture values were included.

## CLASSIFICATION

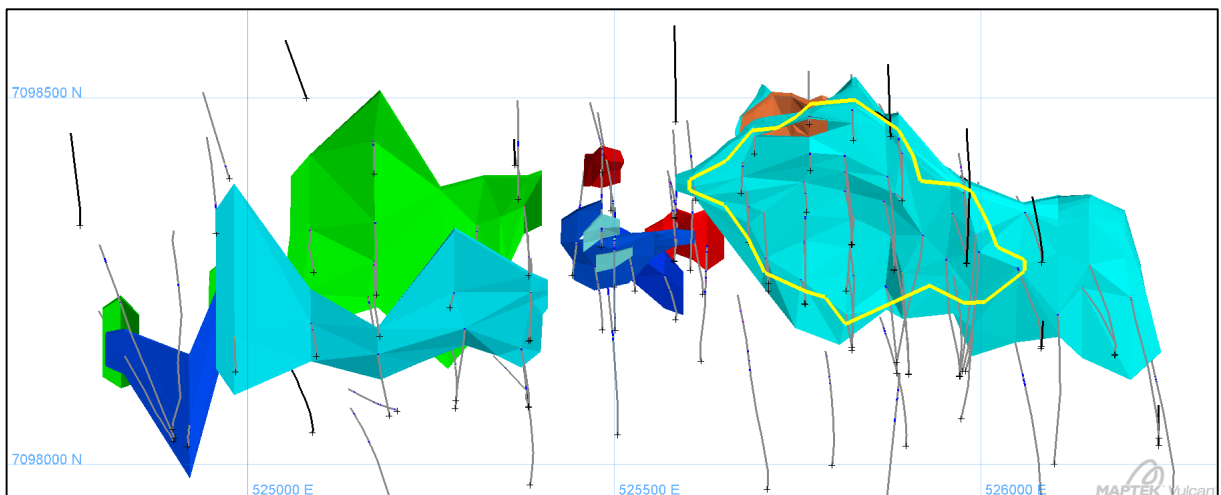
The area of consistent coverage of drilling in the eastern upper and lower outer limb zones, that demonstrate continuity in the mineralization extent, was considered for Indicated Mineral Resource classification (Figure 9). This was identified by visualising the estimation quality parameters, in particular the estimation of most blocks within the first search pass i.e. three holes within a 100 m by 60 m search range within the plane of the mineralisation to define Indicated Mineral Resource. This was applied by digitising in the extent of the area and applying it to blocks in the high-grade zone, shown in yellow.

The resource classification process has the effect of defining:

- Indicated Resources by areas with demonstrated continuity in the eastern outer limb zones where the drilling is roughly 80 m by 40 m or better in spacing within the plane of the mineralisation.
- Inferred Resources including:
  - High-grade domains with limited extent



- High-grade areas with broader drilling
- All low-grade lenses interpreted



**Figure 9: Marg Resource Wireframes and Indicated Classification Outline Shown in Yellow**

## CUT-OFFS

A copper equivalent formulae was developed and is based on the relative price, recovery, concentrate grade and smelter payable factors as follows:

$$\text{CuEq} = \text{Cu} + 0.28 \text{ Pb} + 0.32 \text{ Zn} + 0.39 \text{ Au} + 0.0055 \text{ Ag}$$

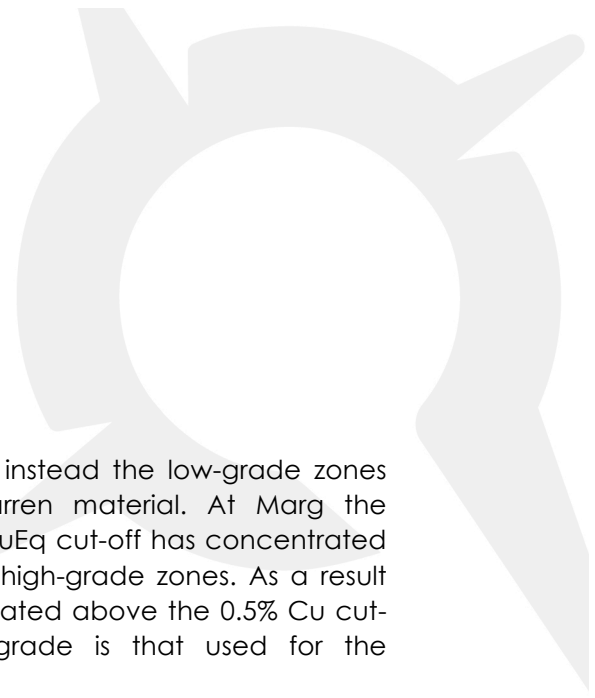
This is based on

- Cu price of 2.5 US\$/lb and recovery of 80% (96.5% payable)
- Pb price of 0.8 US\$/lb and recovery of 70% (95% payable)
- Zn price of 0.8 US\$/lb and recovery of 90% (85% payable)
- Au price of 1100 US\$/oz and recovery of 50% (90% payable)
- Ag price of 16 US\$/oz and recovery of 50% (90% payable)

The Mineral Resource is presented at a 0.5% Cu cut-off. This is consistent with the previous reported resource in 2013 and it approximates the marginal cost of processing sulphide ores. This could effectively be reduced if the other potentially economic elements are considered but presents a reasonable basis for material likely to be considered for processing.

Given the discrete lens type mineralisation style of VMS deposits the geological interpretation has a considerable bearing on the effective cut-off grade. That is there

For personal use only



are no broad halo or disseminated low-grade zones, instead the low-grade zones comprise smaller lenses within waste or largely barren material. At Marg the reinterpretation of the deposits at a high-grade 2.0% CuEq cut-off has concentrated the majority of the significant intercepts to within the high-grade zones. As a result within the high-grade zone virtually all blocks are estimated above the 0.5% Cu cut-off used for reporting and the effective cut-off grade is that used for the interpretation, 2.0% CuEq.

A first attempt to model the lower grade zones has been undertaken by capturing the other lower grade or isolated high-grade intercepts into an encompassing halo domain around the high-grade. This effectively results in a mixed mineralised and waste zone with a high co-efficient of variation of around 1.5 for the low-grade zone compared to about 0.7 for the high-grade zones. The higher variance presents some difficulties in estimation and results in considerable smoothing of the results. It is expected that within the low-grade zone greater tonnage should be available if the estimation smoothing were reduced. The existing estimates within the low-grade that are reported above the 0.5% Cu should represent high confidence zones of mineralisation that could be considered for underground mining assessment. Further work remains to better estimate the quantities of low-grade material above 0.5% Cu cut-off that could be recovered in an open pit-mining scenario.

## RESOURCE STATEMENT

To be consistent with the geological interpretation process the Mineral Resource is presented in parts both at a 0.5% Cu cut-off.

Updated 2015 Resource estimate for the high-grade domains for Marg is:

Indicated

- 3.7 Mt @ 1.5% Cu, 2.0% Pb, 3.8% Zn, 48 g/t Ag, 0.76 g/t Au, 3.8% CuEq

Inferred

- 5.5 Mt @ 1.3% Cu, 1.8% Pb, 3.6% Zn, 46 g/t Ag, 0.79 g/t Au, 3.5% CuEq

Total

- 9.2 Mt @ 1.4% Cu, 1.9% Pb, 3.7% Zn, 47 g/t Ag, 0.78 g/t Au, 3.6% CuEq

In addition to this the low-grade domains contain an additional:

Inferred

- 0.6 Mt @ 0.6% Cu, 0.8% Pb, 1.5% Zn, 22 g/t Ag, 0.29 g/t Au, 1.6% CuEq



The total 2015 Resource Estimate for the for Marg is:

**Indicated**

- 3.7 Mt @ 1.5% Cu, 2.0% Pb, 3.8% Zn, 48 g/t Ag, 0.76 g/t Au, 3.8% CuEq

**Inferred**

- 6.1 Mt @ 1.2% Cu, 1.7% Pb, 3.4% Zn, 44 g/t Ag, 0.74 g/t Au, 3.3% CuEq

**Total**

- **9.8 Mt @ 1.3% Cu, 1.8% Pb, 3.5% Zn, 46 g/t Ag, 0.75 g/t Au, 3.5% CuEq**

Additional grade tonnage tabulations at both Cu and Zn cut-offs are provided in Figure 10 and Figure 11.

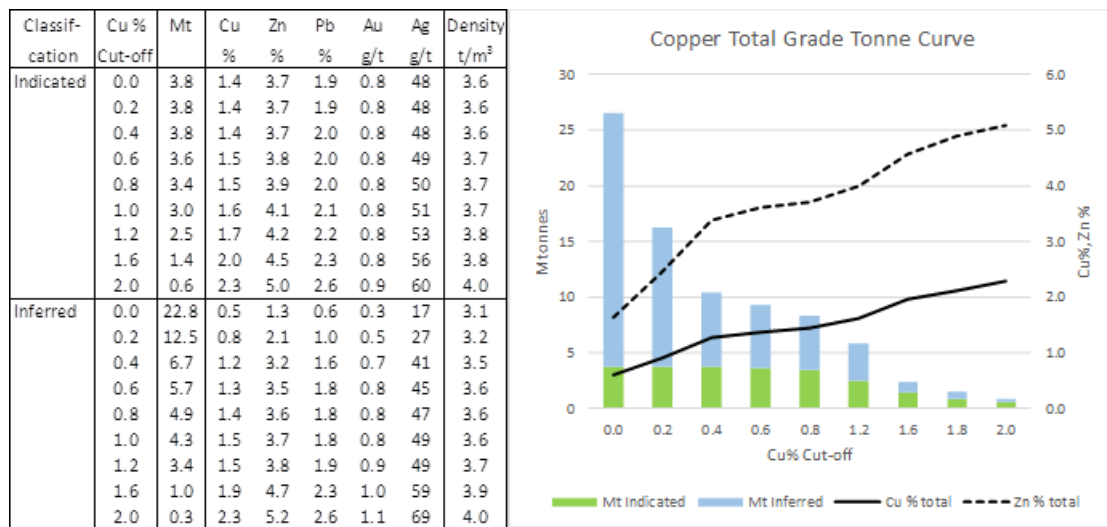


Figure 10: Marg grade tonnages by variable Copper cut-off

For personal use only

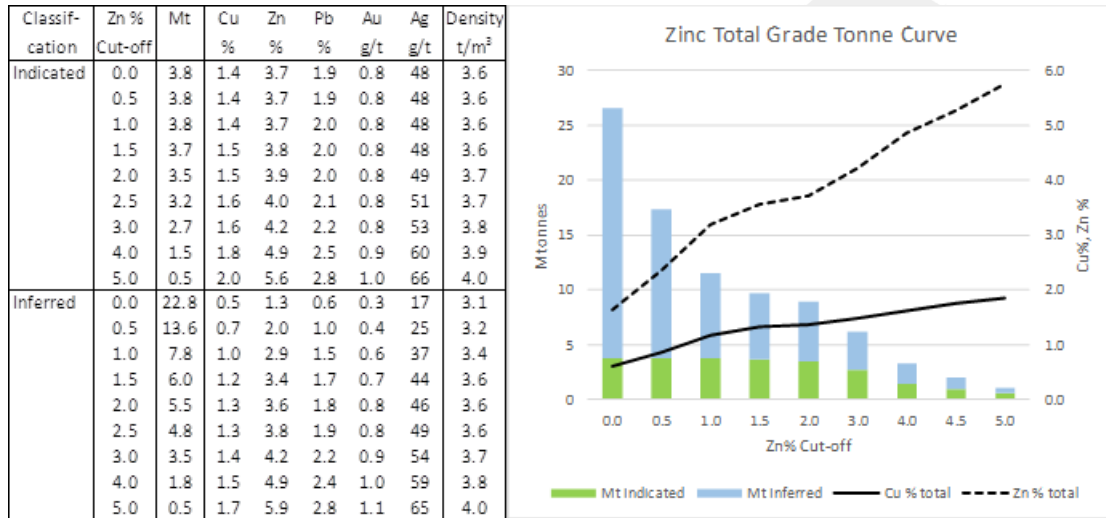


Figure 11: Marg grade tonnages by variable Zinc cut-off

## 2013 RESOURCE MODEL COMPARISON

At the resource statement 0.5% Cu cut-off, the total tonnes have reduced from previous 2013 estimate to the current 2015 estimate. However, the 2015 model is higher grade for all metals. This is the primary affect of creating a more robust mineralisation model based on specific sample selection criteria as outlined.

Table 1: Comparison of Resource Statements at 0.5% Cu cut-off for 2013 and 2015

Model	Domains	Class	Density t/m <sup>3</sup>	Mt	CuEq %	Cu %	Pb %	Zn %	Ag g/t	Au g/t
Redtail 2013	All	Indicated	3.63	4.0	3.93	1.57	1.92	3.90	49	0.79
		Inferred	3.41	7.8	2.82	1.12	1.36	2.89	35	0.52
	<b>Total</b>		<b>3.48</b>	<b>11.7</b>	<b>3.19</b>	<b>1.27</b>	<b>1.55</b>	<b>3.23</b>	<b>40</b>	<b>0.61</b>
MinQuest 2015	Low grade	Inferred	3.16	0.6	1.59	0.63	0.82	1.54	22	0.29
	High grade	Indicated	3.65	3.7	3.79	1.47	1.98	3.76	48	0.76
		Inferred	3.59	5.5	3.52	1.30	1.81	3.59	46	0.79
		<b>Total</b>	<b>3.61</b>	<b>9.2</b>	<b>3.63</b>	<b>1.37</b>	<b>1.88</b>	<b>3.66</b>	<b>47</b>	<b>0.78</b>
<b>Total</b>		<b>3.58</b>	<b>9.8</b>	<b>3.51</b>	<b>1.33</b>	<b>1.81</b>	<b>3.53</b>	<b>46</b>	<b>0.75</b>	

Since the 2013 resource as announced by MinQuest in March of 2015, the commodity prices have changed and subsequently affected the CuEq equation. As such, the 2013 Marg Mineral Resource is stated below using the CuEq equation used in this announcement to report the 2015 Marg Mineral Resource Estimate.

**11.7 Mt @ 1.3% Cu, 1.6% Pb, 3.2% Zn, 40 g/t Ag, 0.6 g/t Au, 3.2% CuEq**

*The 2013 Marg Mineral Resource was announced on 13-03-15 by MinQuest in accordance with the 2012 JORC Code and can be found on the MinQuest website: [www.minquest.com.au](http://www.minquest.com.au)*

## **MINING**

MinQuest completed an internal preliminary mining assessment on the 2013 resource model. This indicated potential for open pit development that would extend into underground development. The study was halted as it identified the inclusion of significant inter-burden within the previous interpretations that caused issues when trying to develop a production schedule. This prompted the current resource update and assisted in the delineation of the sample selection criteria for the high-grade core to the Marg Mineral Resource as having a high likelihood of being economically viable in a potential underground mining scenario. This was the basis for which the mineralisation model was created as outlined above.

## **METALLURGY**

Mineralogical analysis indicates that there is a significant amount of interlocking between pyrite and the target minerals of chalcopyrite, galena and sphalerite.

Metallurgical test studies completed in 2008 show 95% recovery of Cu in the rough circuit, however, give relatively poor bulk circuit recoveries with copper and lead recoveries of about 50% each into the final bulk concentrate although about 30% of the lead in the feed was present as a non-sulphide.

About 75% of the zinc in the zinc circuit feed was recovered into a zinc concentrate.

Bench scale test work completed to date is minimal and has not defined the most probable flow sheet for the deposit. The main issue with recoveries appears to be early activation of zinc in the copper circuit and no work has yet to be completed on using suppressants to assist in controlling this issue. Further work is required to test the option of initial production of a bulk concentrate against differential flotation of the copper and zinc.

## Competent Persons

This Mineral Resource Estimate is based upon and accurately reflects data compiled, and interpreted via wireframes (or supervised by) Mr Chris Doornbos who is a Member of the Australasian Institute of Mining and Metallurgy, a Professional Member (P.Geo) of the Association of Professional Engineers and Geoscientist of Alberta (APEGA) and a full time employee of MinQuest Limited. Mr Doornbos has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves' or as a Qualified Person under NI43-101. Mr Doornbos is the Exploration Manager of MinQuest and currently owns 1,399,344 Fully Paid Ordinary Shares and has the entitlement to a further 1,262,678 deferred consideration shares subject to relevant milestone events being achieved.

Review of the exploration data recent verification sampling was assessed and compiled or completed under the supervision of Mr Justin Legg, Principal Geologist, who is a Member of the Australasian Institute of Mining and Metallurgy, a Member of the Australian Institute of Geoscientists and full time employee of IMC Mining Pty Ltd. Mr Legg has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves' or as a Qualified Person under NI43-101.

Exploration data used as the basis for the resource estimate are historic in nature and previously reviewed and reported by an experienced exploration geologist involved in the field programs in 1996 and 1997 under Ni43-101 in 2006 and JORC (2012) in 2014. Mr Doornbos has completed a site visit and confirms the validity of the core and the project parameters as outlined within this statement.

Mineral Resource Estimation was completed by Mr John Horton, Principal Geologist, who is a Fellow of the Australasian Institute of Mining and Metallurgy, a Member of the Australian Institute of Geoscientists and sub-contracted to IMC Mining Pty Ltd. Mr Horton has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity which he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australasian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves' or as a Qualified Person under NI43-101.

## Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
<b>Sampling techniques</b>	<ul style="list-style-type: none"> <li><i>Nature and quality of sampling (eg cut channels, random chips, or specific specialized industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</i></li> <li><i>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</i></li> <li><i>Aspects of the determination of mineralization that are Material to the Public Report.</i></li> <li><i>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverized to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralization types (eg submarine nodules) may warrant disclosure of detailed information.</i></li> </ul>	<ul style="list-style-type: none"> <li>115 diamond drill holes totaling 33,620 m were drilled at the Marg Deposit between 1988 and 2008.</li> <li>Diamond drill core was placed in wooden core boxes and transported to the Marg camp by all-terrain vehicle or helicopter where the core was carefully measured and core recovery was determined.</li> <li>The core was geologically logged by a geologist and visible zones of mineralization were marked and sampled.</li> <li>Mineralized samples were and split on site with either a manual core splitter or diamond-saw, with half the sample placed in plastic bags for shipment to the laboratory</li> <li>Mineralized samples (Cu &gt;0.6%) vary from 0.15 m to 3.56 m.</li> <li>Continuous drill core samples of less than 1 m drilling length were adjusted firstly to the lithological boundaries and secondly to the mineralogy of massive sulphide mineralization.</li> <li>39 samples &gt;3 m length are noted in the 1988 drilling with a majority of samples having Cu &lt;0.2%.</li> </ul>
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li><i>Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</i></li> </ul>	<ul style="list-style-type: none"> <li>Drilling at Marg has been exclusively diamond drilling using a Longyear 38 (1988 – 2007); a JKS 300 hydraulic-helicopter-portable drill (2007), and a helicopter-portable Zinex A5 B20 drill (2008).</li> <li>Most holes were started with HQ and then reduced down to NQ, with almost all of the sulphide zones cored with NQ diameter - with exception of a few of the 1988 drill holes which were BQ (37 mm) size.</li> </ul>
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li><i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li><i>Measures taken to maximize sample recovery and ensure representative nature of the samples.</i></li> <li><i>Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.</i></li> </ul>	<ul style="list-style-type: none"> <li>Drill core recoveries were consistently more than 90%. Reduced core recoveries were only encountered within structurally incompetent zones. Reduced drilling speeds and head pressures plus drilling media additives were used to improve core recoveries in such zones.</li> <li>There does not appear to be any bias between drill core recoveries and grade of mineralization. Core recoveries through weakly mineralized country rocks and, more importantly, the mineralized VMS horizons, were consistently greater than 90%.</li> <li>The average recovery for the mineralized domains is 95% even after all missing records are conservatively reset to 0 for assumed lost core.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>• <i>Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.</i></li> <li>• <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>• <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Core was measured and core recovery determined.</li> <li>• Drill core was geologically logged by a geologist and visible zones of mineralization were marked and sampled at the Marg Camp.</li> <li>• Drill core was logged in relatively standard format and geological sections were produced in the course of the exploration programs.</li> <li>• Nomenclature used in the drill logs was based on metamorphic mineral assemblages with lithologies.</li> <li>• The level of logging detail was and is appropriate for mineral resource estimation.</li> <li>• During the 2000 exploration program, some of the core was re-logged with the purpose of determining original rock types through observation and with the help of litho-geochemistry if required. This resulted in a re-interpretation of the complex fold structure hosting the deposit</li> <li>• All geotechnical aspects of the drill core, including recovery and rock quality features, were logged prior to logging its lithology and mineralogy for the 2007 to 2008 drilling programs. The geologist then designated sampling intervals based upon its geological features and the entire drill core was photographed wet prior to sampling</li> </ul>
<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>• <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>• <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>• <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>• <i>Quality control procedures adopted for all sub-sampling stages to maximize representivity of samples.</i></li> <li>• <i>Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.</i></li> <li>• <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The sample size varied according to the sampled drill core lengths. These lengths were determined by the lithology and mineralogy of the drill core based upon geological and geotechnical logging results. Sample lengths were appropriate for the intersected mineralization. Minimum core diameters were many times greater than the maximum mineralization crystal size.</li> <li>• Mineralized samples were and split in half length-wise on site with either a manual core splitter or diamond-saw, with half the sample placed in plastic bags for shipment to the laboratory.</li> <li>• Mineralized samples (Cu &gt;0.6%) vary from 0.15 m to 3.1 m</li> <li>• 39 samples &gt;3 m length are noted in the 1988 drilling with a majority of samples having Cu &lt;0.2%.</li> <li>• During 2008 all sampled drill core was sawn in one-half and sent for metallurgical testing; the other one-half of core was split to one-quarter for assaying at G&amp;T Metallurgical Services Ltd. as a form of quality control and quality analysis. The remaining one-quarter of the core was returned to the core box.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• Prior to 2005, sampling was completed in accordance with the Yukon Quartz Mining Act regulations and assessment requirements.</li> <li>• After 2005, core sampling programs were done in accordance with NI 43-101.</li> <li>• All sample preparation was by ALS Chemex Labs of North Vancouver, B. C. The 1988 to 2007 core samples underwent a standard protocol whereby they were weighed, dried and crushed to 70% minus 2 mm, before a 250 g split was taken and pulverized to better than 85% minus 75 microns.</li> </ul>
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>• <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>• <i>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</i></li> <li>• <i>Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Mineralized rock samples were examined and described in the appropriate detail before being placed in plastic bags together with pre-numbered assay tags</li> <li>• All nine drill programs have used ALS Chemex Labs of North Vancouver, B. C. for drill core assays.</li> <li>• Chemex operates according to the guidelines set out in ISO/IEC Guide 25 "General requirements for the competence of calibration and testing laboratories" and the company is certified to ISO 9001:2000. Chemex is a Standards Council of Canada Accredited Laboratory.</li> <li>• For the 1988 to 2007 samples a 50 gram split of the pulverized fraction was dissolved in aqua regia and analyzed for 50 elements by a combination of ICPMS and ICPAES techniques. Samples over the detection limit for copper, lead, zinc and silver values were determined using atomic absorption spectroscopy (AAS). A 30 gram split was analyzed for gold with a fire assay preparation and AAS finish.</li> <li>• In 2008, the HQ core was quartered and this was sent to G&amp;T Metallurgical Services Ltd. for copper, lead and zinc assay. The rejects from this were sent to ALS Chemex Labs for copper, lead, zinc, silver, and gold analysis. In addition blanks and standards were analyzed.</li> <li>• For nineteen core samples one quarter of the core was sent both to ALS Chemex Labs and G&amp;T Metallurgical Services Ltd. for check analysis.</li> <li>• In the 2008 program ALS Chemex completed multi element analysis by the ME-MS41 method for all samples. Gold and was done by fire</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>assay and AA finish using the Au-AA23 method on 30g pulp portions. Samples that recorded over 1% for Cu, Pb and Zn were analyzed using the Cu-OG46, Zn-OG46 and Pb-OG46 methods.</p> <ul style="list-style-type: none"> <li>• Duplicate samples were prepared and analyzed at Acme using a method similar to Chemex. A 50g split of the pulverized fraction was dissolved in aqua regia and analyzed for copper, lead, zinc and silver by the induced coupled plasma–mass spectrometry technique (ICP-MS). A 30g sample was analyzed for gold using fire assay with an induced coupled plasma finish (ICP-MS).</li> <li>• Acme is a BSI Certified laboratory and it is certified to ISO 9001:2000.</li> <li>• Blank samples consisting of barren limestone were inserted into the sample stream.</li> <li>• Duplicate samples collected by quartering core were also inserted into the sample stream.</li> </ul>
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>• <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>• <i>The use of twinned holes.</i></li> <li>• <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>• <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• An independent due diligence study was completed by A. A. Burgoyne of Burgoyne Geological Inc. in 2011.</li> <li>• Burgoyne selected five separate drill hole intercepts of previously assayed massive sulphide mineralization from the 2007 and 2008 drill programs. These are essentially duplicate samples in that the one half of the remaining core was sawn (split), sampled and assayed</li> <li>• The duplicate samples of drill core analyzed for copper, lead, zinc, gold, and silver give generally good repeatability for copper, lead, zinc and gold.</li> <li>• All available QAQC data was reviewed by IMC and compared to the larger assay data population via Q-Q plots. Variance between the data sets was generally &lt;10%.</li> <li>• Four previous NI 43-101 reports also document the project in 2013, 2011, 2007 and 2005, each requiring qualified person review</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>• <i>Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.</i></li> <li>• <i>Specification of the grid system used.</i></li> <li>• <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All hole locations were surveyed by suitably qualified surveyors.</li> <li>• In 1996 a new baseline and a number of cross lines were established and previous drill holes were referenced to this baseline</li> <li>• The 1997, 2000, 2005 and 2006, 2007 and 2008 drill hole collars were later referenced with chain and compass surveys to the 1996 grid.</li> <li>• In 2006/7, the collars were re surveyed by Underhill Engineering Ltd</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>• <i>Data spacing for reporting of Exploration Results.</i></li> <li>• <i>Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.</i></li> <li>• <i>Whether sample compositing has been applied.</i></li> </ul>	<p>with differential GPS.</p> <ul style="list-style-type: none"> <li>• Drill hole spacing is variable with drilling often in fans from pads to minimize rig movements.</li> <li>• Initial (1988) drilling program was on 80 m to 100 m spacing, which was later infilled to 40 m to 50 m spacing by the end of the 1997.</li> <li>• The 2005 to 2007 drilling was designed to infill gaps identified in the 1997 resource estimate, as well as testing the extension of the massive sulphide horizons.</li> <li>• Drilling in 2008 was directed at collection of drill core from the main Marg Deposit area for metallurgical purposes.</li> </ul>
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>• <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>• <i>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Marg Deposit consists of a series of continuous to discontinuous sheets of massive and semi-massive sulphide mineralization that trend from 060° to 090° and dip from 30° to 50° south.</li> <li>• Drilling is orientated between 10° and 350° with dips between -50° and -75° to the north.</li> <li>• This provides a high intersection angle with the overall mineralization structure and should provide adequate sample to represent the mineralization.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>• <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>• For all core samples processed during 2005 to 2008, Yukon Gold implemented a chain of custody procedure to ensure sample security. Drill core was handled at core facility at Marg Camp in a secure place. The 2005 to 2007 drill core was split and sampled and was packed in rice sacks. Following sample transport by air to Mayo it was under Archer Cathro's supervision and driven to Whitehorse where it was delivered to the ALS Chemex preparation lab. In the 2008 program the drill core samples were under Yukon Gold personnel chain of command until, delivered to G&amp;T Metallurgical Services Ltd.</li> <li>• Core samples processed during 1988 to 1997 followed normal mining company security standard of the time. Drill core and bagged core samples were kept in a secure room or place. The chain of custody for the samples would be to fly the core samples to either Wernecke or Mayo. It was under Archer Cathro or an expediter command and driven to Whitehorse and flown to Vancouver for analysis.</li> </ul>
<b>Audits</b>	<ul style="list-style-type: none"> <li>• <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>• In 2008, Yukon Gold Corporation (under the direction of Gary Cohoon, P.Geol.) completed an audit of the survey and drill hole data including down-hole surveys.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>reviews</b>		<ul style="list-style-type: none"> <li>• In May 2011 Redtail Metals Corp., (under the direction of Gilles Dessureau, P.Geol.) completed a full audit of the assay database</li> <li>• An independent due diligence study was completed by A. A. Burgoyne of Burgoyne Geological Inc. between April and May 2011. This review consisted of the following:               <ul style="list-style-type: none"> <li><i>ii</i> Property site visit including review of geology, mineralization and site setting.</li> <li><i>iii</i> An examination of some of the drill core at the Marg campsite from the 2007 and 2008 drilling programs.</li> <li><i>iv</i> A detailed review of technical reports, maps and sections.</li> <li><i>v</i> A review of the geologic model with respect to controls on mineralization.</li> <li><i>vi</i> A review of the drill hole database</li> <li><i>vii</i> A Review of the QA/QC procedures</li> <li><i>viii</i> Auditing the 2011 Mineral Resource Estimates</li> </ul> </li> <li>• 2015 MinQuest imported all available data in to acquire, with in house validation checks.</li> <li>• 2015 IMC reviewed drill hole data base as outputs from the acquire data base.</li> </ul>

### Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
<b>Mineral tenement and land tenure status</b>	<ul style="list-style-type: none"> <li>• <i>Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.</i></li> <li>• <i>The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.</i></li> </ul>	<ul style="list-style-type: none"> <li>• As of November 30, 2013 the Property comprised 402 Yukon Quartz mineral claims in the Mayo Mining District and owned and operated by Golden Predator Mining Corp. (formerly Redtail Metals Corp.)</li> <li>• The Property lies within settlement lands owned by Na-Cho Nyak Dun First Nations. The mineral sub-surface rights to the Property existed prior to the settlement with Na-Cho Nyak Dun First Nations.</li> <li>• The holder of existing mineral rights on settlement land has a right of access to exercise mineral rights, without consent of the First Nations.</li> <li>• MinQuest Limited has entered into a farm-in joint venture agreement with Golden Predator Corp. (Golden Predator) of Hayden, Idaho for the Marg VMS Project. Under this agreement MinQuest has acquired</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>the right to earn up to a 75% interest in the project for an aggregate total of \$8,100,000 CAD.</p> <ul style="list-style-type: none"> <li>• Mr. Chris Doornbos has reviewed the mineral title and claim status of the Marg Property. The mineral claims were correctly staked, recorded and currently valid at this time.</li> <li>• There is no known impediments to exploration, regulatory or environmental at this time.</li> </ul>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>• <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Marg Property area was first staked in 1965 by a joint venture between United Keno Hill Mines Ltd. and Canadian Superior Exploration Ltd. The joint venture examined the claim area by prospecting and by soil and stream geochemistry, with the objective of finding Keno Hill style silver veins. No significant silver mineralization was found.</li> <li>• 1982, the area was re-staked by the ZX Joint Venture between SMD Mining Co. Ltd. Minerals Ltd., and Enterprise Exploration Ltd. An exploration program included hand trenching in geochemically anomalous areas in search of Sedex style lead-zinc mineralization.</li> <li>• The project was optioned to All-North Resources Ltd. who earned a 50% interest through a program that included geochemical and geophysical surveys (VLF and MaxMin EM, Magnetometer, and IP) and trenching.</li> <li>• 1987 NDU Resources Ltd. purchased All-North's interest. The 1988 work program included claim staking, geological, geochemical, and geophysical surveys (VLF and Pulse EM) plus 6038 m of diamond drilling in 33 holes, which defined extensive volcanogenic massive sulphide mineralization. A preliminary resource estimate was completed and baseline environmental monitoring was commenced</li> <li>• 1989, the NDU/Cameco JV continued to explore the property, completing five holes (1,819m) of diamond drilling on the Marg Property. Reconnaissance geochemical sampling was also completed over much of the property and further water samples were collected for environmental monitoring.</li> <li>• 1990, with an additional ten holes, totaling 4120 m, completed on the Marg Zone. Baseline environmental monitoring surveys initiated in 1988 were continued and the resource estimate was updated.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>• The project was re-activated in 1996, with 8518 m of diamond drilling in 29 holes completed.</li> <li>• United Keno Hill Mines Ltd. acquired NDU in 1997 thereby obtaining the majority interest in the Marg Property. United Keno completed additional diamond drilling (7 holes for 2540 m) and completed a winter road from the town of Keno to the property boundary.</li> <li>• 2000 Atna Resources Ltd. purchased United Keno's two-thirds interest in the Marg Property and formed a joint venture with Cameco to further explore the property. Exploration work during the 2000 field season consisted of geological mapping, soil sampling and prospecting, plus re logging and geochemical analysis of previously drilled core.</li> <li>• 2004 Atna purchased Cameco's interest in the property</li> <li>• 2005 Atna announced the sale of the property to Yukon Gold Corporation Inc. Yukon Gold commissioned an independent review of the historical resource estimates and exploration potential.</li> <li>• 2005 Yukon Gold drilled of four holes totaling 1185 m</li> <li>• 2006 Yukon Gold drilled nine holes totaling 2986 m as well as conducting an airborne geophysical survey (magnetometer and versatile time domain electromagnetic VTEM).</li> <li>• 2007 Yukon Gold Gold drilled seven holes totaling 2395 m</li> <li>• 2008 Yukon Gold commissioned Scott Wilson Roscoe Postle Associates Inc. (Scott Wilson RPA) to complete a resource estimate for the Marg Deposit.</li> <li>• 2008 a further 10 drill holes totaling 3674m of which six holes were for metallurgical testing and 4 holes tested the extension of the known mineralization.</li> <li>• 2010 Yukon Gold Corporation Inc.'s wholly owned subsidiary, Yukon Gold Corp. declared bankruptcy and went into receivership.</li> <li>• Lance Capital Ltd acquired the Marg Property in early 2011, with Redtail Metals Corp (now Golden Predator Mining Corp.) completing an agreement to purchase a 100% interest in the Marg Property from Lance Capital Ltd. The Property was 100% acquired with no encumbrances in October 2012 on the final cash payment. No exploration has been completed by Redtail Metals Corp.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Geology</b>	<ul style="list-style-type: none"> <li>• <i>Deposit type, geological setting and style of mineralization.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Marg deposit is a Devonian and Mississippian felsic-hosted VMS deposit associated with the Cordillera from Mexico to Alaska. These deposits are often referred to as <i>Kuroko</i> or <i>Noranda Type</i> massive sulphide deposits.</li> <li>• The Marg Deposit consists up to eight continuous to discontinuous sheets of massive and semi-massive sulphide mineralization with an average thickness of 3m to 4m. However, most of the mineralization occurs within four sheets.</li> <li>• The mineralized sheets or horizons are sub parallel, trend from 060° to 090° and dip from 30° to 50° south</li> <li>• Drilling has defined the mineralization for over 1400 m along strike, and 700 m down dip and is open along strike, down dip and down plunge.</li> <li>• Mineralization occurs at, or near the contact between footwall volcanoclastic rocks and hanging wall argillaceous sediments. Mineralization is contained within a wedge-shaped succession dominated by felsic metavolcanic rocks that appears to be truncated along the northeast edge by the “Footwall Fault”.</li> <li>• Sulphide minerals consist of pyrite, sphalerite, chalcopyrite, galena, tetrahedrite and arsenopyrite in a gangue of quartz, ferroan carbonate, muscovite and rare barite. Magnetite is notably absent.</li> <li>• Three distinct structural events are preserved in the Marg area. These likely represent a continuum of deformation that accommodated crustal shortening in both north-westerly and north easterly directions</li> <li>• Mineralization occurs within a refolded sheath fold that appears as an approximate ‘M’ shape in cross section, with the four main sulphide horizons being the limbs of the ‘M’.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>• <i>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:</i> <ul style="list-style-type: none"> <li>○ <i>easting and northing of the drill hole collar</i></li> <li>○ <i>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</i></li> <li>○ <i>dip and azimuth of the hole</i></li> <li>○ <i>down hole length and interception depth</i></li> <li>○ <i>hole length.</i></li> </ul> </li> <li>• <i>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</i></li> </ul>	<ul style="list-style-type: none"> <li>• All drilling to date has been by wire line diamond core drilling. Drilling on the Marg Deposit in 1988, 1989, 1990, 1996, 1997, and 2005 through to 2008 involved a total of 34223.7 metres over 119 core drill holes, 115 (33,620 m) of which define the Marg deposit.</li> <li>• The drilling at Marg was completed over approximately 1400 m of strike length and about 700 m down dip on drill lines largely perpendicular to the dip and trend.</li> </ul>
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>• <i>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.</i></li> <li>• <i>Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</i></li> <li>• <i>The assumptions used for any reporting of metal equivalent values should be clearly stated.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Reported mineralized intercepts were length weight averaged from the original, uncut assay results. The intercept length were determined firstly based upon distinct mineralization contacts, given the stratiform nature of the mineralization, and secondly largely on copper values in excess of 0.5%.</li> <li>• A weighted average grade for each intercept was calculated regardless of the distribution of high and low grades within an identified mineralized interval.</li> <li>• High grade cuts were applied to reduce the impact of the most extreme grades. This was undertaken on the samples prior to compositing at levels above:             <ul style="list-style-type: none"> <li>○ 5% Cu</li> <li>○ 11% Zn</li> <li>○ 6% Pb</li> <li>○ 175 g/t Ag</li> <li>○ 4 g/t Au</li> </ul> </li> <li>• Metal equivalents were used only to assist the initial mineralization domain interpretations which were later adjusted to define continuous high and low-grade copper mineralisation at a 2.0% and 0.5% CuEq cut-off, respectively.</li> <li>• Metal equivalents are not otherwise used for resource</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>• <i>These relationships are particularly important in the reporting of Exploration Results.</i></li> <li>• <i>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</i></li> <li>• <i>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').</i></li> </ul>	<p>estimations.</p> <ul style="list-style-type: none"> <li>• All mineralized intercepts were reported based on drill core lengths, not true widths. The reasoning being that the stratiform VMS mineralization is slightly crenulated locally leading to differences in true widths.</li> <li>• Most intercepts report mineralization perpendicular to dip and trend of the rocks and the VMS stratiform mineralization.</li> <li>• Intercepts are used to build a wireframe model in 3-dimensionals that reflect the true width of the mineralisation. These are then use to populate blocks and sub-block to represent the interpreted volumes.</li> <li>• The mineralized sheets or horizons are sub parallel, trend from a strike of 060° to 090° with dips from 30° to 50° towards the south. The horizons are up to 23 m thick and average 3 to 4 m.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>• <i>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</i></li> </ul>	<ul style="list-style-type: none"> <li>• A drill hole plan, examples of vertical cross-sections with drilling intercepts, and a 3-dimensional view of the mineralized lenses accompany this statement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>• <i>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</i></li> </ul>	<ul style="list-style-type: none"> <li>• The Marg Property has been subjected to extensive soil sampling surveys for copper, lead, and zinc at 50 m by 100 m line spacing.</li> <li>• Several parts of the Property are highly anomalous and these results have, in part, directed the drilling done from 1988 to 2008.</li> <li>• Geophysical ground surveys including pulse electromagnetic and magnetometer were completed in 1988 and 1989.</li> <li>• In 2006 Yukon Gold completed a helicopter borne VTEM and magnetometer surveys over the Marg Property at 200 m line spacing to define 447 conductors. Drilling remains to be done on most of these conductors.</li> <li>• Modal analysis indicates that there is a significant amount of</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>interlocking between pyrite and the target minerals of chalcopyrite, galena and sphalerite.</p> <ul style="list-style-type: none"> <li>Baseline environmental water quality surveys were undertaken in 1988 and 1989 and continued in 1990, 1996, and 1997. The findings indicate that there are no significant or unusual environmental sensitivities associated with the Marg Property.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li><i>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</i></li> </ul>	<ul style="list-style-type: none"> <li>There are a number of exploration surveys that include geophysics, mapping and surface geochemistry. These are useful for drill targeting but do not directly influence the resource assessment at the Marg Property.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li><i>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</i></li> <li><i>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</i></li> </ul>	<ul style="list-style-type: none"> <li>A comprehensive compilation of information, reports, maps, and other data on the Marg Property with the objective of all data becoming digital.</li> <li>A 2800 m Phase 1 HQ size core diamond drilling program for metallurgical studies should be completed</li> <li>Metallurgical test work to determine metal recoveries and define the flow sheets should be initiated and completed on metallurgical bulk samples obtained from the above diamond drilling program.</li> <li>Continue discussions with Na-Cho Nyak Dun First Nations with regards to reaching an agreement for continuous access to the Property</li> <li>A Preliminary Engineering Economic Assessment Report (Scoping Study) should be completed once the metallurgical results are available.</li> <li>Further (Phase 2) drilling and metallurgical studies should be budgeted.</li> <li>The Marg Deposit is open along trend, down plunge to the east, and down dip; further diamond drilling is warranted with the object of expanding the resource.</li> </ul>

Criteria	JORC Code explanation	Commentary
		<ul style="list-style-type: none"> <li>Continued exploration should include follow-up prospecting, geochemical soil sampling and diamond drilling on untested Versatile Time</li> <li>Domain Electromagnetic (VTEM) airborne geophysical anomalies and geochemical anomalies defined by previous operators.</li> </ul>

### Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
<b>Database integrity</b>	<ul style="list-style-type: none"> <li>Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.</li> <li>Data validation procedures used.</li> </ul>	<ul style="list-style-type: none"> <li>A review of the geological model with respect to controls on mineralization at the Marg Deposit was undertaken by MinQuest as part of this Mineral Resource Estimate.</li> <li>Auditing and checking of calculations leading to Mineral Resource estimates, a review of the drill hole and analysis database and resource methodology parameters, and evaluation of mineralized cross-sections were completed as part of this review.</li> <li>Data intervals were checked for overlaps and gaps. Where gaps in the data were found minimal values were inserted</li> </ul>
<b>Site visits</b>	<ul style="list-style-type: none"> <li>Comment on any site visits undertaken by the Competent Person and the outcome of those visits.</li> <li>If no site visits have been undertaken indicate why this is the case.</li> </ul>	<ul style="list-style-type: none"> <li>Site visits were undertaken by A. A. Burgoyne (Burgoyne Geological Inc) for the previously reported NI43-101 statements.</li> <li>Chris Doornbos (MinQuest) has visited site June, 2015.</li> </ul>
<b>Geological interpretation</b>	<ul style="list-style-type: none"> <li>Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.</li> <li>Nature of the data used and of any assumptions made.</li> <li>The effect, if any, of alternative interpretations on Mineral Resource estimation.</li> <li>The use of geology in guiding and controlling Mineral Resource</li> </ul>	<ul style="list-style-type: none"> <li>Geological modelling was completed in Micromine mining software under the supervision of Mr Chris Doornbos (MinQuest).</li> <li>The criteria used for the mineralization interpretation was a drill intersection greater than 2 m (or true width ~1.5 m) and <math>\geq 2.0\%</math> CuEq. A lower grade halo encompassing mineralization of 0.5%</li> </ul>

Criteria	JORC Code explanation	Commentary
	<p><i>estimation.</i></p> <ul style="list-style-type: none"> <li><i>The factors affecting continuity both of grade and geology.</i></li> </ul>	<p>CuEq was also developed. All interpreted mineralization domains were snapped to drill holes.</p> <ul style="list-style-type: none"> <li>Wireframes were imported to Vulcan, validated and then used for block modelling and resource estimation purposes.</li> <li>The previous interpretation has focused on the stacked echelon nature of the mineralization that was truncated by the footwall fault.</li> <li>The revised interpretation has focused on constraining the high grade material and the folded nature of the deposit.</li> </ul>
<b>Dimensions</b>	<ul style="list-style-type: none"> <li><i>The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.</i></li> </ul>	<ul style="list-style-type: none"> <li>The drilling has defined mineralization over a 1.4 km trend distance, a down dip distance of 700 m and across a stratigraphic thickness of approximately 100 m.</li> </ul>
<b>Estimation modelling techniques</b>	<p><b>and</b></p> <ul style="list-style-type: none"> <li><i>The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.</i></li> <li><i>The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.</i></li> <li><i>The assumptions made regarding recovery of by-products.</i></li> <li><i>Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).</i></li> <li><i>In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.</i></li> <li><i>Any assumptions behind modelling of selective mining units.</i></li> <li><i>Any assumptions about correlation between variables.</i></li> <li><i>Description of how the geological interpretation was used to control the resource estimates.</i></li> </ul>	<ul style="list-style-type: none"> <li>The Mineral Resource Estimate was developed with a database that is unchanged since the previous work in 2013 and published as an NI43-101 report in 2013.</li> <li>This used the survey, drilling, geological and assay data from: 115 drill holes totaling 33,620 m of (HQ and which was reduced to NQ in mineralized zones) of diamond core drilling, 815 downhole survey points, 1719 core sample assay results, 3040 geotechnical observations and 208 SG measurements. No material data errors were detected upon review.</li> <li>Topographic data was derived from regional government mapping sources.</li> <li>Micromine mining software was used to interpret the geology contacts, weathering profile, faults and mineralization envelopes. Interpretations and wireframing were undertaken in a 3-dimensional environment unencumbered by the previous sectional processes.</li> <li>The geology and mineralization wireframes were imported into Vulcan software. Samples within the mineralized wireframes were flagged and composited on 2 m intervals.</li> <li>Three low grade and nine high grade mineralization domains</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> <li>• <i>Discussion of basis for using or not using grade cutting or capping.</i></li> <li>• <i>The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.</i></li> </ul>	<p>were estimated independently as well as w surrounding wastes material within similar geological domain.</p> <ul style="list-style-type: none"> <li>• Semi-variogram models provide the basis for Ordinary Kriged block estimates for potentially economic elements Cu, Au, Pb, Zn, As, with total ranges of 100 m along strike and 60 m across strike.</li> <li>• A block model was constructed to presents a reasonable volume model for the thin high grade interpretation.</li> <li>• Block estimates for mineralisation are based on 5 m by 2.5 m by 2.5 m parent blocks with sub-cells down to 5 m by 2.5 m by 1.25 m used for volume definition.</li> <li>• Block estimates for waste areas are based on 5 m x 2.5 m x 2.5 m parent blocks. With discretisation of 6 by 3 by 3 points.</li> <li>• Two estimation passes with a search range of 90 m by 60 m by 20 m, then 180 m by 120 m by 40 m. Search orientations were varied locally within the model anisotropy based on a simplified structural model. Parameters include a maximum of eight 2 m composites and two composites per drill hole with the first pass requiring a minimum of three drill holes.</li> </ul>
<b>Moisture</b>	<ul style="list-style-type: none"> <li>• <i>Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Tonnages and grades were estimated on a dry in situ basis.</li> <li>• No Moisture values were included.</li> </ul>
<b>Cut-off parameters</b>	<ul style="list-style-type: none"> <li>• <i>The basis of the adopted cut-off grade(s) or quality parameters applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>• Previous work and NI43-101 reports do not include mining assessments.</li> <li>• No formal economic assessment study has been conducted to positively identify a realistic cut-off grade for various possible mining scenarios of the Marg deposit.</li> <li>• The Marg deposit presents both open pit potential development near surface and an underground development target.</li> <li>• IMC completed a preliminary mining assessment on the 2013 resource model. This identified the inclusion of considerable inter-burden and a lower grade threshold than is suitable for</li> </ul>

Criteria	JORC Code explanation	Commentary
		<p>underground assessment prompting the current resource update.</p> <ul style="list-style-type: none"> <li>The Mineral Resource is presented 0.5% Cu cut-off. This is expected to meet the marginal costs of processing without relying on value from other elements.</li> </ul>
<b>Mining factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>The deposit would most likely be mined using both open pit and underground methods.</li> <li>The updated resource estimate will be the basis of a planned scoping study.</li> </ul>
<b>Metallurgical factors or assumptions</b>	<ul style="list-style-type: none"> <li><i>The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.</i></li> </ul>	<ul style="list-style-type: none"> <li>Modal analysis indicates that there is a significant amount of interlocking between pyrite and the target minerals of chalcopyrite, galena and sphalerite.</li> <li>Metallurgical test studies in 2008 give relatively poor bulk circuit recoveries with copper and lead recoveries of about 50% each into the final bulk concentrate although about 30% of the lead in the feed was present as a non-sulphide.</li> <li>About 75% of the zinc in the zinc circuit feed was recovered into a zinc concentrate.</li> <li>Bench scale test work completed to date has not defined the most probable flow sheet for the deposit and requires further work to test the option of initial production of a bulk concentrate against differential flotation of the copper and zinc.</li> <li>Further metallurgical work must be initiated and completed.</li> </ul>
<b>Environmental factors</b>	<ul style="list-style-type: none"> <li><i>Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual</i></li> </ul>	<ul style="list-style-type: none"> <li>Baseline environmental water quality surveys were undertaken in 1988 and 1989 and continued in 1990, 1996, and 1997. The findings indicate that there are no significant or unusual</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>assumptions</b>	<p><i>economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.</i></p>	<p>environmental sensitivities associated with the Marg Deposit.</p> <ul style="list-style-type: none"> <li>At the time of the report there were no known environmental, permitting, legal, title, taxation, socio-economic, or political issues that would adversely affect the reported mineral resources.</li> <li>Any future exploration work, especially that requiring surface disturbance (i.e. road building, excavator trenching, etc.), would be subject to the Yukon Territorial regulations in place at that time. Furthermore, future exploration must be conducted in consultation with the local Na-Cho Nyak Dun First Nations First Nations People.</li> </ul>
<b>Bulk density</b>	<ul style="list-style-type: none"> <li><i>Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.</i></li> <li><i>The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.</i></li> <li><i>Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.</i></li> </ul>	<ul style="list-style-type: none"> <li>A total of 248 specific gravity measurements from 18 drill holes have been made on the Marg project using the Archimedes methodology on drill core specimens.</li> <li>Bulk density values are between 2.8 t/m<sup>3</sup> for unmineralised silicate rocks to over 4.5 t/m<sup>3</sup> for sulphide dominated material.</li> <li>Sample density displays a strong relationship with a combined Cu, Pb, Zn grade. A linear regression was used in 2013 to assign block density from the estimated grades.</li> <li>The linear regression was reviewed and found to be consistent with samples inside the current high-grade zones. Hence the existing model was retained as:</li> </ul> $\text{Dry Bulk Density} = 2.8 + 1.2 \times (\text{Cu} + \text{Pb} + \text{Zn})$ <ul style="list-style-type: none"> <li>This relationship predicts dry bulk density values of between 2.8 t/m<sup>3</sup> in barren silicate rocks and up to 4.5 t/m<sup>3</sup> in sulphide dominated material and conforms with the occurrence of heavy sulphide minerals indicated by the economic grade along with associated pyrite occurrence.</li> <li>The average dry bulk density reported is 3.6 t/m<sup>3</sup> for high-grade domains and 3.1 t/m<sup>3</sup> for low-grade domains.</li> </ul>

Criteria	JORC Code explanation	Commentary
<b>Classification</b>	<ul style="list-style-type: none"> <li>The basis for the classification of the Mineral Resources into varying confidence categories.</li> <li>Whether appropriate account has been taken of all relevant factors (ie relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).</li> <li>Whether the result appropriately reflects the Competent Person's view of the deposit.</li> </ul>	<ul style="list-style-type: none"> <li><b>Indicated Resources</b> are defined by areas with demonstrated continuity in the eastern outer limb zones where the drilling is roughly 80 by 40 m or closer in spacing within the plane of the mineralisation.</li> <li><b>Inferred Resources</b> include:               <ul style="list-style-type: none"> <li>High grade domains with limited extent</li> <li>High grade areas with broader drilling</li> <li>All low grade lenses interpreted</li> </ul> </li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>The results of any audits or reviews of Mineral Resource estimates.</li> </ul>	<ul style="list-style-type: none"> <li>An independent due diligence study of the was completed by A. A. Burgoyne of Burgoyne Geological Inc. in 2011.</li> <li>The current Mineral Resource estimate was reviewed by Mr Justin Legg and Mr John Horton on behalf of IMC Mining Ltd; and by Mr Chris Doornbos on behalf of MinQuest.</li> </ul>
<b>Discussion of relative accuracy/fidene</b>	<ul style="list-style-type: none"> <li>Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.</li> <li>The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include assumptions made and the procedures used.</li> <li>These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.</li> </ul>	<ul style="list-style-type: none"> <li>Estimation quality variables were retained for the copper estimates for the               <ul style="list-style-type: none"> <li>Kriging variance</li> <li>Slope of regression</li> <li>Kriging efficiency</li> <li>Number of samples</li> <li>Number of drill holes</li> <li>Average sample distance</li> <li>Minimum distance to the nearest sample</li> </ul> </li> <li>In addition nearest neighbour composite assignment were used to provide declustered statistics for each variable.</li> <li>Model validation included:               <ul style="list-style-type: none"> <li>Visual assessment, principally in cross section</li> <li>SWATH plots that present means spatially in panels</li> <li>Comparison of statistics between composites, declustered composites and block estimates</li> </ul> </li> </ul>