

ABN: 72 002 261 565

# ASSAY RESULTS OF UP TO 46 g/t Au CONFIRM HIGH-GRADE POTENTIAL AT CREDO WELL

# **Highlights**

- Assay results received from recent RC drilling at the Credo Well Project.
- 8 holes drilled for a total of 694 metres.
- Highlights from the Main Zone of mineralisation include:
  - o 3m @ 15.8g/t Au from 48m, including;
    - 2m @ 23.5 g/t Au from 48m;
    - 1m @ 46 g/t Au from 47m; and
  - 4m @ 3.1g/t Au from 47m, including;
    - 2m @ 5.9 g/t Au from 47m
- Historical intersections<sup>1</sup> from Credo Well as previously reported by Torian include:
  - 3m @ 16.46g/t Au from 54m (main vein);
  - 1m @ 58.80g/t Au from 1m (main vein);
  - o 5m @ 7.42g/t Au from 39 (hanging wall vein);
  - 8m @ 10.47g/t Au from 61m (main vein);
- Credo Well will be explored under the recently announced earn-in arrangement with Dampier Gold (ASX: DAU) spending \$500,000 over 4 years to earn a 50% interest.
- Planned follow-up work includes geophysical targeting and geological studies prior to further RC and diamond drilling.

Torian Resources Limited (**Torian** or **Company**) (**ASX: TNR**) is pleased to report assay results from a limited program of Reverse Circulation (RC) drilling completed recently at its Credo Well Project near Kalgoorlie in Western Australia.

The program, comprising a total of eight RC holes for 694 metres, was designed to in-fill previous RC drilling and to test the extent of gold mineralisation surrounding an area of modest historical mining. Significantly, no holes to date have been drilled deeper than 170m.

#### 1. Credo Well

Credo Well formed part of Torian's Zuleika JV Project and is located in close proximity to a number of major gold operations in the Kalgoorlie region – approximately 10km west of Paddington, 5km northeast of Mt Pleasant and some 20km north of Kundana. The area comprises some 16km<sup>2</sup> of the total 222km<sup>2</sup> Zuleika Project, as shown in Figure 1 below.

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**Directors** 

<sup>&</sup>lt;sup>1</sup> Refer ASX announcement 14/02/2017



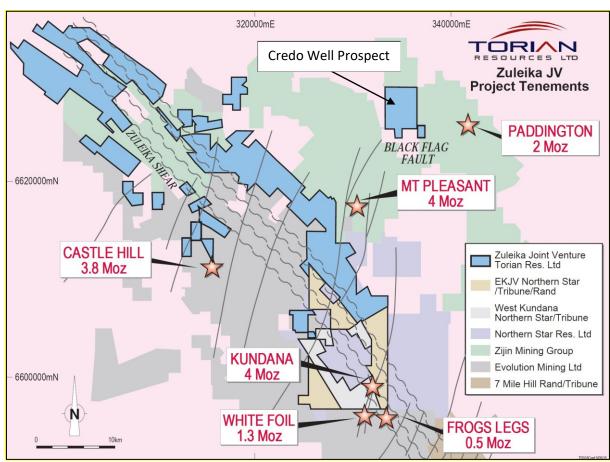


Figure 1: Map showing Torian's Credo Well Prospect in relation to other regional deposits.

# 2. Regional Geology

Credo Well lies in the Ora Banda Domain, within the Kalgoorlie Terrane of the Norseman-Wiluna Greenstone Belt. Local rocks include mafic and ultramafic volcanics and their high-level intrusive equivalents. The sequence appears to be approximately 10km thick.

In detail, the rocks comprise the Bent Tree Basalt, the Victorious Basalt and Black Flag Group. The Bent Tree Basalt consists of massive tholeiitic flows with doleritic phases. The tholeiitic Victorious Basalt displays porphyritic and variolitic textures and the Black Flag Group comprises felsic to intermediate volcanic, epiclasitic and sedimentary rocks.

The major mafic-intrusive packages of the sequence are the Mt Ellis and Mt Pleasant sills, positioned at the base of the volcano-sedimentary package. The Mt Ellis Sill comprises a layered pyroxenite to quartz-gabbro and the more aerially extensive Mt Pleasant Sill is a layered peridotite to quartz-gabbro.

The Liberty Granodiorite is the dominant felsic intrusive with minor, multiple phases of more widely distributed felsic porphyries. Dolerites and gabbroic sills, relatively large quartz-feldspar porphyries and syenitic to granitic bodies all intrude the basalt, incorporating a larger component of the unit than previously recognised.

The sequence displays well preserved igneous structures and textures, including cumulate textures in the layered intrusions, pillows structures and varioles in basalts. Metamorphism ranges from low to mid-greenschist facies, characterised by a high degree of primary textural preservation.



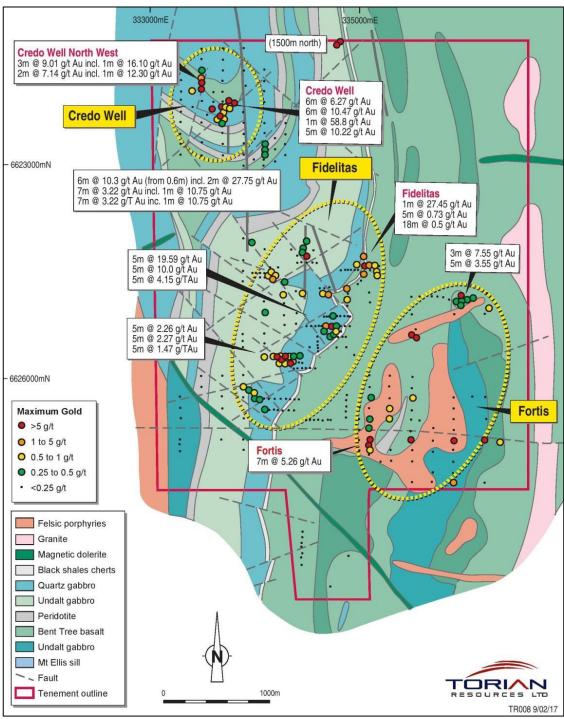


Figure 2: Map showing Torian's Credo Well Prospect, historical intersections, tenure and geology.

# 3. **Drilling Program**

The recent drilling program consisted of eight RC holes for a total of 694 metres. The program targeted the Credo Well underground workings, which is the most advanced prospect within the Project.

The holes were designed to in-fill previous RC drilling, with the deepest hole completed by Torian being 130m. Most holes were drilled towards 310 degrees magnetic, however due to access issues around historic dumps, thick trees and underground workings, one hole was drilled in the opposite direction. This hole returned the best result.



Intersections greater than 0.3g/t Au, returned from the final batches submitted to the laboratory, are shown in Table 1 below:

Hole ID	E	N	Depth (m)	Dip	Azi	From (m)	To (m)	Width (m)	Grade (g/t)
CRC177	333925	6628736	75	-60	310	N	o Significar	nt Intercep	ts
CRC178	333907	6628723	70	-55	310	47	51	4	3.1
					includes	47	50	2	5.9
CRC179	333844	6628751	100	-55	130	48	51	3	15.8
					includes	48	49	1	46.0
CRC180	333902	6628675	130	-60	310	118	123	5	0.65
CRC181	333842	6628700	20	-60	310	2	3	1	0.35
CRC182	333863	6628682	70	-60	310	48	49	1	1
CRC183	333815	6628617	80	-60	310	49	50	1	1.46
CRC184	333889	6628658	149	-60	310	107	108	1	0.55

Table 1: Drill results of greater than 1g/t Au from Credo Well.

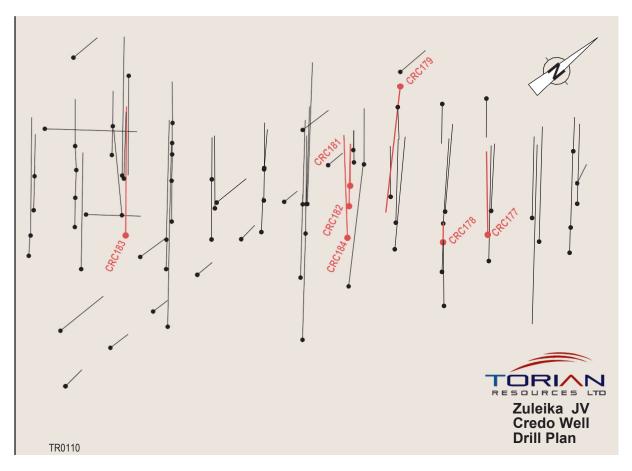


Figure 3: Drill Hole plan at Credo Well



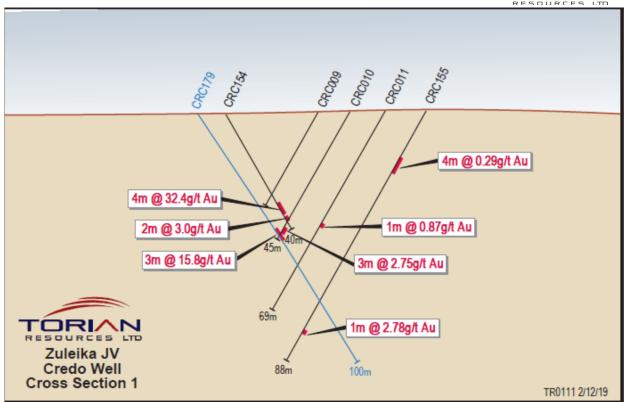


Figure 4: Cross-Section showing CRC179 drilled to 130 degrees (left to right) intersecting high grades around 15m below CRC154

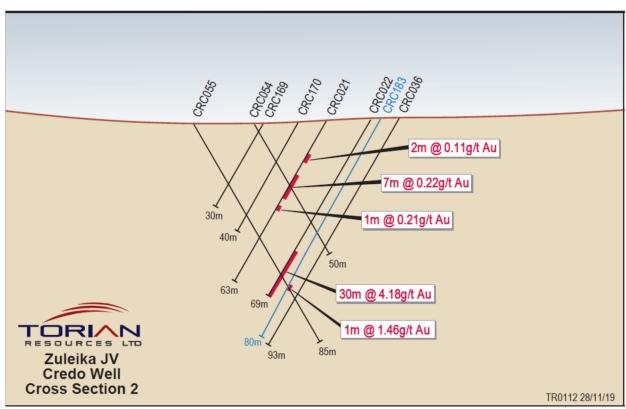


Figure 5: CRC022 cross section with CRC183 showing no continuation of the grade in CRC022

# 4. Interpretation

The results have confirmed the presence of continuous and good tenor mineralisation in the north-east of the project (Holes CRC 178 and CRC179). Holes CRC180, CRC181 and CRC 184, which were designed to extend the mineralisation both up- and down-dip, intersected lower grade mineralisation but did confirm extensions of the mineralised structure – confirming the potential for repeats of the high-grade



mineralisation at depth.

Hole CRC183 was twinned with historical hole CRC022, which returned a reported intercept of 30m at 4g/t. The hole failed to replicate this high-grade result, returning a lower grade intercept of 1m at 1.46g/t. Based on preliminary interpretation of the results, it would appear that either CRC022 has been located in the incorrect location or that it has been drilled down a narrow gold-bearing vein.

Rock recovered from the spoil heap shows the presence of narrow quartz veins with alteration cross-cutting the main vein at around 60 degrees (these quartz veins may not be the main vein and they were not located in-situ, suggesting that this is speculation). Further work is required to obtain the original log of CRC022.

### 5. Next Steps

Over the next two months, Torian plans the following works at Credo Well:

- Carry out further interpretation of current and historical drilling including a geophysical targeting study by Southern Geoscience Corporation;
- Conduct geological studies to construct a void model and determine the orientation of the vein sets; and
- Plan additional RC and diamond drilling to determine the extent of the mineralisation.

## 6. Commentary

Commenting on the results, Torian's Managing Director, Stephen Jones, said: "The recent RC program has confirmed the presence of exceptionally high-grade mineralisation at Credo Well and the potential to establish a high-grade Resource. Upcoming geophysical targeting and geological studies will help us to determine the geometry and orientation of the high-grade lodes, allowing us to plan follow-up RC and diamond drilling to fully evaluate the size and potential of this strategically located project."



Figure 5: Picture of Credo Well looking North East. Note the extensive historical dumps and underground workings.

#### For further information contact:

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# **About Torian:**

Torian Resources Ltd (ASX:TNR) is a gold exploration and development company with an extensive and strategic land-holding comprising six projects and over 500km<sup>2</sup> of tenure in the Goldfields Region of Western Australia.

Torian's flagship project, Zuleika, is located along the world-class Zuleika Shear. The Zuleika Shear is the fourth largest gold producing region in Australia and consistently produces some of the country's highest grade and lowest cost gold mines. Torian's Zuleika project lies north and partly along strike of several major gold deposits including Northern Star's (ASX: NST) 7.0Moz East Kundana Joint Venture and Evolutions (ASX: EVN) 1.8Moz Frogs Legs and White Foil deposits.

Torian's other projects include the strategically located Mt Stirling and Malcolm Projects in the Leonora region (near Red 5's King of the Hills Project), where it recently completed updated Mineral Resource Estimates and preliminary scoping studies, and a suite of other projects in the Kalgoorlie region including Mt Stirling, Diorite, Malcolm, Gibraltar and Mount Monger.



#### References

**Paterson, C. 2005.** Credo Project M24/449 – 451. Annual Technical Report for the period ended 31 December 2004. Yilgarn Mining (WA) Pty Ltd March 2005

**Purcell, G., 2002.** Credo JV P24/2395-2406 Annual Report. Period 1 January 2001 – 31 December 2001. Homestake Gold Of Australia Limited, January 2002.

**Spora, P., 2002.** Credo JV P24/2395-2406 Annual Report. Period 1 January 1997 – 31 December 1997. Plutonic Operations Limited, February 1998.

# **Competent Person Statement**

The information in this report which relates to exploration results and mineral resources is based on information compiled, reviewed and conclusions derived by Mr Stephen Jones, who is a Fellow of the Australasian Institute of Mining and Metallurgy and a full-time employee of the Green Jacket Resources. Mr Jones has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the "Australasian Code for reporting of Exploration Results, Exploration Targets, Mineral Resources and Ore Reserves". Mr Jones consents to inclusion in the report of the matters based on this information in the form and content in which it appears.



# Appendix 2 Credo Well Project

# JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken toensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>All data and results referred to in this report are new.</li> <li>Samples were collected via Reverse Circulation (RC) drill chips.</li> <li>All drilling yielded samples on a metre basis. Initial samples were commonly composited into intervals of 4m, with selected individual 1m samples collected. Reverse Circulation (RC) drilling is utilised to obtain 1 m samples which are cone split, from which approx. 2-3 kg is pulverised to produce a 40 g charge for fire assay.</li> <li>Sample preparation method is total material dried and pulverized to nominally 85% passing 75 µm particle size. Gold analysis method is by 40g Fire Assay, with Atomic Absorption Spectrometry (AAS) finish (DL 0.01 – UL 50 ppm Au). Samples exceeding the upper limit of the method were automatically re-assayed utilizing a high grade gravimetric method.</li> </ul>
Drilling techniques	<ul> <li>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).</li> </ul>	RC drilling usually 155mm in diameter. RC drilling was via a face sampling hammer.
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Recoveries were logged onto paper logs during drilling. Recoveries were visually assessed.</li> <li>Sample recoveries were maximised in RC drilling via collecting the samples in a cyclone prior to sub sampling.</li> <li>No relationship appears from the data between sample recovery and grade of the samples.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drillholes were geologically logged. This logging appears to be of high quality and suitable for use in further studies.</li> <li>Logging is qualitative in nature.</li> <li>All samples / intersections are logged. 100% of relevant length intersections are logged.</li> </ul>



Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>Non-core RC drill chip sample material is riffle split, where sample is dry.</li> <li>The sample preparation technique is total material dried and pulverized to nominally 85% passing 75 µm particle size, from which a 40g charge was representatively riffle split off, for assay.</li> <li>Standard check (known value) sample were not used in all cases. Where used the known values correspond closely with the expected values. A duplicate (same sample duplicated) were commonly inserted for every 20 or 30 samples taken.</li> <li>The sampling used is typical of this style of deposit.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>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.</li> </ul>	<ul> <li>Various independent laboratories have assayed samples from the project over the years. In general they were internationally accredited for QAQC in mineral analysis.</li> <li>No geophysical tools have been used to date.</li> <li>The laboratories inserted blank and check samples for each batch of samples analysed and reports these accordingly with all results.</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>Selected significant intersections were resampled from original remnantsample material and analysed again.</li> <li>No twinned holes have occurred in this programme with varied results.</li> <li>Documentation of primary data is field log sheets (hand written). Primary data is entered into application specific data base. The data base is subjected to data verification program, erroneous data is corrected. Data storage is retention of physical log sheet, two electronic backup storage devices and primary electronic database.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Survey control used is hand held GPS for historic holes and differential GPS for the new holes. Downhole surveys were carried out on all drillholes following the completion of drilling using an Auslog A698 deviation tool.</li> <li>The holes in this programme were picked up by an authorised surveyor.</li> <li>Grid systems are various local grid converted to MGA coordinates.</li> <li>Topographic control is generally accurate to +/- 0.5 m for the historic holes and 0.1m for the new holes.</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> </ul>	<ul> <li>The drill spacing of the historic drilling is variable but generally no greater than 200m by 40m, with some areas infilled to 80m by 40m. The new drilling is 40m by 20m spaced.</li> <li>The areas have drilling density sufficient for JORC Indicated / Inferred category. Further infill</li> </ul>



Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been applied.	<ul> <li>will be required for other categories. The construction of a suitable void model is the biggest impediment to reporting a resource.</li> <li>Sample compositing has been used in areas where mineralisation is not expected to be intersected. If results return indicate mineralisation, 1m split samples will be submitted for analysis.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	<ul> <li>The orientation of the drilling is approximately at right angles to the known mineralisation and so gives a fair representation of the mineralisation intersected.</li> <li>No sampling bias is believed to occur due to the orientation of the drilling.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Samples were delivered to the laboratory in batches at regular intervals. These are temporarily stored in a secure facility after drilling and before delivery</li> </ul>
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>The company engages independent consultants who regularly audit the data for inconsistencies and other issues. None have been reported to date.</li> </ul>

# **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The Credo Well area is wholly contained within P24/4418, currently under application for conversion to a Mining Lease (MLA). This is beneficially held 100% by the company, transfers are pending.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>All work relating to previous exploration contained within this report was completed by other parties. Details are included in the references.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Details of the geology are found elsewhere in this report.
Drill hole Information	<ul> <li>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:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not</li> </ul>	<ul> <li>Details of the drilling, etc are found within the various tables and diagrams elsewhere in this report.</li> <li>No material information, results or data have been excluded.</li> </ul>



Criteria	JORC Code explanation	Commentary
	Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	
Data aggrega tion method s	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>Weighted averages were calculated by a simple weighting of from and to distances down each hole. Most samples are 1 metre samples. No top cuts were applied. Lower cut-offs used were 0.3 g/t Au.</li> <li>Internal dilution of up to 2m at less than 1g/t Au has been utilised in theintersection table, provide the overall grade of the intersection is plus 1 g/t Au.</li> <li>No metal equivalent values are used</li> </ul>
Relationship between mineralisati on widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>Details of geology, and selected cross sections are given elsewhere in this report</li> <li>At Credo Well the steep dipping nature of the mineralisation means that steeply inclined holes give slightly exaggerated widths. These are shown in the tables above.</li> <li>The tables above show drill widths not true widths. True widths would be approximately 80% of the drilled widths.</li> </ul>
Diagrams	<ul> <li>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.</li> </ul>	Details of geology, and selected cross sections are given elsewhere in this report.
Bala nced repor ting	<ul> <li>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.</li> </ul>	Details of the results, drilling, etc are reported elsewhere in this report.
Other substantive exploration data	<ul> <li>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.</li> </ul>	Details of geology, and selected cross sections are given elsewhere in this report.
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Proposed work included drilling of selected twin holes followed by infill and step out RC drilling across all resources. The aim of such work is to increase confidence in the data and also to test for extensions to the known resources. Budgets are being prepared for this work at present.</li> <li>In addition a significant number of additional prospects are known to exist within the projects as defined by previous RAB and RC drilling intersections. These will form the second phase of exploration.</li> <li>Various maps and diagrams are presented elsewhere in this report to highlight possible extensions and new targets.</li> </ul>