Trans-Siberian Gold plc

(“TSG” or the “Company”)

Updated Mineral Resource

Trans-Siberian Gold plc (TSG.LN) announces an update of the Mineral Resource estimate for the Asacha deposit in Kamchatka, Russia.

The updated Mineral Resource estimate was conducted by Seequent (formerly AGL) and classified according to the guidelines of the JORC Code (2012).

Mineral Resource Summary

The Mineral Resource estimate for Asacha as of 31 December 2017 is shown in the following table:

Classification	Zone	‘000 tonnes	Au (g/t)	Ag (g/t)	Au (‘000oz)	Ag (‘000oz)
Measured	Main	172	15	29	85	162
Indicated	Main	435	21	67	299	933
Indicated	East	3	56	30	6	3
Total M&I		**611**	**20**	**56**	**391**	**1,098**
Inferred	Main	78	14	33	35	82
Inferred	East	269	26	53	224	458
Total Inferred		**345**	**23**	**48**	**260**	**540**

Notes:

1. *Resources are reported above 4g/t cut-off grade*
2. *Resources are reported exclusive of mining depletion, having allowed for mining dilution to 31 Dec 2017.*
3. *Tonnage and grades have been rounded*

The resource at Asacha occurs in two zones: the Main zone (currently being mined) and East zone (not yet mined). The Main zone comprises six defined veins, with the bulk of the resource contained in two of these, QV1 and QV2, while the East zone is comprised of three narrow vein structures.

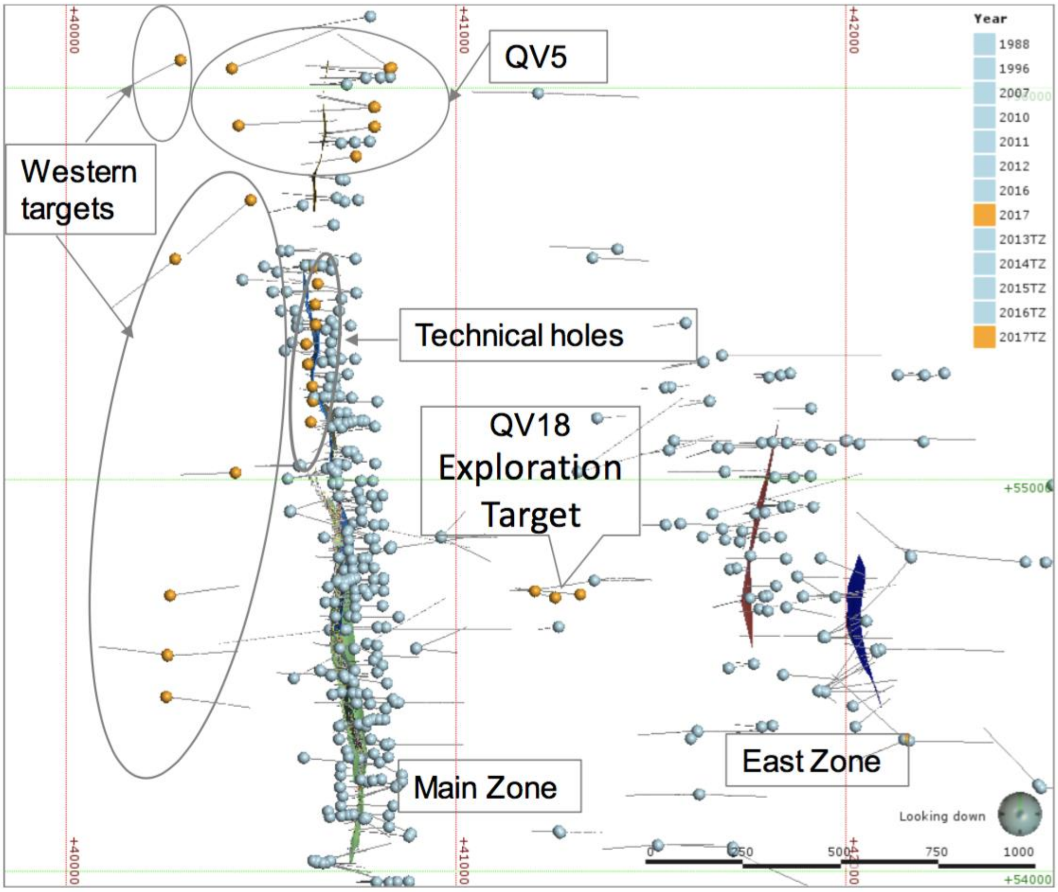
The purpose of these annual updates is to incorporate new data available from mining development, exploration drilling and to account for mining depletion.

2017 Exploration

In 2017 the Company’s continuing exploration programme included underground channel sampling as well as diamond hole drilling. The main areas of focus were:

- Western targets – to test the potential to the west of the Main Zone
- QV5 – infill drilling to a consistent 50m spacing along strike
- Technical holes to determine contact of the overburden and host rock
- New Exploration Target, QV18, some 450m east of the Main Zone

Figure1. Collar plan of drill holes



Year-on-Year Comparison

The following table illustrates the changes between the Mineral Resource estimate as of 31 December 2016 and the updated Mineral Resource estimate as of 31 December 2017:

Description	Au ('000oz)	Ag ('000oz)
Resource Estimate as at 31 December 2016	693	1,760
Mining depletion	-32	-56
Re-estimation of QV5 from new drilling data (inferred)	-4	-9
Difference due to model geometry and grade estimation changes for new data	-7	-57
Resource Estimate as at 31 December 2017	651	1,638

A copy of the updated Mineral Resource estimate is available on the Company's website at: http://www.trans-siberiangold.com

Competent Person Conclusion

The Competent Person, Ms. Carrie Nicholls, states*:*

"Based on the presence of the operating mine and mill, existing mine economics, the potential for incremental development access to deeper and more distal parts of the ore body, and the

potential for further exploration success, it is considered that all the vein resources defined at Asacha have a reasonable prospect of eventual economic extraction."

Dmitry Khilov, CEO of TSG, commented:

"The results of the annual review of our mineral resources show no material changes and confirm high grades within the in-situ resources. Adjustments to our resources due to mining depletion remained the same year-on-year. Our continuing programme of work indicates that there remains notable potential for the life of the Asacha deposit."

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Competent Person

The updated Mineral Resource estimate was prepared by Ms. Carrie Nicholls (Senior Evaluation Geologist, Seequent).

The information in this release that relates to the updated Mineral Resource estimate is based on, and fairly represents, information, which has been compiled by Ms. Nicholls.

Ms. Nicholls is a geologist with more than 15 years of experience in geo-statistical analysis, geological modelling and resource estimation. She has extensive experience in open pit gold mining operations in Africa and Venezuela and has undertaken geo-statistical and geological modelling work for a variety of deposits including gold, copper and niobium. She holds a B.Sc. (hons) degree in geology from Bristol University, UK and a M.Sc. in Mineral Resources from the University of Wales, Cardiff, UK. She is a member of the AusIMM and Geological Society of London.

Ms. Nicholls has sufficient experience relevant to the styles of mineralisation and type of deposit under consideration and to the activity that is being undertaken to qualify as a Competent Person, as defined in the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Ms. Nicholls is a full time employee of Seequent and has consented to the inclusion of the matters in this announcement based on the information in the form and context in which it appears.

About TSG

TSG is focused on low cost, high grade mining operations and stable gold production from its 100% owned Asacha Gold Mine in Far East Russia.

Additional information is available from the Company's website: www.trans-siberiangold.com

Market Abuse Disclosure

The information contained within this announcement is deemed by the Company to constitute inside information as stipulated under the Market Abuse Regulations (EU) No. 596/2014 ('MAR'). Upon the publication of this announcement via Regulatory Information Service ('RIS'), this inside information is now considered to be in the public domain.

Technical Glossary

“cut-off grade”	the lowest grade, or quality, of mineralised material that qualifies as economically mineable and available in a given deposit. May be defined on the basis of economic evaluation, or on physical or chemical attributes that define an acceptable product specification.
"g/t"	grams per tonne
"Indicated mineral resource"	a part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed
"Inferred mineral resource"	a part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drill holes which may be limited or of uncertain quality and reliability.
"JORC Code"	the code for reporting of the Australasian Joint Ore Reserves Committee, which is sponsored by the Australian mining industry and its professional organisations. The code is widely accepted as a standard for professional reporting purposes for reporting of mineral resources and ore reserves.
“Measured mineral resource”	A part of a Mineral Resource for which quantity, grade (or quality), densities, shape, and physical characteristics are estimated with confidence sufficient to allow the application of Modifying Factors to support detailed mine planning and evaluation of the economic viability of the deposit.
"Mineral Resource"	a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.
"Mineralisation"	the process or processes by which a mineral is introduced into a rock, resulting in a valuable or potentially valuable deposit. It is a general term, incorporating various types; e.g., fissure filling, impregnation, and replacement.

Appendix: JORC Code (2012 Edition) – Table 1

Section 1 Sampling Techniques and Data

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

Criteria	Commentary
Sampling techniques	• The Asacha mineral resource estimate is based on diamond core drill sampling, as well as surface channel sampling and underground face samples. • Diamond drill core sampling has been carried out by three different companies – CKGE in 1986-1990, TVX in 1994-1997, and TSG in 2004-2005 and again in 2012. All core was sampled to geological boundaries around logged vein intercepts, and used a nominal 1m sample interval outside of this. CKGE analysed full core samples, while TVX and TSG submitted half core samples for analysis. Since 2012 TSG reverted to whole core sample analysis as it was found that the sawing process was not always accurate. • Surface channel samples were collected by CKGE between 1986 and 1990. Trenches were excavated down to bedrock along the length of the vein exposure, and samples collected by rock-chipping along lines perpendicular to the vein. Sample intervals honour vein boundaries or are of nominal 1m length. Lines average 3m apart. The steps taken to ensure representivity of the sample along the sampled lines is not known. • Underground samples are collected from development drives, raises and walls by manual chipping along lines. It is reported that earlier samples were collected from a channel of nominal 5cm depth and 10cm width. However, the underground sampling observed by Seequent was typical of most underground sampling and involved collection by chipping along a marked line, with attention paid to ensuring that the volume collected is even along the axis of sampling to minimise bias. Sampling is to geological boundaries.
Drilling techniques	• All drill sampling is by diamond coring. • Early diamond drill core sampling (1986-1990) by CKGE used conventional (non-wireline) single tube coring equipment. Core diameter ranged from 29 to 56mm. After logging full core samples were submitted for analysis. No photographs were taken. • Diamond drilling between 1994 and 1997 by TVX used wireline twin tube equipment to retrieve samples of 47.6mm diameter. Core was sampled to vein boundaries or to 1m intervals. After logging, diamond saw cut ½ core samples were submitted for analysis. • Drilling by TSG in 2004-2005, was done by AtlasCopco (DIamec-26 rig) and Boart Longyear (LM55 and LF70 rigs). During 2012 and 2016 was done by Boart Longyear LM75 rig. • In 2017, the drilling was carried out by contractor Kolymageo using a Boart Longyear LF90 rig. All drilling was by wireline, using double tube barrels, and was of NQ diameter. • Core is not orientated.

Criteria	Commentary
Drill sample recovery	• Recovery information for earlier drill samples was not available. Drill sample recovery of the 2004-2005 TSG drilling averages 98%. • Core photos of holes drilled during 2012 from the eastern zone show that while core is moderately broken, the recovery is high with no systematic losses in ore zones apparent. Drill core recovery for the 2016 drilling campaign averages 99%. The poorest recoveries within the 2016 dataset (<90%) were investigated and were all found to be in excess of 50m from the intersected mineralisation and therefore of no risk. • The contractor is paid for metres drilled in order to ensure quality over quantity the contract stipulates core recovery of not less than 95% within the mineralised zones and not less than 85% in the host rock. • The sample recovery is affected by the type of structure and alteration of the zone intercepted. Grades were much lower than expected from the underground drilling campaign carried out in 2017. The campaign targeted high grades shoots where the veins are locally thickened and argillic alteration is prevalent. It was observed in the core that the mineralisation had been mostly washed out by the drilling process therefore from March 2018, the core diameter will be changed from NQ to HQ to help alleviate the problem. Increasing the core diameter would also produce a more representative sample for the deposit type consisting of high grade narrow veins. • The issue of drill sample recovery was given considerable attention in reports by previous authors, as it was considered a possible source of bias in early generation data. This issue remains unresolvable, but the risk of any gross bias due to core loss has been diminished significantly by ongoing mining production and sampling, and is not considered a source of significant risk to resource estimates.
Logging	• Geological logging consists primarily of identification of vein intersections. • The logging is carried out on 1m intervals on pre-printed sheets for the hole length of the core. The following data is logged: core recovery, RQD, hardness (on Mohs hardness scale), mineral assemblages on a scale of 1-3, angle of veins, no. of veins, % of veins. All core is photographed (wet). • It would be valuable to TSG to consistently re-log the host rock lithologies and construct a 3D model of the host rock geology. TSG agree in principle to the construction of a 3D geological model and though there is no commitment to the re-logging of historical core at this stage, they have agreed to provide the geological data with all new verified core in order to start the process of creating a 3D model.
Sub-sampling techniques and sample preparation	• Whole core sampling commenced in 2012, prior to this half core was submitted which was cut by saw. The change to whole core was implemented based on the inaccurate sawing of the core, which was in part attributed to the NQ diameter, and loss of sample from the process of sawing. • Mineralised intervals are sent for assay with 3m of host rock other side. • The initial core sample weight is around 5-7kgs, after the first crush in the laboratory, a 1kg sample is taken for the assay. The remaining crushed core is sent back to the core shed where it is retained for 3-4 years.

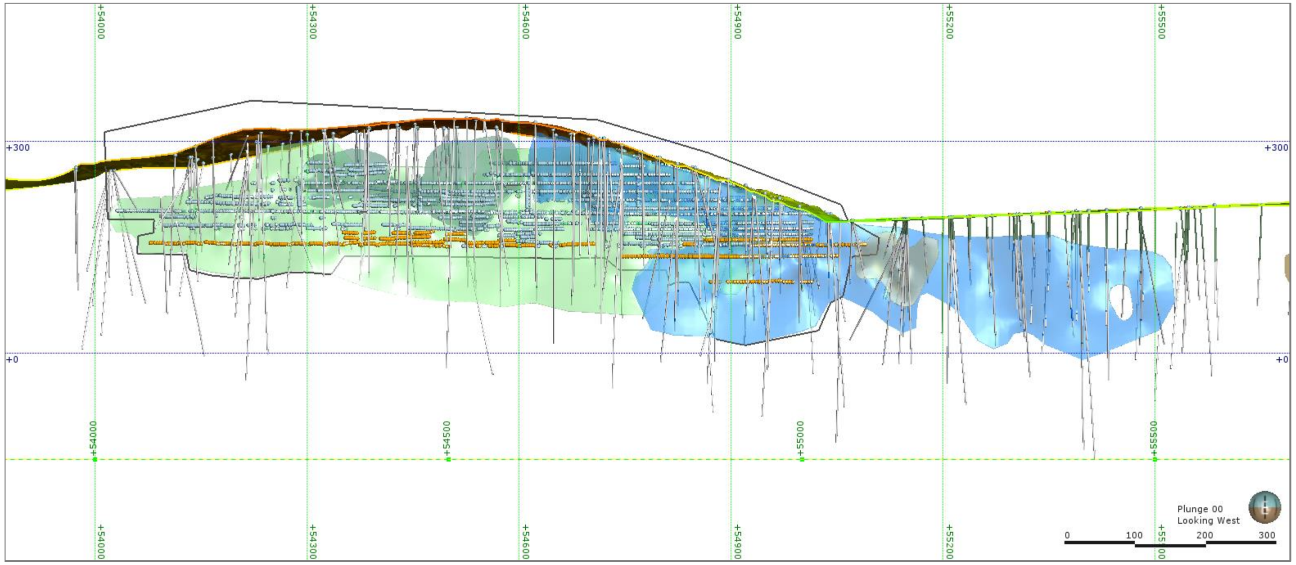
Criteria	Commentary
	• Sample preparation of all drilling samples reportedly conforms to a flowchart of drying, jaw crushing, splitting pulverizing, and pulp aliquot selection. Previous authors have examined the processes employed, and conclude that they are appropriate and conform to industry standard practices. • The surface and underground channel sampling undertaken by CKGE reportedly used the same procedure as for diamond drilling. • Underground channel sampling conducted by TSG since mining commenced in 2010 has been processed at the on-site laboratory. The sample preparation flowchart is very similar to that used for diamond core: o Drying at 105°C o Jaw crush to 3mm o Sample reduction to 2 x 0.5kg samples using rotary splitter o Pulverise to ~90% passing 75µm using a continuous ring mill • Seequent inspected the on-site laboratory and found it to be clean, well equipped and diligently operated. • Seequent note that there is potential for cross sample contamination in continuous ring mills. At present no control is employed for assessing the presence of this.
Quality of assay data and laboratory tests	• All CKGE diamond drill samples were analysed for Au and Ag by the Geological Survey Laboratory in Milkovo, Kamchatka. Samples were first analysed for Au by X-ray spectral analysis, then all samples with concentrations above detection also analysed by Fire Assay (50g charge) with gravimetric finish. • All TVX drill samples were analysed for Au and Ag by KamchatGeologia Laboratory in Petropavlovsk, Kamchatka, using the same procedure as for CKGE. • TSG diamond drill samples were all analysed at KamchatGeologia Laboratory using the same procedure as for TVX samples. • The quality of historic (pre-TSG) data has been discussed in considerable detail in previous reports, the most recent summary being Hatch (2006). Seequent were not provided with any of the historic QC data, and have not undertaken any further analysis. Hatch (2006, p41) concluded that “it is unlikely that there are any significant issues relating to the sample preparation and analytical work completed by the Milkovo and PK (KamchatGeologia) laboratories. However, Hatch considers that significantly more QA/QC data should have been collected and assessed as the TVX programme progressed”. Seequent agrees with Hatch’s assessment that ‘both the sample preparation and assaying procedures used for the CKGE and TVX samples are appropriate for this ore-body. They are consistent with industry practice’. In Seequent’s opinion this data is suitable for the purpose of resource estimation and supports the levels of classification applied. • No information was available to Seequent regarding TSG’s 2004/2005 diamond drilling, and no information specifically relating to 2012 drilling on the Eastern zones is available either. Based on total drilling metres, the diamond drill data acquired by TSG (including the Eastern zone) comprises 41% of total diamond drill metres. However, much of this drilling is extensional and exploratory in nature and is

Criteria	Commentary
	not directly included in resource estimates. When only data immediately relevant to resource estimates are considered, TSG diamond drill data makes up 10% of holes, and 10% of total diamond core vein metres used in estimation. • The lack of QC data available for TSG's diamond drilling is a concern. While there is no reason to suspect the validity/quality of the TSG diamond drill data, the lack of QA and QC data diminishes the confidence that can be placed in this data. In mitigation, the mining history and reconciliation do not show any evidence of material problems in the historic data. No biases are apparent in sampling as diamond intercepts are progressively superseded by channel sampling in the underground workings. • Seequent have analysed the QC data collected during analysis of TSG underground face samples at the on-site laboratory. QC is managed by the laboratory. • Accuracy is assessed using certified reference materials (CRMs) inserted into batches at the rate of 2 per batch of 24 samples. Two CRM's were in use during the period 2012-2015. Up until mid 2015 analyses of Au in CRM A and B showed the analytical process to be stable and in control. In the latter part of 2015, both CRM's show evidence of a decrease in laboratory performance – the average assayed grade trends downwards slightly and the variability increase. The difference between certified (expected) mean value and the average of actual assays is 7% for the year for both CRM's. During 2016 no CRM were submitted as none were available on site, new batches from Australia took some time to get to site and CRM submission resumed mid 2017. During 2017 the CRM difference in means between the certified value and TSG laboratory is between -5 and -3% for Au. The laboratory shows a low bias which was also evident from the pulp check assays submitted. • TSG laboratory procedures only routinely assess the precision of pulp aliquot selection – two aliquots are assayed for each sample, and the results averaged. Comparison of the two assays shows that pulp homogeneity is good, with duplicate pairs having a CV of 7%. • During 2015 TSG submitted crusher duplicate samples to the TSG on site laboratory and to Kamchatgeologia (KCG) as umpire samples. The paired fire assays from TSG laboratory indicate an absolute relative error in sampling and assaying of 23% CV. The samples submitted to KCG show a relative bias of +7%, with TSG being lower than KCG. This, and the low value of TSG CRM's with respect to certified mean, indicate that there may be a slight low bias in on-site laboratory assaying. • During 2016 a batch of checks samples from the eastern zone campaign were sent to Kamchatgeologia laboratory, though the sample set was small (9 samples when sample swaps and very low samples were excluded), the results indicate that the TSG laboratory has a slight low bias (5% for Au and 5% for Ag), though the coefficient of variation is very similar from both laboratories. • Repeat sampling of channels is now routinely carried out to assess the average relative error present in underground channel sampling. The CV achieved in 2017 were equal for both the original and the duplicate, indicating excellent repeatability. The external checks were sent to Irgiredmet Laboratory in Irkutsk which indicated that there is a slight low bias at the TSG laboratory. • Since 2014, an assessment of contamination in sample preparation was made by bracketing ore grade samples with blank samples. During 2016, 1 out of 9 blank samples submitted failed, albeit below cut-off. It is recommended that this practice is not only continued but is increased in frequency. However in 2017 no samples were submitted, as they encountered far fewer high grade samples and mining rates did not allow repeat sampling to take place.

Criteria	Commentary
	• Seequent re-iterate that a full QAQC programme whereby blanks, CRM, pulp and coarse/rig duplicates are submitted and analysed. The QAQC programme in place is what the on-site laboratory conduct as part of their own procedure. It is recommended that the geology department initiate their own QAQC programme for their sample submission to the laboratory and external checks.
Verification of sampling and assaying	• No independent verification of significant intersections was carried out by Seequent. Given the status of Asacha as a producing mine this is not considered necessary. Reconciliation to date does not indicate any material problem with the accuracy of diamond drill sampling. • Twinning of diamond drill holes is not considered necessary. Addition of successive generations of drilling which in-fills, and at times repeats, earlier holes, has not shown any major unexpected (i.e. not explicable by inherent variability) differences. In general holes separated by short distances are more similar than holes separated by larger distances. In addition, the grades indicated by diamond drilling are largely confirmed by channel sampling and mine production. • All assay data provided by laboratories is provided by email and are also printed out.
Location of data points	• No information was provided on the survey datum used – this is still restricted information in Kamchatka. TVX and TSG holes have been surveyed by the same independent survey contractor (KamchatTISIZ), with a reported accuracy of 3cm. Based on information in previous reports, the CKGE holes were originally surveyed in a different local coordinate system, but KamchatTISIZ were able to resurvey 41 of the original CKGE holes and used these to establish a transformation to migrate all CKGE hole coordinates into the new coordinate system. • Downhole surveying of CKGE reportedly used a MIR36 survey instrument at 20m intervals. TVX era holes were surveyed with a WelNav magnetic single shot instrument, and TSG holes with a Reflex magnetic single shot at intervals between 10 and 60m. No natural sources of magnetic interference are expected. • Since commencement of mining, surveying of development openings is carried out by the registered mine surveyor. Geology staff locate channel collar and path relative to the surveyed outline. It is considered that underground channel sample locations will be generally located with +/- 25cm of true location. • TSG measure the drillhole collar positions using tachymeter Nikon Nivo 5 MW. Downhole survey measurements were done using the REFLEX EZ-SHOT survey instrument. On average surveys were taken every 20m. Measurements are made at regular intervals whilst drilling to track the orientation and final measurements for the database are made when the hole is complete. The local magnetic declination is used to correct the azimuths measured. • Due to experience with the local brown bears, the collar locations are marked by approximately 2m metal tubes, hammered in vertically, with a metal identification tag. The tag includes the hole ID, drillhole depth and date. • The topographic survey was carried out by by KamchatTISIZ JSC in 1997 and digitized in 2004 by GEOSEIS Ltd on a scale of 1:1000 (Pulkovo 1942, Gauss-Kruger projection, Area 27). The quality of this survey is adequate.

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td><i>Data spacing and distribution</i></td><td>

- Surface and underground channels are spaced at approximately 3m along drives. Diamond drill holes vary in spacing. The areas of densest diamond drilling are at roughly 25x50m on the main veins. On the East veins the drilling varies from approximately 30x30m near surface extending to 50x75m at depth. Veins have not been modelled unless continuity can be confidently assumed. The veins updated for this model are shown in relation to the new data in the figures below.



QV 1 and 2 with locations of drilling and channel sample data. Orange locations indicate 2017 channel samples.

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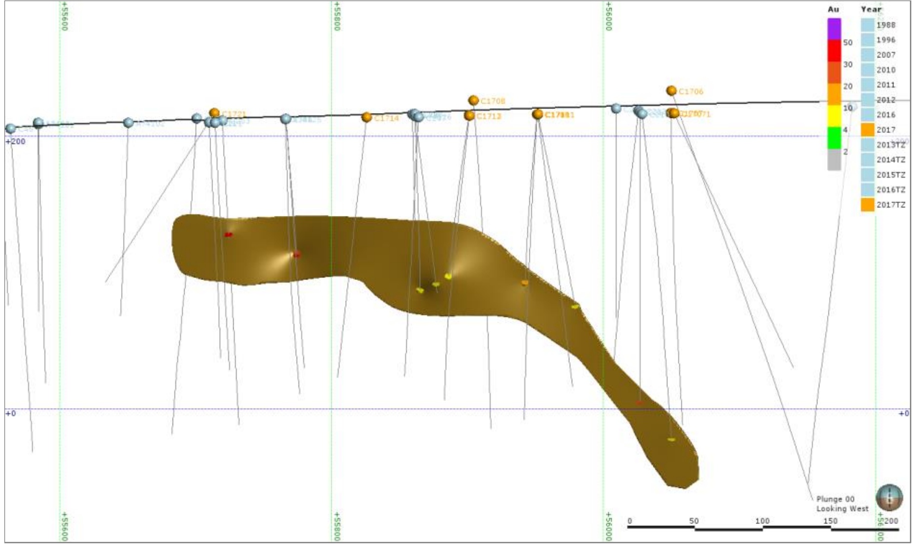
Criteria	Commentary
	 QV 5 with locations of drilling data. Orange collars indicate 2017 drilling. • Vein intersections have been composited in two ways: ○ Firstly, all diamond drill holes and channel samples were composited to a 1m (+/- 0.5m) interval. These were used to make grade estimates in 3 dimensions above the base of mine development ○ Secondly, all diamond holes and channel samples that traverse the full width of the vein have been composited across the full width of the vein, then multiplied by the horizontal width of the intersection to create metal accumulations. Below the lowest level of mine development, grades were estimated in 2 dimensions.
Orientation of data in relation to geological structure	• The veins mined at Asacha are sub-vertical. Diamond drill data from surface is generally angled to intersect the veins at moderate angles. Holes are drilled from both east and west. A number of intersections at acute angles have been excluded from estimation. The uncertainty in the lateral location of veins increases with depth below surface as holes become longer and intersection angles more acute.
Sample security	• Underground channel and drill core samples are processed and assayed on site. • It is not known whether any special precautions were taken to ensure security of diamond drill samples. The site is remote, and all

Criteria	Commentary
	handling and transport of bagged samples would have been undertaken by company personnel.
Audits or reviews	• Data quality has been discussed in detail by a number of previous authors. The most comprehensive treatment was a review of previous work by Hatch in 2006 for Standard Bank PLC (Hatch, 2006, Technical Review Report, September 2006, Hatch_60915 PD Final Report Oct2006.pdf) which draws on a number of earlier reports. • Hatch conclude that the lack of systematically collected and presented data available to demonstrate the quality of sampling and assaying is a weak point in resource estimates. Seequent concur with this view. • Based on analysis of available historic data, and review of current QAQC practices, Seequent are satisfied that the data supplied are of sufficient quality for the purposes of mineral resource estimation and support the level of classification applied to estimates. The commencement of mining and processing and reasonable reconciliation between prediction and production has significantly de-risked the issue of data quality in estimating, classifying and reporting Mineral Resources at Asacha. • Seequent reiterate that compilation, analysis and reporting of all existing QA/QC data for diamond drilling at Asacha should remain a priority for TSG.

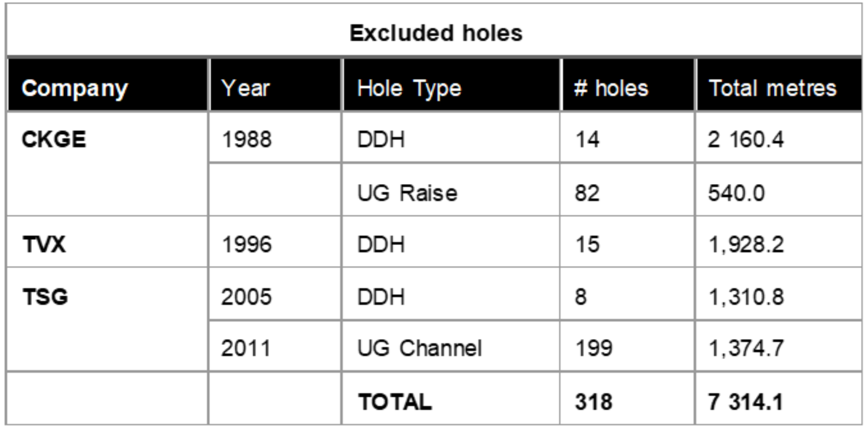
Section 2 Reporting of Exploration Results

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

Criteria	Commentary
Mineral tenement and land tenure status	• TSG operates on the basis of the license PTR11626BE dated 07.08.2003 with amendments dated 06.04.2016 with the aim of exploration and mining, including the related processing and use of waste. The license area is 24 km^2. The expiry date of the license is 01.09.2018. The company have launched an application with the necessary documentation for an extension of the license until 2024. It is expected to be renewed by July 2018. • There are no known impediments to the operation of mining in this license area.
Exploration done by other parties	• The Asacha deposit was discovered in 1973, and exploration work was undertaken by the state owned Central Kamchatka Geological Expedition (CKGE) between 1986 and 1990. In 1990 a mining licence was granted to Trevozhnoe Zarevo (TZ), and in 1994 TVX Gold Inc. (TVX) acquired a 50% stake in the company. Exploration work was carried out by TVX between 1996 and 1998. In 2001 TSG acquired TVX's 50% stake in TZ, and increased this to 90% in 2002. TSG acquired the remaining 10% interest in TZ in two tranches; 2007 and 2010. TSG conducted geological exploration drilling of the Main Zone in 2004-2005, and of the Eastern Flank during 2012 and 2016. Mine development on the Main Zone commenced in 2008, and mining (extraction and stoping) started in the middle of 2011. • The table overleaf summarises all drilling and underground sampling done on the Asacha deposit:

Valid Holes

Company	Year	Hole Type	# holes	Total metres	Prefix
CKGE	1988	DDH	158	33 075.6	C003-C328
		Surface Channel	366	2 976.8	K, T
		UG Channel	465	2 579.5	T1, T-BK
		UG Raise	69	370.5	S1, S2, S3, S4, S5
TVX	1996	DDH	106	17 425.5	A74 001 - A74 146
TSG	2004/5	DDH	119	23 382.7	1A – 606A
	2010	UG Channel	64	431.6	B, O, R
	2011	UG Channel	379	1 936.0	B, D, O, R
	2012	UG Channel	569	2 191.9	B, O, R
	2013	UG Channel	88	456.1	
	2014	UG Channel	603	1443.05	
	2015	UG Channel	561	1608.92	
	2016	UG Channel	581	1 518	
	2017	DDH	25	6 402.3	C1703 – C1748
	2017	UG Channel	716	1 832.2	KV, ORT, RS, TVSH, VHS
TSG (Eastern zone)	2012	DDH	47	11 202.6	C1001-C1090
	2016	DDH	17	4 096.9	C1602-C1606, C1620,C1611, C1621,

Criteria	Commentary
	

Excluded holes

Company	Year	Hole Type	# holes	Total metres
CKGE	1988	DDH	14	2 160.4
		UG Raise	82	540.0
TVX	1996	DDH	15	1,928.2
TSG	2005	DDH	8	1,310.8
	2011	UG Channel	199	1,374.7
		TOTAL	**318**	**7 314.1**

Geology	• The Asacha gold deposit is located in the south-east region of the Kamchatka Peninsula, far east Russia. The Peninsula is a Tertiary volcanic arc that formed due to the subduction of the north-westerly moving Pacific plate. The morphology comprises a series of NNE arc parallel structures defined by the alignment of stratovolcanoes, many of which are still active. A number of transverse faults offset the arc-parallel structures, and in places these have been recognized as hosts for mineralisation. • Although a number of parallel vein systems have been identified in the area, only two systems have been explored in detail. First of them is referred to as the Main Zone and it has been defined over strike length of approximately 1500m and to depth of approximately 300m in places. The second is the East Zone, where the veins are generally narrower and less continuous. For modelling purposes, the Main Zone has been divided into several subsidiary veins that occur as splays or splits. The veins are steeply dipping and in places can be up to several meters thick. • The Asacha deposit is classified as a low-sulphidation quartz-adularia-sericite Au-Ag epithermal vein system. The mineralisation is hosted with N-S trending fault hosted structures. High grade zones are usually associated with sulphide rich bands (referred to as Ginguro bands). The Asacha ore minerals are native gold and silver in the form of polybasite and pyrargyrite. The main gangue minerals include quartz and adularia, with significantly smaller quantities of hydromicas, kaolinite, montmorillonite, iron and manganese oxides and chalcophile minerals.
Drill hole Information	• The table overleaf summarises the drillhole of interest for QV 5, drilled during 2017:

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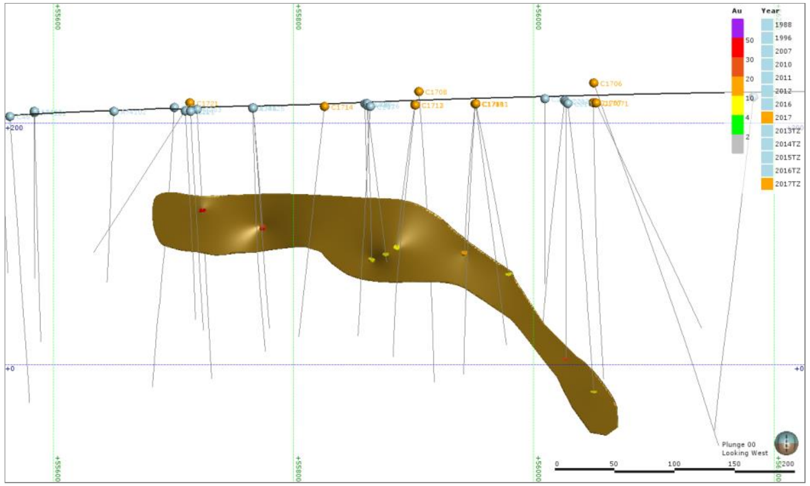
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>
<table>
<tr><th rowspan="2">Drill hole ID</th><th colspan="3">Collar</th><th rowspan="2">Hole length</th><th rowspan="2">Dip</th><th rowspan="2">Azimuth</th><th colspan="2">Interception depth</th><th rowspan="2">Interception Length</th></tr>
<tr><th>X</th><th>Y</th><th>Z (RL)</th><th>From</th><th>To</th></tr>
<tr><td>C1709</td><td>40 789.725</td><td>55 951.185</td><td>216.201</td><td>200</td><td>-44.6</td><td>264.6</td><td>179.0</td><td>180.8</td><td>1.8</td></tr>
<tr><td>C1711</td><td>40 791.55</td><td>55 951.754</td><td>216.242</td><td>220</td><td>-45.1</td><td>282.1</td><td>195.4</td><td>195.7</td><td>0.3</td></tr>
<tr><td>C1712</td><td>40 790.314</td><td>55 901.115</td><td>215.368</td><td>200</td><td>-44.7</td><td>261.3</td><td>169.7</td><td>170.8</td><td>1.1</td></tr>
</table>
</td></tr>
<tr><td><i>Data aggregation methods</i></td><td>Exploration results are not being reported separately. The exploration drilling carried out in 2017 on QV 5 of the Main Zone has been incorporated within the mineral resource estimate. The mineralised intersections were domained by wireframes and samples were composited to 1m prior to estimation. A cut-off of 4 g/t was used to domain the mineralised zone, though below cut-off intersections were sometimes included for continuity of the vein.
Metal equivalents were not used in the reporting of the mineral resource.</td></tr>
<tr><td><i>Relationship between mineralisation widths and intercept lengths</i></td><td>The mineralisation at Asacha in general sub -vertical and exploration drilling aims to intercept the veins as perpendicular as possible. The drilling is on average orientated at a 50° dip.
The gold and silver mineralisation at Asacha is mainly concentrated within the quartz-adularia veins and is rarely found beyond their limits. Their lines of contact with surrounding rocks are clearly identified.</td></tr>
<tr><td><i>Diagrams</i></td><td>Exploration results are not being reported separately. The following figure shows the new drilling as orange collars and the old drilling as blue collars.</td></tr>
</table>

Criteria	Commentary
	 QV 5 with locations of drilling data. Orange collars indicate 2017 drilling.
Balanced reporting	- Exploration results are not being reported separately. The results of the drilling were used to update the reported Mineral Resources.
Other substantive exploration data	- The results from a hydro-geological study which was carried out in 2016-2017 predicted that water inflows to the 150m, 100m and 50m levels at 1 587 m^3/hour, 2 614 m^3/hr and 3640 m^3/hr. This affects the northern part of the Main Zone under the Semeyny stream.
Further work	- No exploration programmes are planned for 2018.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	Commentary
Database integrity	• Drilling data is stored in an unsecured Microsoft Access database. Assay results are received electronically, whilst other data is entered manually. • Validated data for use in estimates was provided in ASCII comma delimited files. A few errors detected in these files were fixed on advice from TSG. • Seequent also validated data using the internal consistency checks in the software packages Leapfrog® Geo, Datamine and pre-2016 estimates in Minesight. Visual checking was also used to detect any anomalous hole collar locations, hole paths, inconsistent geology etc.
Site visits	• Mike Stewart, at the time Principal Consultant, Seequent (formerly QG Pty Ltd) visited Kamchatka between 10th and 18th December 2012, and travelled to the Asacha mining operation from 13-15th December. Whilst on site Mike Stewart toured the underground operations, processing plant, mine laboratory, mining offices and core storage area. The remainder of the time was spent in the TSG offices in Petropavlovsk gathering data and discussing geology. • Carrie Nicholls, Senior Consultant, visited Kamchatka between 12-15th October 2017. The purpose of the visit was, as Competent Person for the mineral resource estimate to gain an understanding of the complexities of the deposit to aid the modelling process; review the processes carried out in relation to the collection and processing of sample data; to gain an understanding of their reconciliation process and exploration strategy.
Geological interpretation	• The primary geological interpretation of Asacha was provided by TSG in the form of coded drill hole intercepts and digitised level plan interpretations based on underground sampling and mapping. • Veins intercepts are based on logging of quartz combined with consideration of Au and Ag grades. Veins are typically banded accumulations of quartz, adularia, chalcedony, saccharoidal quartz, carbonate and ginguro (smokey black bands of fine grained mixed base metal sulphides). The banded habit of the veining suggests a typical cyclic crack-seal formation mechanism. The veins generally display hard contacts with the surrounding host rock but in some areas, the mineralisation extends as stockworks into the host rock within the hangingwall and footwall and also within clayey-brecciated zones. In this situation a lower threshold of 6g/t is used for defining veins. • The vein system at Asacha is comprised of two main veins (QV1 and QV2) with a number of smaller splay structures. The confidence in interpretation of the main structures is generally high, although correlation may be complicated around splays and towards the margins of veins. In general, vein continuity was only assumed where intercepts could be confidently correlated.
Dimensions	• The defined extent of mineralization on the Asacha vein system is a little over 1.5km in strike and 400m in vertical extent. The largest individual veins defined within this system (QV1 and QV2) have strike lengths of 1000m and outcrop at surface.

Criteria	Commentary
	• In the eastern zone, mineralization is defined over 1km of strike extent, although individual veins have a maximum strike of 500m. Veins in the eastern zone are significantly thinner, and less well correlated than in the main zone.
Estimation and modelling techniques	• Geometric modelling of vein structures was carried out using the implicit modelling software Leapfrog® Geo. Modelling of grades was carried out using Isatis and Datamine geostatistical software. • Two different approaches to modelling of grade were employed: • A 3D/2D boundary was delineated based loosely on the lowest levels of development. Within this boundary grades were estimated by 3D using Ordinary Kriging. This method was adopted because numerous channel samples do not cross the full width of the vein. The orientation of both search and variogram was adjusted for each block to match the local variations in the orientation of the vein. In addition, QV 5 (main zone) and QV25 in the east has been estimated in 3D. The variograms modelled are typical of precious metals: •

				Ranges (m)				Ranges (m)		
Variogram	**Vein**	**Nugget**	**Sill (sph)**	**Dip**	**Strike**	**Across**	**Sill (sph)**	**Dip**	**Strike**	**Across**
Au	10	0.26	0.14	7	8.4	1	0.60	30	48	5
	20, 21, 50	0.36	0.25	19	53	1.5	0.39	45	363	3.5
	30,40, 60, 25, 70, 80	0.33	0.25	14	16	1	0.42	50	80	5
Ag	10, 20, 30, 40, 50, 60, 25, 70, 80	0.19	0.32	20	34	1	0.49	60	90	4.3

Criteria	Commentary

The search parameters used for 3D estimation are in the table below:

Vein	Dip	Strike	Across	Min. samples	Max samples	2^{nd} search volume multiplier	Min. samples	Max samples
10	75	75	15	4	24	2	4	24
20	75	75	15	4	24	2	4	24
21	75	75	15	4	24	N/A		
25	100	200	30	4	24	2	2	24
30	90	90	15	4	24	N/A		
40	75	75	15	4	24	N/A		
50	100	250	20	4	24	N/A		
60	75	75	20	4	24	N/A		

- Outside of the 3D boundary on the Main Zone and in the East zone for QV 70 and 80, the veins are ideally suited to be estimated in 2D. The vein grades were estimated by Ordinary Kriging of Au metal, Ag metal and horizontal thickness, then Au and Ag grades were back calculated. Variogram models applied to all veins are shown overleaf:

Variable	Vein	Nugget	Nugget (%)	Sill (sph)	Ranges		Sill (sph)	Ranges	
					Dip	Strike		Dip	Strike
AuM_Cut	10	260	17%	500	25	25	800	100	100
	20,30,40,60	330	23%	485	18	18	610	50	50
	70,80	660	33%	600	30	40	735	60	80
AgM_Cut	10	780	17%	1500	25	25	2400	100	100
	20,30,40,60	1840	28%	2260	18	18	2440	50	50
	70,80	0.5	50%	0.25	10	10	0.25	40	40
HThick	10	0.3	21%	0.4	20	20	0.7	50	120
	20,30,40,60	0.3	21%	0.4	20	20	0.7	50	120
	70,80	0.3	21%	0.4	20	20	0.7	50	50

The search parameters used for the 2D estimation are in the table below:

Vein	Search		# sectors	Min/sector	Max/Sector
	Dip	Strike			
10	100	200	4	4	4
20	100	200	4	4	4
30	75	150	4	4	4
40	100	200	1	4	14
60	75	150	4	4	4
70	100	200	1	4	12
80	100	200	1	4	12

<table>
<tr><th>Criteria</th><th>Commentary</th></tr>
<tr><td></td><td>In both 2D and 3D estimates, top capping was applied to limit the influence of extreme values:
<table>
<tr><th rowspan="2">Vein code</th><th colspan="2">Cuts applied to vein accumulations</th><th colspan="2">Cuts applied to 1m composites</th></tr>
<tr><th>AuM</th><th>AgM</th><th>Au</th><th>Ag</th></tr>
<tr><td>10</td><td>200</td><td>350</td><td>150</td><td>400</td></tr>
<tr><td>20</td><td>250</td><td>450</td><td>150</td><td>700</td></tr>
<tr><td>21</td><td></td><td></td><td></td><td></td></tr>
<tr><td>30/31/3</td><td>60</td><td>60</td><td>65</td><td>200</td></tr>
<tr><td>40</td><td></td><td></td><td>150</td><td></td></tr>
<tr><td>50</td><td></td><td></td><td></td><td></td></tr>
<tr><td>60</td><td>60</td><td>25</td><td>100</td><td>40</td></tr>
<tr><td>25</td><td></td><td></td><td></td><td></td></tr>
</table>
The maximum distance of extrapolation of grades from data points is limited by the vein interpretation. Maximum extrapolation is to approximately 50m.</td></tr>
<tr><td><i>Moisture</i></td><td>All tonnages are estimated on a dry basis.</td></tr>
<tr><td><i>Cut-off parameters</i></td><td>Based on LOM mining and milling costs, the breakeven grade is 4g/t Au. A minimum mining width of 1m also applies. The breakeven metal content to meet these constraints is thus 4m*g/t. In practice, the proportion of resource below this threshold is insignificant, and it is practically equivalent to simply applying a 4g/t Au cut-off.
No account is taken of the contribution of Ag in consideration of cut-off.</td></tr>
<tr><td><i>Mining factors or assumptions</i></td><td>The Asacha resource is currently mined by a number of different development and stoping methods. Mining practice is evolving with experience, and is adaptive according to the local geological and geotechnical conditions.
The practical minimum mining width is approximately 1m.
No mining dilution is applied to reporting of resources.</td></tr>
</table>

Criteria	Commentary
	• Based on the presence of the operating mine and mill, existing mine economics, the potential for incremental development access to deeper and more distal parts of the orebody, and the potential for further exploration success, it is considered that all of the vein resources defined at Asacha have a reasonable prospect of eventual economic extraction.
Metallurgical factors or assumptions	• Milling experience to date has not encountered any substantive variation in metallurgical recovery which would affect definition of resources. Asacha ore is free milling with an average life to date recovery of 94% for Au and 78% for Ag.
Environmental factors or assumptions	• There are no environmental factors that affect definition of mineral resources.
Bulk density	• A global bulk density of 2.48 is applied to all ore. This measurement is based on around 160 core samples taken from the 1990's. • Due to the differing nature of the host rock and veins in the southern end of the deposit, compared to the north, it is recommended that check density measurements are made. The ground conditions in the south are of poorer quality due to extensive faulting and argillic alteration.
Classification	• Classification takes account of data quality, confidence in geological interpretation and confidence in block estimations. These aspects are necessarily subjective. • Measured Resources are restricted to areas that have been developed above and below, or to a maximum projection of 12m above or below development. In addition, the slope of regression on accumulation estimates is greater than ~0.90. Only veins QV 10, 20, 21 and 30 have any resource classified as Measured. • To be classified as Indicated resource, blocks must be within 25m of a diamond drill hole, or 25m above or below development. This equates to a slope of regression on accumulation estimates of >~0.65. Part of veins QV 10, 20 and 30, and the whole of veins QV 31, 32, 40, 60 and 70 were given a classification of Indicated. • In veins QV 10, 20 and 30, any part of the interpreted vein limits not classified as Measured or Indicated was given a classification of Inferred. In addition, the whole of Veins QV 50, 80 or 25 were classified as Inferred. There is insufficient drilling in these veins to permit a higher level of classification to be applied. • Classifications were set using polygons digitised in long section.
Audits or reviews	• This Mineral Resource was audited internally by Peter Bloy. • This Mineral Resource has not been audited externally. • A number of external reviews were undertaken of mineral resource estimates conducted prior to commencement of mining. They are not considered relevant to the current estimates of the resource remaining after 6 years of mining.

Criteria	Commentary
Discussion of relative accuracy/ confidence	• The Mineral Resource has been reported in accordance with the guidelines of the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves and reflects the relative accuracy of the Mineral Resource estimates. • The statements relate to global estimates of tonnes and grade. The higher the level of classification applied, the higher the local accuracy of resource estimates. • Comparison of reported production with the resource estimates is broadly in line with expectation.