ASX and MEDIA RELEASE

13 September 2023

ALKANE
RESOURCES LTD
ABN 35 000 689 216

Resource and Reserve Statements FY23

- **Identified Mineral Resources and Ore Reserves for the Tomingley Gold Project have been updated for 30 June 2023. The Project includes the current production facility at the Tomingley Gold Operations, the Roswell, San Antonio and McLeans deposits (the Tomingley Gold Extension Project) and the Peak Hill Gold Project in the Central West region of New South Wales.**
- **Drilling at McLeans, located between Tomingley and Roswell, identified an Inferred Resource which has been included in the total Tomingley Gold Project Mineral Resources.**
- **Mineral Resources and Ore Reserves for the Tomingley Gold Project have been re-estimated to account for additional resources, mining depletion, changes in gold price and operating costs:**
  - **Total Mineral Resources 27.26 Mt grading 2.02g/t Au (1,775,000oz)**
  - **Total Ore Reserves 10.96 Mt grading 1.77g/t Au (622,000oz)**
- **The NSW Department of Planning and Environment approved the Mining Lease for open cut and underground mining development for the Roswell and San Antonio deposits.**
- **The extensive drilling program continued at the gold-copper porphyry Boda and Kaiser Prospects within the larger North Molong Porphyry Project (NMPP) located 90km east of Tomingley. The drilling enabled an initial Inferred Resource to be estimated for the Kaiser deposit in February 2023. The combined Inferred Resources stand at:**
  - **Mineral Resources (0.3g/t AuEq*) 894 Mt grading 0.52g/t AuEq* (14.8 MEqoz)**

    894Mt grading 0.25g/t Au and 0.15% Cu (7.2 Moz Au; 1.3Mt Cu)
- **Drilling continued at Boda and Kaiser to refine Indicated Resources within both deposits and expand Boda to include the Boda 2-3 mineralisation to the south.**
- **Detailed metallurgical work is in progress, and preliminary mining concepts with infrastructure planning is also progressing.**

**** The prices used to calculate AuEq are based on 6-month averages of US$1,930/oz gold and US$8,500/t copper, and A$:US$0.67. Recoveries are assumed equal for Au and Cu at 85% from preliminary metallurgical studies. Alkane considers the elements included in the metal equivalents calculation have a reasonable potential to be recovered and sold.***

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Mineral Resource and Ore Reserve Estimates for 30 June 2023

The Company reports Ore Reserves and Mineral Resources for the Tomingley Gold Project (**TGP**) which includes the Tomingley Gold Operations (**Tomingley** or **TGO**); the Roswell, San Antonio and McLeans deposits **(Tomingley Gold Extension Project or TGEP)** and the and the Peak Hill Gold Project (**PHGP**); and the Boda-Kaiser Deposits (**Boda-Kaiser**) as at 30 June 2023 in accordance with the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (**JORC 2012**). All projects are located within the Central West region of New South Wales.

At TGO, open pit mining ceased in 2023 and the operation transitioned to fully underground mining at Wyoming One, Caloma One and Caloma Two. No changes were estimated for the Roswell and San Antonio deposits and an initial Resource was completed at McLeans (together the Tomingley Gold Extension Project or **TGEP**) and these are included with the TGP.

Tomingley is operated on a residential basis with personnel residing in Dubbo, Narromine and Parkes, in the Central West of New South Wales.

Extensive RC and core drilling continued at Boda and nearby Kaiser within the North Molong Porphyry Project (NMPP) facilitated an initial estimated Kaiser Inferred Resource following an Inferred Resource estimate of Boda in CY2022. The Boda-Kaiser program is operated from the Company's main exploration base at Orange.

Mineral Resource and Ore Reserve Governance & Internal Controls

Alkane has governance arrangements and internal controls in place with respect to its estimates of Mineral Resources and Ore Reserves and the estimation process within the Tomingley Gold Operations and evaluation projects, including:

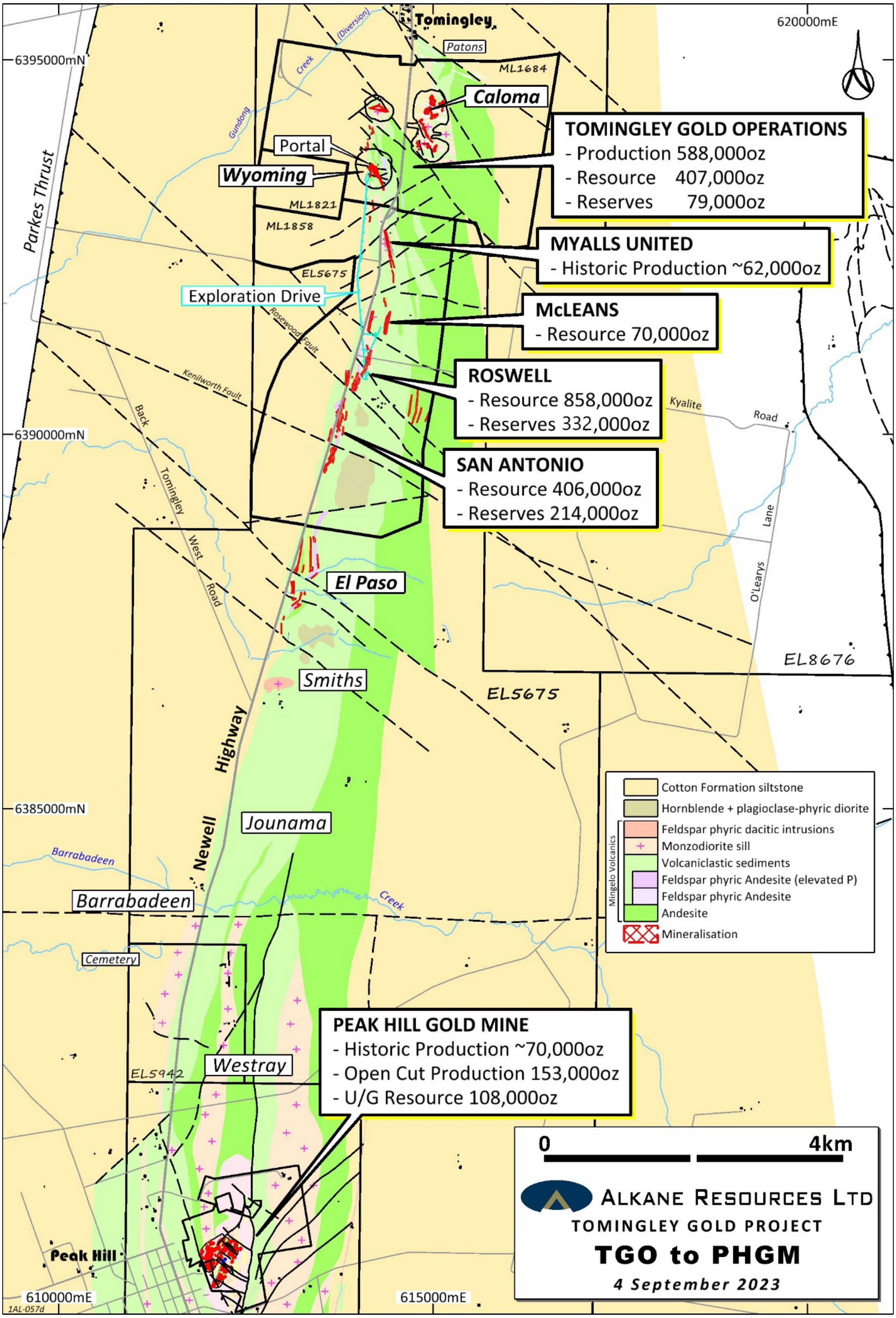
- oversight and approval of each annual statement by the Technical Director;
- establishment of internal procedures and controls to meet JORC Code 2012 compliance in all external reporting;
- independent review of new and materially changed estimates;
- annual reconciliation with internal planning to validate reserve estimates for operating mines; and
- Board approval of new and materially changed estimates.

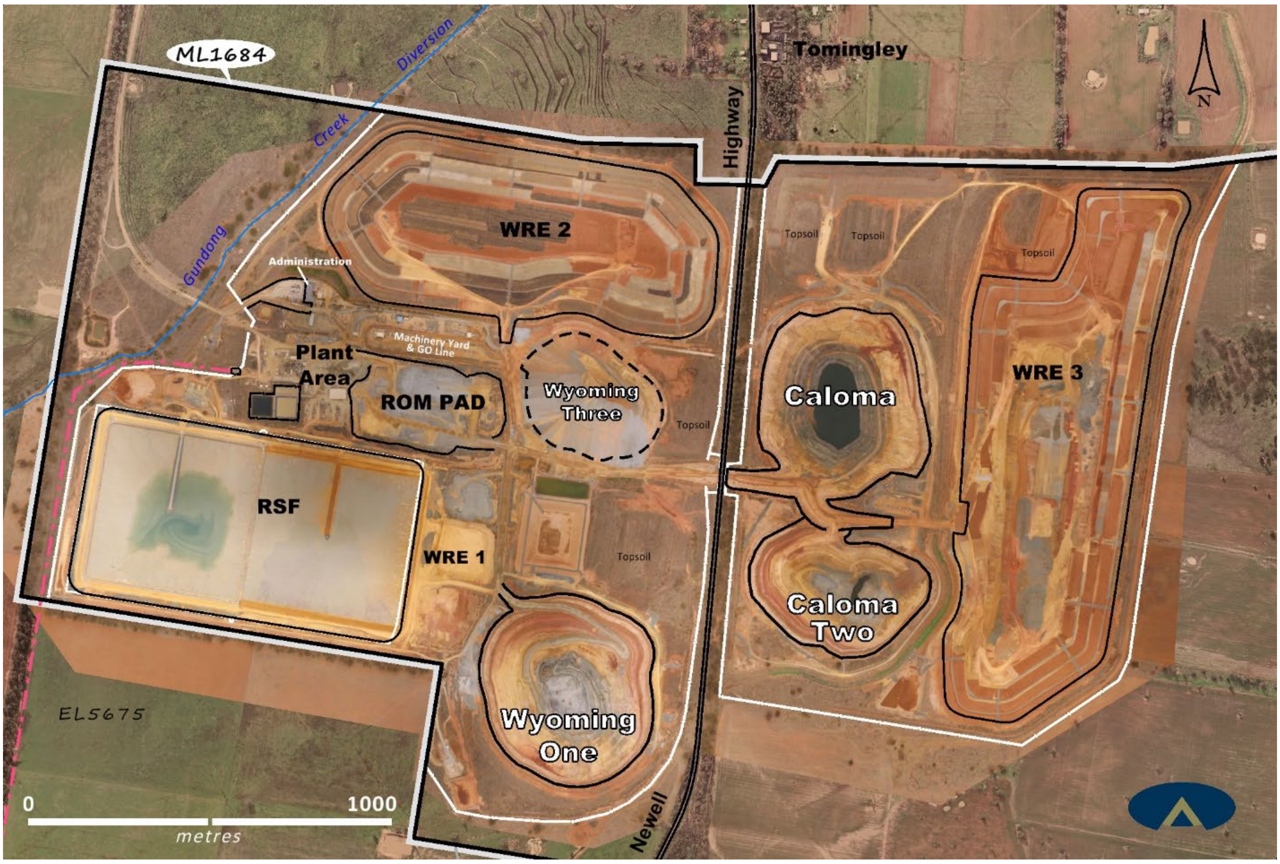
Tomingley Gold Operations – Mineral Resources

Tomingley has been operating since January 2014 and consequently the geology, mineralisation style, metallurgy, recovery, mining parameters and modifying factors have previously been well documented and reported. To ensure the resources have 'reasonable prospects of eventual economic extraction', the open pittable resources have been restricted by an indicative optimised pit shell, estimated at a gold price of A$2,000 per ounce with the potential open pittable component assessed at ≥0.4g/t gold cut-off.

The underground resource is restricted to material below the current final pit design, below the highest stope level currently designed, with potential for eventual extraction by underground mining methods assessed at ≥1.3g/t gold and a gold price of A$2,250 per ounce. As with the open pit resource the estimate was based on a block count method of all material above the cut-off grade. The constraints used are based on all material below current open pit surface +1.3 g/t but below the top RL of current UG stope designs which is in this case below the 180mRL.

These estimates take into account ore depleted by mining during the 2023 financial year and are set out in the tables below.


Tomingley
Patons
620000mE
6395000mN
ML1684
Caloma
Portal
Wyoming
ML1821
ML1858
EL5675
Exploration Drive
Parkes Thrust
TOMINGLEY GOLD OPERATIONS
- Production 588,000oz
- Resource 407,000oz
- Reserves 79,000oz
MYALLS UNITED
- Historic Production ~62,000oz
McLEANS
- Resource 70,000oz
ROSWELL
- Resource 858,000oz
- Reserves 332,000oz
SAN ANTONIO
- Resource 406,000oz
- Reserves 214,000oz
Rosewood Fault
Kenilworth Fault
Kyalite
Road
6390000mN
Back Tomingley West Road
Lane
O'Learys
El Paso
EL8676
Smiths
EL5675
Newell Highway
6385000mN
Jounama
Barrabadeen
Creek
Barrabadeen
Cemetery
Westray
EL5942
Peak Hill
PEAK HILL GOLD MINE
- Historic Production ~70,000oz
- Open Cut Production 153,000oz
- U/G Resource 108,000oz
Cotton Formation siltstone
Hornblende + plagioclase-phyric diorite
Mingelo Volcanics
Feldspar phyric dacitic intrusions
Monzodiorite sill
Volcaniclastic sediments
Feldspar phyric Andesite (elevated P)
Feldspar phyric Andesite
Andesite
Mineralisation
0
4km
ALKANE RESOURCES LTD
TOMINGLEY GOLD PROJECT
TGO to PHGM
4 September 2023
610000mE
615000mE
1AL-057d



Mineral Resources

TOMINGLEY GOLD OPERATION MINERAL RESOURCES (30 June 2023)								
DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Gold
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	(Koz)
Open Pittable Resources (cut off 0.40g/t Au)									
Caloma One	0	0.0	0	0.0	0	0.0	0	0.0	0
Sub Total	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**
Underground Resources (cut off 1.3g/t Au)									
Wyoming One	988	2.8	725	2.2	375	1.8	2,088	2.4	163
Wyoming Three	46	2.2	24	2.0	20	1.9	90	2.1	6
Caloma One	359	2.5	1113	2.0	328	2.0	1,800	2.1	123
Caloma Two	115	2.5	1066	2.3	360	2.2	1,541	2.3	115
Sub Total	**1,508**	**2.7**	**2,928**	**2.2**	**1,083**	**2.0**	**5,519**	**2.3**	**407**
TOTAL	**1,508**	**2.7**	**2,928**	**3.8**	**1,083**	**3.4**	**5,519**	**2.3**	**407**

Apparent arithmetic inconsistencies are due to rounding

These Mineral Resources are wholly inclusive of Ore Reserves.

Full details are given in Appendix 1.

Tomingley Gold Operations – Ore Reserves

As with the Mineral Resource estimates, **Open Pit Ore Reserves** include the previously designed Caloma north-east cut-back in the production plan. All other reserve estimates remained unchanged and were reported in the ASX Announcement of 23 September 2019. Full details and JORC tables were included in those announcements and the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement, and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

The open pit ore reserves for Caloma One are based on the latest site operating information. This includes:

- EOM December 2018 survey surface which delineates completion of previous open pit mining activity;
- latest grade control and resource block models;
- pit designs based upon review by geotechnical consultants; and
- Life of Mine cost and revenue models for the operation.

An initial estimate of **Underground Ore Reserves** was completed in 2018 at a 2.50g/t Au cut-off and was reported in ASX Announcements of 4 and 11 June 2018. Underground development commenced mid-2019, with recovery and delivery of ore to the plant ROM commenced early 2020. Following increase in gold prices in 2020 and substantial operating data, the cut-off grade was revised, and the reported 2022 Ore Reserve is based on the Measured and Indicated Mineral Resources within the defined underground resource base at 1.3g/t Au cut-off and gold price of A$2,000 per ounce and application of the current site based mine design.

These estimates take into account ore depleted by mining during the 2022 financial year and are set out in the tables below.

Current mining activities comprise of underground mining of Wyoming One, Caloma One and Caloma Two orebodies. The cut back of the Caloma One pit was completed during FY23.

Two mining methods are used to mine the underground resource including, Longhole Open Stoping (LHOS) with loose or cemented rockfill and top-down LHOS with rib pillars and no fill. The choice of mining method is determined by value of the resource, orebody width and geotechnical factors.

Stoping configurations are predominantly single-lift stoping (25m vertical interval) with strike length of 20-30m. The stoping method involves establishing a slot using conventional long-hole drill and blast techniques and then the stoping front is retreated along strike. The installation of brow cables and the use of a concurrent strike-retreat blasting sequence assist in controlling ground stability. Depending on the mining method used cemented rockfill or loose rockfilled is filled into the stopes upon completion of mining. For the LHOS with rib pillars there is no fill placement.

Ore production is scheduled at 900 ktpa which is trucked to surface using a fleet of four underground trucks (MT65). The truck fleet is matched with four Caterpillar R2900 loaders operating on a combination of tele-remote and manual control. Normal drilling fleet includes two development jumbos (DD420/422i) and two production drills (DL431/432).

TOMINGLEY GOLD OPERATION ORE RESERVES (30 June 2023)							
DEPOSIT	PROVED		PROBABLE		TOTAL		Total Gold
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	(Koz)
Open Pittable Reserves (cut off 0.40g/t Au)							
Caloma	0	0.0	0	0.0	0	0.0	0
Stockpiles	329	1.0	0	0	329	1.0	11
Sub Total	**329**	**1.0**	**0**	**0.0**	**329**	**1.0**	**11**
Underground Reserves (cut off 1.3g/t Au)							
Wyoming One	260	2.1	85	1.8	345	2.0	22
Caloma One	156	1.7	392	1.7	548	1.7	29
Caloma Two	26	1.5	252	1.8	278	1.8	16
Sub Total	**442**	**1.9**	**729**	**1.7**	**1,171**	**1.8**	**68**
TOTAL	**771**	**1.5**	**729**	**1.7**	**1,500**	**1.6**	**79**

Apparent arithmetic inconsistencies are due to rounding

Full Open Pit details are given in Appendix 2 and full Underground details are in Appendix 3.

The tables below compare the Mineral Resources and Ore Reserves year on year with 2022 as per the current reporting requirements.

Comparison of 2022/ 2023 TGO Mineral Resources and Ore Reserves

TOMINGLEY GOLD OPERATION COMPARATIVE RESOURCES						
DEPOSIT	2022			2023		
	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)
Open Pit						
Wyoming One	0	0	0	0	0	0
Wyoming Three	0	0	0	0	0	0
Caloma One	122	2	8	0	0	0
Caloma Two	0	0	0	0	0	0
Sub Total	**122**	**2.0**	**8**	**0**	**0.0**	**0**
Underground						
Wyoming One	2198	2.6	181	2088	2.4	163
Wyoming Three	90	2.1	6	90	2.1	6
Caloma One	1170	2.1	79	1800	2.1	123
Caloma Two	1446	2.2	103	1541	2.3	115
Sub Total	**4904**	**2.3**	**369**	**5519**	**2.3**	**407**
TOTAL	**5,026**	**2.3**	**377**	**5,519**	**2.3**	**407**

Apparent arithmetic inconsistencies are due to rounding

TOMINGELY GOLD OPERATION COMPARATIVE OPEN PIT RESERVES						
DEPOSIT	2022			2023		
	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)
Wyoming One						
Wyoming Three						
Caloma One	122	2.0	8	0	0.0	0
Caloma Two						
Stockpiles	384	1.3	16	329	1.0	11
TOTAL	**506**	**1.5**	**24**	**329**	**1.0**	**11**
	TGO UNDERGROUND RESERVES					
SOURCE	2022			2023		
	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)
Proven	571	1.9	35	442	1.9	27
Probable	1,247	1.7	68	729	1.7	40
TOTAL	**1,818**	**1.8**	**104**	**1,171**	**1.8**	**68**
TOTAL	**2,324**	**1.7**	**128**	**1,500**	**1.6**	**79**

Apparent arithmetic inconsistencies are due to rounding

The primary differences from 2022 to 2023 are:

- Residual open pit resources for Wyoming One, Wyoming Three and Caloma Two were reduced to zero due to practical limits to surface mining;
- Caloma 1 cut-back reserves depleted;
- Underground reserves added by development grade control drilling; and
- Underground reserves depleted by mining

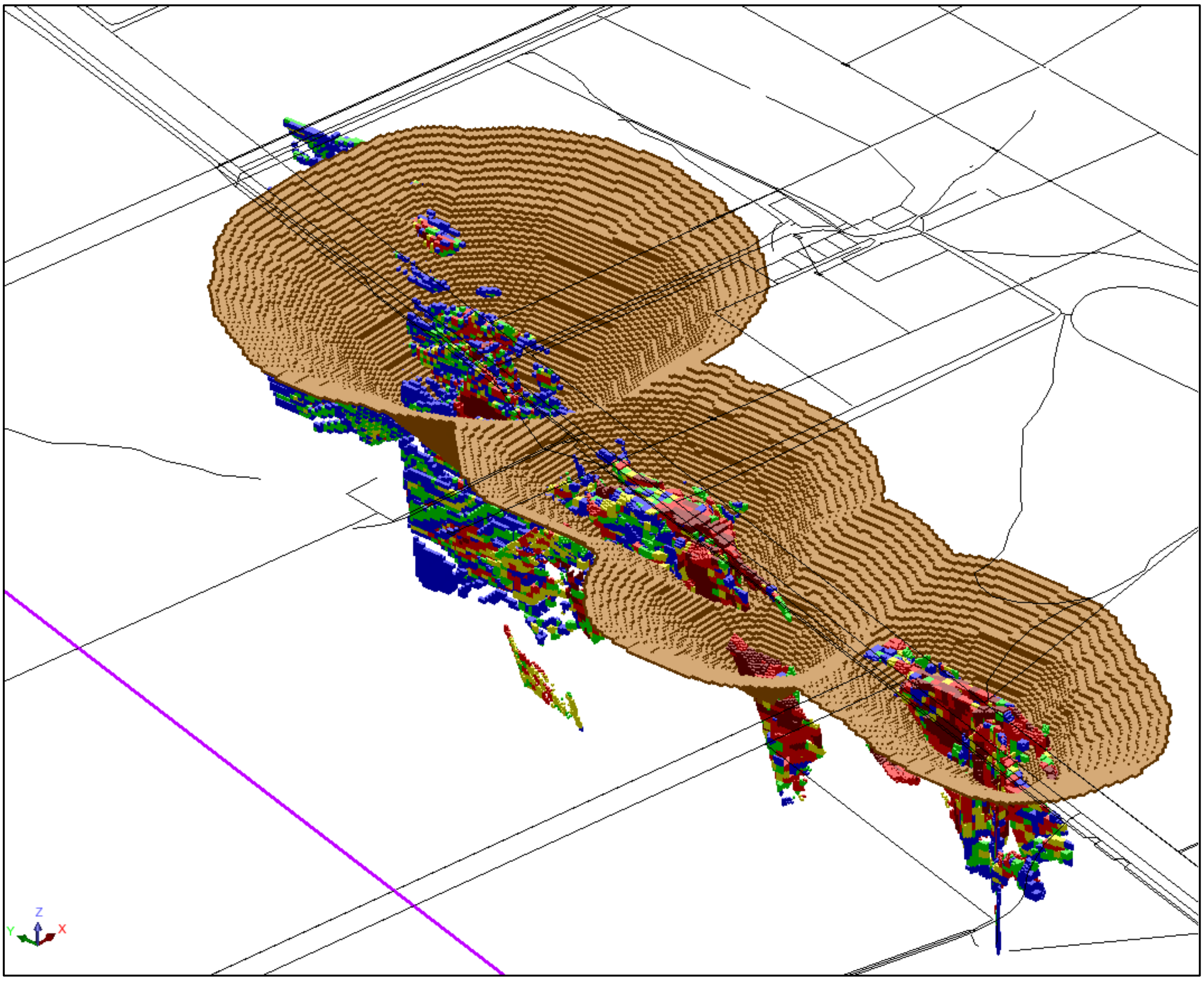
Tomingley Gold Extension Project (TGEP) Mineral Resources

The Tomingley Gold Extension Project (TGEP) encompasses new developments to the immediate south of the TGO site. The primary deposits are Roswell and San Antonio which have been connected by an underground exploration drive that extends from the Wyoming One pit to the north end of the defined Roswell resource.

The geology and mineralisation at Roswell and San Antonio is identical to that at the Tomingley operations and metallurgical tests confirmed a recovery profile similar to TGO. Using the TGO cost structures, simple pit shells were estimated to confirm the resources have 'reasonable prospects of eventual economic extraction' the open pittable resources have been restricted by an indicative optimised pit shell estimated at a gold price of A$2,250 per ounce.

The resources were reported in the Annual Resource and Reserve Statement ASX 9 September 2022

Full details and JORC tables were included in the ASX announcements of 4 November 2020, 15 June 2021, 2 May 2022, and 9 September 2022 and the Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcements.



Isometric north-east view of the Roswell – San Antonio resource block models with superimposed open pit shells.

McLeans Mineral Resources

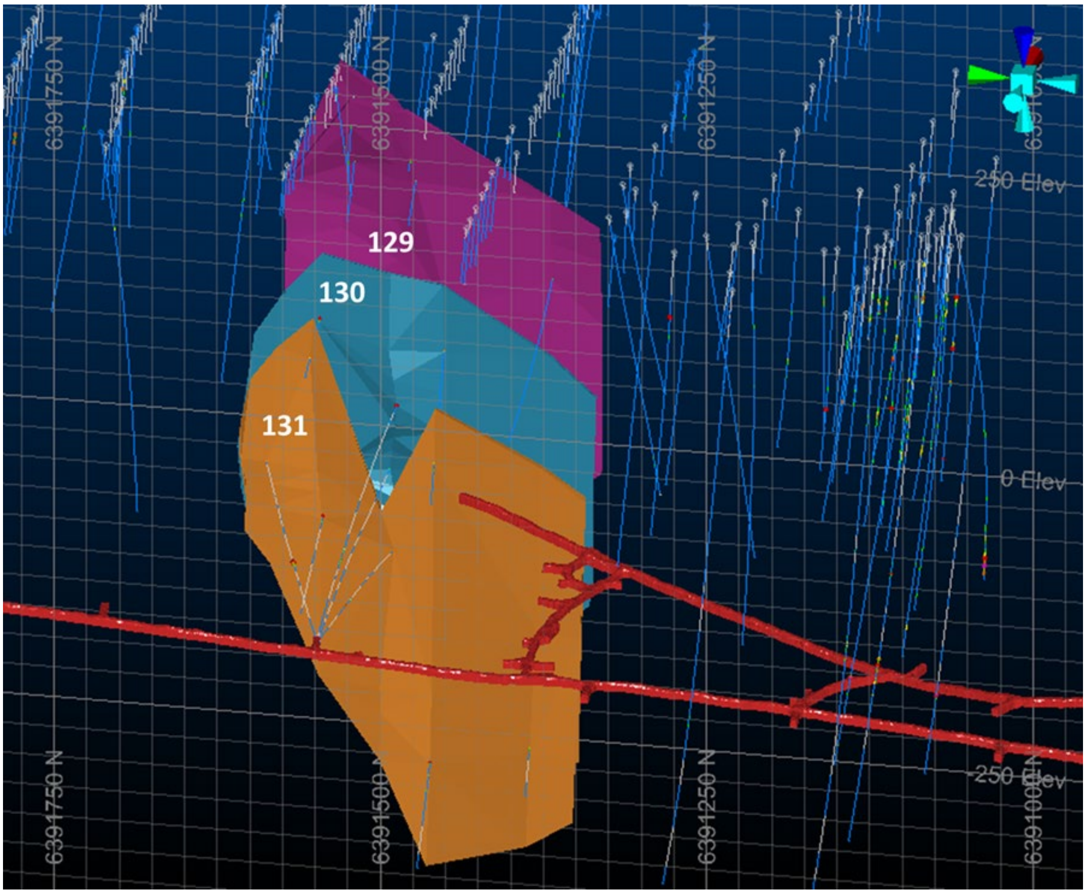
The McLeans prospect in located 2km south of the Wyoming One pit and is also adjacent to the Roswell exploration drive. McLeans host rocks and mineralisation are identical to the Tomingley and Roswell-San Antonio deposits.

Drilling that defined mineralisation is a combination of surface RC and diamond core and underground drilling from the Wyoming One exploration drive. McLeans is primarily hosted by one 'brittle' andesite with similar texture and geochemistry as the andesite that is host to the majority of mineralisation at the nearby Roswell deposit. This andesite is host to structural zones generated by a competency contrast between the 'brittle' volcanics and surrounding 'ductile' volcaniclastic sediments.

The McLeans host andesite starts approximately 130m below the surface, extends approximately 250m in strike and remains open at depth. The andesite averages a thickness of 60m but thins to 25m along its upper and northern margins forming a 'keel'.

The Mineral Resource Estimation was calculated using 14 RC and diamond drill holes with a nominal 80m drill hole spacing for a total of 4,808 metres. Cut-off grades were determined from the current cut-offs utilised by the Tomingley Gold Operations of 1.3g/t Au for underground.

Inferred Resources 0.86 Mt @ 2.51 g/t Au for 70,000oz



McLeans wireframed lodes, looking down and to the NE with drill hole traces. SAR drive shown in red for context.

Full details and JORC Table are provided in Appendix 4

Initial shallow reconnaissance drilling to fresh rock is completed using 90mm (3.5") air core. Gold and arsenic anomalism was followed up with deeper drilling completed by RC (usually 144mm or 5¾") and RC pre-collared HQ3 diamond core drilling. Drilling is broadly spaced along east-west sections, except for four HQ diamond drilled holes that were fanned from an underground drill cuddy/stockpile. Air-core drilling was not used in the resource estimation.

Estimation Methodology

Grade estimation was completed using Inverse Distance Squared (ID2) with dynamic anisotropy to optimise search ellipse orientation within the lodes. All wireframing and estimation was completed with Datamine Studio RMsoftware.

Sample data was composited into one metre downhole lengths using a best fit methodology. A block size of 5mX x 5mY x 5mZ and sub-blocking down to 2.5mX x 2.5mY x 2.5mZ was used.

A top cut analysis was carried out by a visual inspection of the data using histograms, percentile analysis and sensitivity analysis for individual domains to identify population outliers. The sensitivity analysis involved analysing varying cap values, to estimate the contribution of each sample to the overall metal content. Capping was deemed necessary for two of the three domains.

The base of oxide is only around 20 metres vertically below surface in the vicinity of the McLeans mineralisation. The shape and depth of the majority of the McLeans mineralisation, and proximity to existing underground infrastructure, indicates that it most likely would be mined from underground. For the purposes of discussing volumes of ore with a reasonable prospect of eventual economic extraction, any fresh mineralisation within 20 metres of the base of oxide is excluded from any resources reported here. All domain boundaries are hard boundaries where only composite samples within that domain were used to estimate blocks coded as within that domain.

Validation of the modelling parameters and processes of estimation included visual inspections in section, plan and in 3D.

Classification Criteria

Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, as well as metal distribution. There is no material classified as Indicated or Measured.

Cut-Off Grade

The Mineral Resource cut-off grade for reporting of gold resources for the McLeans deposit selected as 1.3 g/t for underground mining. This was based upon economic parameters utilised at Tomingley Gold Operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

Mining

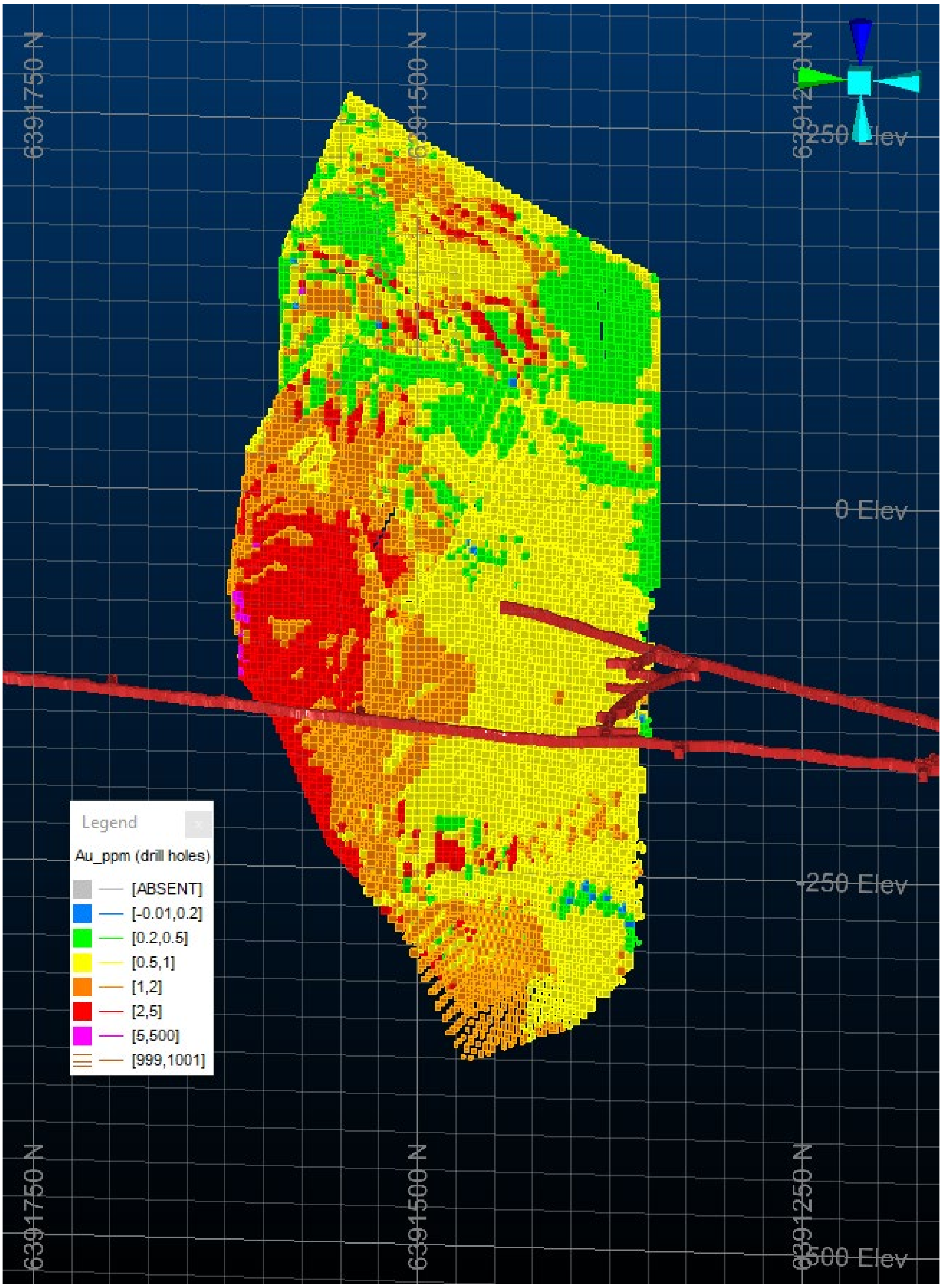
Underground could be potentially mined via medium- to small-scale mechanised underground mining methods, similar to that currently being applied at Tomingley Gold Operations.

No dilution or cost factors were applied to the estimate.

Metallurgy

The metallurgy of the Tomingley deposits is well studied. Tomingley Gold Operations has been processing ore since 2014 from its four deposits and during this time no significant metallurgical issues have arisen, with recoveries averaging between 85% - 94%. No metallurgical work has been conducted on McLeans however work on Roswell ore 500 metres to the southwest, suggests it has similar metallurgical qualities as per the Tomingley deposits. Further metallurgical test work is ongoing.

No metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.



McLeans estimated grade model.

Tomingley Gold Operations Extension Project– Mineral Resources

TOMINGLEY GOLD EXTENSION PROJECT MINERAL RESOURCES (30 June 2023)									
DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Gold
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	(Koz)
Total Resources (cut off 0.4g/t Au Roswell and 0.5g/t Au San Antonio)									
Roswell			5,615	1.78	791	0.96	6,406	1.68	346
San Antonio			5,930	1.82	1,389	1.32	7,319	1.73	406
Sub Total	**0**	**0.0**	**11,545**	**1.80**	**2,180**	**1.19**	**13,725**	**1.70**	**752**
Underground Resources (cut off 1.6g/t Au and 1.3g/t Au McLeans)									
Roswell			1,897	2.67	4,244	2.56	6,141	2.59	512
McLeans					870	2.51	870	2.51	70
Sub Total			**1,897**	**2.67**	**5,114**	**2.56**	**7,011**	**2.59**	**584**
TOTAL			**13,443**	**1.92**	**7,294**	**1.85**	**20,737**	**1.90**	**1,336**

Apparent arithmetic inconsistencies are due to rounding

Full Resource details for Roswell and San Antonio are given in the ASX Announcements 4 November 2020, 15 January 2021, 2 May 2022 and 9 September 2022.

Tomingley Gold Extension Project - Open Pit Ore Reserves

Based upon the resource models above, optimisation work using Whittle Software (WSP) and modifying factors developed on the existing Tomingley operations, an open pit reserve was estimated with the following observations:

- The project is sensitive to block model cell size, gold price and wall angle. The conservative case for wall angle as proposed by WSP has been adopted for design purposes.
- The project has limited sensitivity to resource category. The extent of the Indicated resource is such that the inferred category has limited effect on the optimisation and is generally below the range of the Revenue Factor shells.
- The project has limited sensitivity to mining cost increments within the range of this study. Reducing mining costs by 10% may be achieved by increasing the size of trucks for the oxide prestrip.
- Shell selection for design was based upon a gold price of A$2,250 per ounce, and revenue factor 1 shell. This was considered the most robust of the lower the gold price options.

Full details were reported in the Annual Resource and Reserves Statement (ASX Announcement 9 September 2022.) The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcements.

Roswell and San Antonio Underground Ore Reserves

Based upon the resource models below the proposed open pit extraction, the Roswell deposit was selected for immediate underground mining using the current mining parameters of Wyoming One and the Caloma orebodies. Roswell is connected to the Wyoming One underground operations via an exploration drive that was driven from the Wyoming One underground workings to access the Roswell orebody. At the end of FY23, the drive had reached the north end of Roswell and operational development headings had commenced. The reported Ore Reserve is based on the current Measured and Indicated Mineral Resources using TGO mine design parameters and incorporates the existing site costs and modifying factors.

Tomingley Gold Operations Extension Project– Ore Reserves

TOMINGLEY GOLD EXTENSION PROJECT ORE RESERVES (30 June 2023)							
DEPOSIT	PROVED		PROBABLE		TOTAL		Total Gold
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	(Koz)
Open Pittable Reserves (cut off 0.40g/t Au)							
Roswell	0	0.0	3,900	1.7	3,900	1.7	213
San Antonio	0	0.0	4,100	1.6	4,100	1.6	214
Sub Total	**0**		**8,000**	**1.6**	**8,000**	**1.6**	**427**
Underground Reserves (cut off 1.6g/t Au)							
Roswell	0	0.0	1,456	2.6	1,456	2.6	119
San Antonio	0	0.0	0	0.0	0	0.0	0
Sub Total	**0**	**0.0**	**1,456**	**2.6**	**1,456**	**2.6**	**119**
TOTAL	**0**	**0.0**	**9,456**	**1.8**	**9,456**	**1.8**	**547**

Apparent arithmetic inconsistencies are due to rounding.

Full details for Roswell and San Antonio were reported in the Annual Resource and Reserves Statement (ASX Announcement 9 September 2022.) The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcements.

TOMINGLEY GOLD EXPANSION PROJECT - COMPARATIVE RESERVES						
DEPOSIT	2022			2023		
	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)	Tonnage (Kt)	Grade (g/t Au)	Gold (koz)
Open Pit						
Roswell	3,900	1.70	213	3,900	1.70	213
San Antonio	4,100	1.60	214	4,100	1.60	214
Sub Total	**8,000**	**1.65**	**427**	**8,000**	**1.65**	**427**
Underground						
Roswell	1,456	2.60	119	1,456	2.60	119
San Antonio	0	0.00	0	0	0.00	0
Sub Total	**1456**	**2.60**	**119**	**1456**	**2.60**	**119**
TOTAL	**9,456**	**1.8**	**547**	**9,456**	**1.8**	**547**

Apparent arithmetic inconsistencies are due to rounding.

Peak Hill Gold Project

The Peak Hill Gold Project is located 15km south of Alkane's operating Tomingley Gold Operations (TGO). The Peak Hill Gold Mine (**PHGM**) was a fully operational open pit gold mine that is currently under care and maintenance with most site rehabilitation completed away from the existing open cuts. There are four pits; the main Proprietary-Parkers Pit and three satellite pits, Bobby Burns, Crown and Great Eastern.

The recent history of the Project was summarised in the 2021 Annual Resource and Reserve Statement ASX Release 7 September and JORC Tables documented in ASX Release 18 October 2018

Mineral Resources

PEAK HILL GOLD PROJECT MINERAL RESOURCES (30 June 2023)						
Deposit	Resource Category	Cut-Off	Tonnes (Mt)	Gold Grade g/t	Gold Metal (Koz)	Copper Metal (%)
Proprietary U/G	Inferred	2g/t Au	1.02	3.29	108	0.15
TOTAL			**1.02**	**3.29**	**108**	**0.15**

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

Comparison of 2020 / 2021 Peak Hill Gold Project Mineral Resources

The Mineral Resource estimate was initially completed in October 2018.

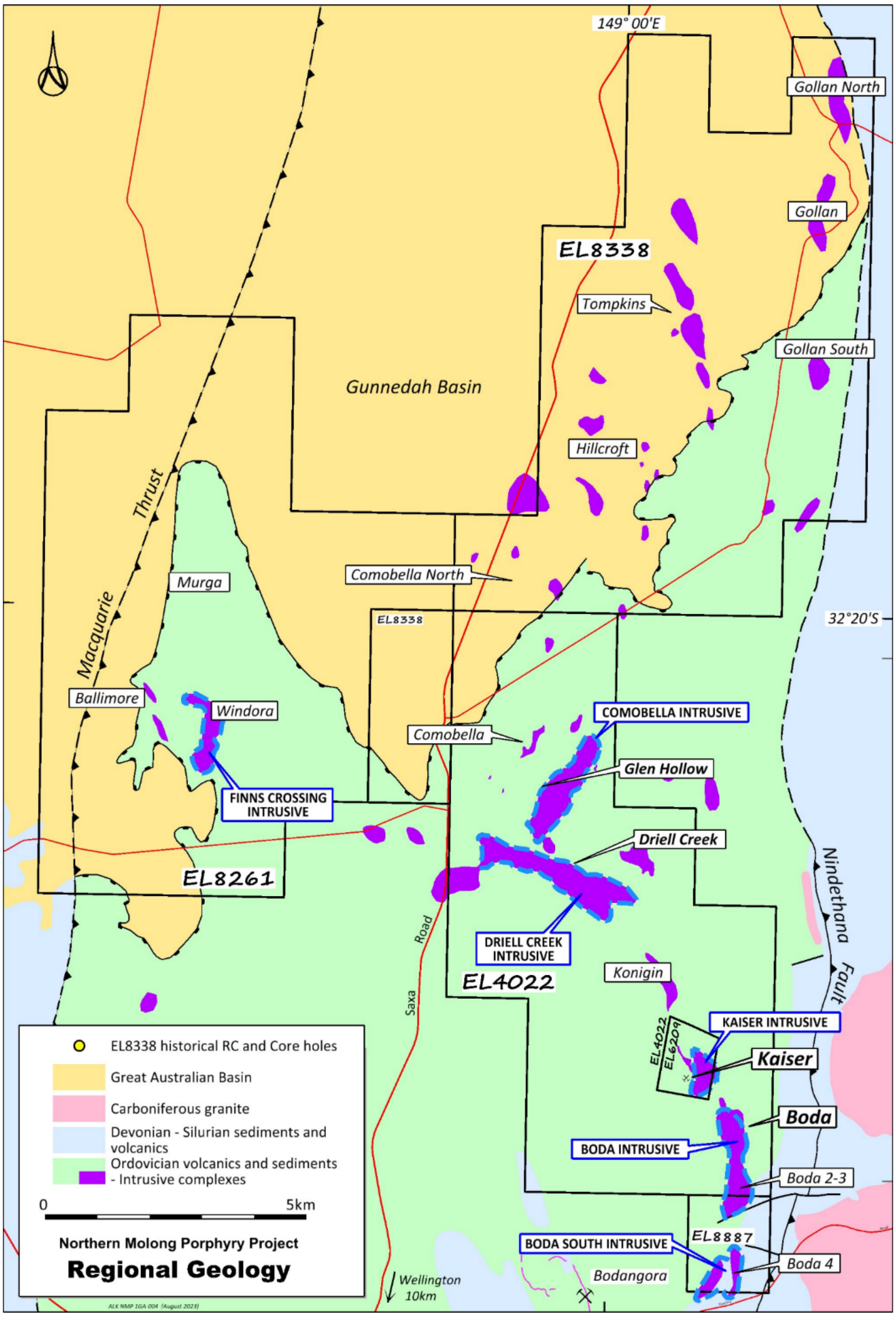
PEAK HILL COMPARATIVE MINERAL RESOURCES								
Deposit	**2022**				**2023**			
Proprietary U/G	Tonnes (Mt)	Gold Grade g/t	Gold Metal (Koz)	Copper Metal (%)	Tonnes (Mt)	Gold Grade g/t	Gold Metal (Koz)	Copper Metal (%)
Inferred Resource	1.02	3.29	108	0.15	1.02	3.29	108	0.15
TOTAL	**1.02**	**3.29**	**108**	**0.15**	**1.02**	**3.29**	**108**	**0.15**

Northern Molong Porphyry Project – Boda and Kaiser Mineral Resources

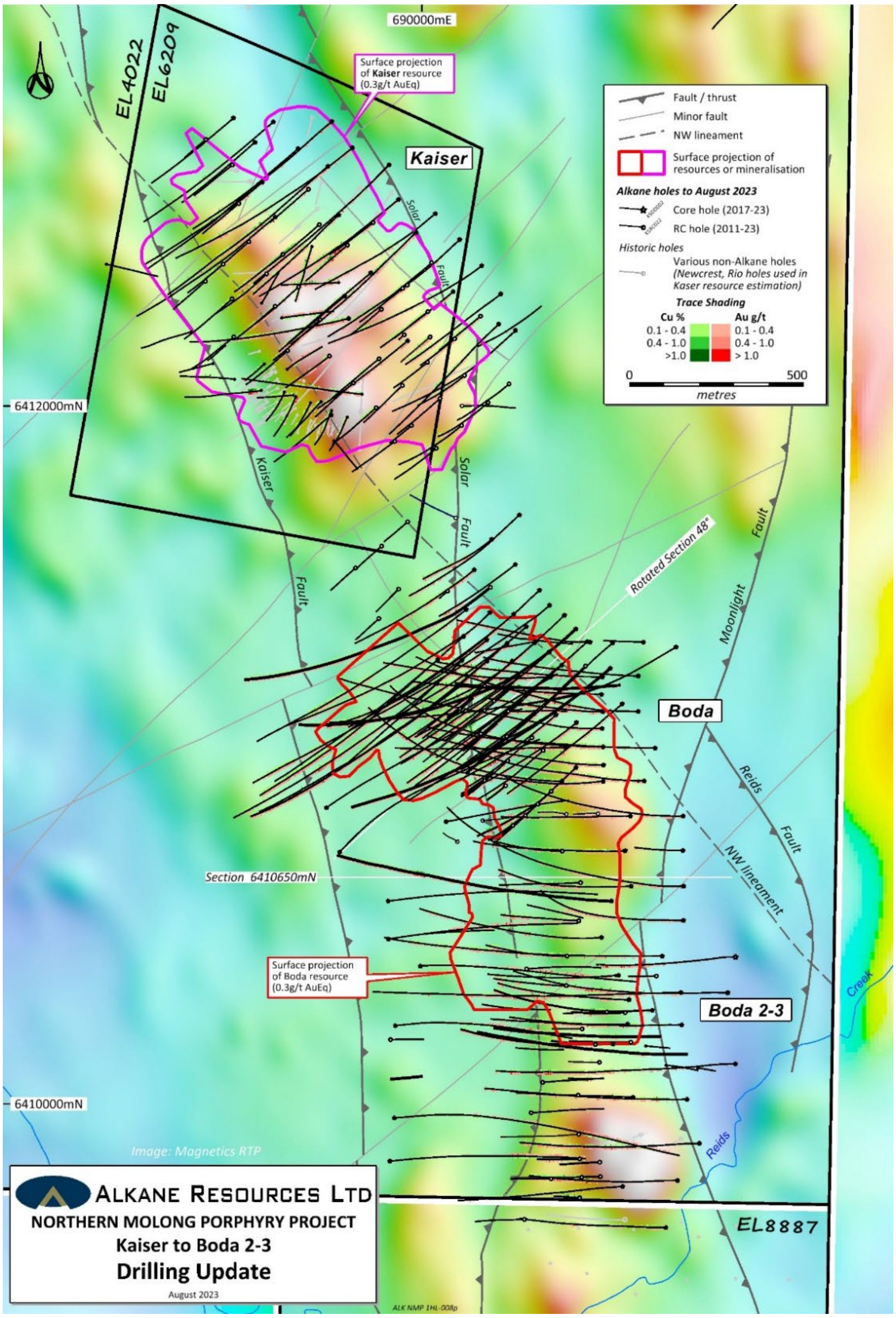
The Project is located in central west NSW at the northern end of the Molong Volcanic Belt of the Macquarie Arc and is considered highly prospective for large scale porphyry and epithermal gold-copper deposits.

Exploration in the NMPP has identified five discrete magnetic/intrusive complexes – Kaiser, Boda, Comobella, Driell Creek and Finns Crossing – within a 15km northwest trending corridor. The corridor is defined by intermediate intrusives, lavas and breccias, extensive alteration and widespread, low-grade, gold-copper mineralisation.

Since the discovery of Boda in late-2019, a significant campaign of RC and diamond core drilling commenced. The drilling was designed to test the dimensions and extent of the mineralisation at Boda and Kaiser for the purposes of an initial resource estimation.



The Boda and Kaiser Deposits are developed within the Ordovician Molong Volcanic Belt comprising andesitic to basaltic volcanics with comagmatic monzonitic intrusive complexes and located within a NW-SE trending structural corridor. The mineralisation is hosted within a package of submarine basaltic to andesitic lavas with subordinate latite flows. The volcanic package has undergone intense and extensive calc-potassic to potassic alteration often replacing both phenocrysts and the groundmass. This alteration is apparent over a strike length of approximately 3.5km and width of approximately 1km from Kaiser, southeast to Boda, then rotating and continuing south to Boda 2-3, with more significant mineralising centres occurring at each of the prospects. The calc-potassic alteration comprises fine-grained biotite-actinolite-epidote-magnetite with lesser internal zones of potassic alteration comprising only hydrothermal biotite. Towards the margins of this alteration hematite dusting of albite is commonly observed and is a diagnostic mineral of inner propylitic alteration and can provide a vector to the centre of the system.



Copper and gold mineralisation is observed throughout the prospect primarily as pyrite, chalcopyrite with subordinate bornite and chalcocite, and rare covellite. Within the magmatic hydrothermal breccias, pyrite, chalcopyrite and to a lesser extent bornite, occur predominantly as a cement mineral between the calc-potassic altered clasts. Outside of the breccias, copper mineralisation is observed within calcite ± quartz ± epidote dominant veins and as disseminations and patches, often intergrown with epidote.

Calc-potassic alteration grades into propylitic alteration away from the breccia complex and has a typical assemblage of actinolite-hematite-epidote-pyrite (± trace chalcopyrite) proximal to the calc-potassic alteration zone. Moving further away from the mineralised centre the typically assemblage becomes more chlorite-calcite-albite-pyrite dominant.

Extensive RC and diamond core drilling focussed on the definition of an initial Inferred Mineral Resource for both Boda and Kaiser since the discovery drilling in September 2019. The Boda resource was fully documented with accompanying JORC Table in ASX Announcement 30 May 2022, and Kaiser fully reported in ASX Announcement 27 February 2023.

Boda and Kaiser Mineral Resources

NORTHERN MOLONG PORPHYRY PROJECT MINERAL RESOURCES (30 June 2023)										
DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Metal
	M Tonnes	Grade	Tonnage	Grade	M Tonnes	Grade	M Tonnes	Grade	Au Moz / Cu Mt
Resources (cut off 0.3g/t AuEq)									
BODA Au g/t					624	0.26	624	0.26	5.20
BODA Cu %					624	0.14	624	0.14	0.90
BODA AuEq					**624**	**0.51**	**624**	**0.51**	**10.1 MozEq**
KAISER Au g/t					270	0.24	270	0.24	2.05
KAISER Cu %					270	0.18	270	0.18	0.48
KAISER AuEq					**270**	**0.54**	**270**	**0.54**	**4.7 MozEq**
COMBINED Au g/t					894	0.25	894	0.25	7.19
COMBINED Cu %					894	0.15	894	0.15	1.34
TOTAL AuEq					**894**	**0.52**	**894**	**0.52**	**14.8 MozEq**

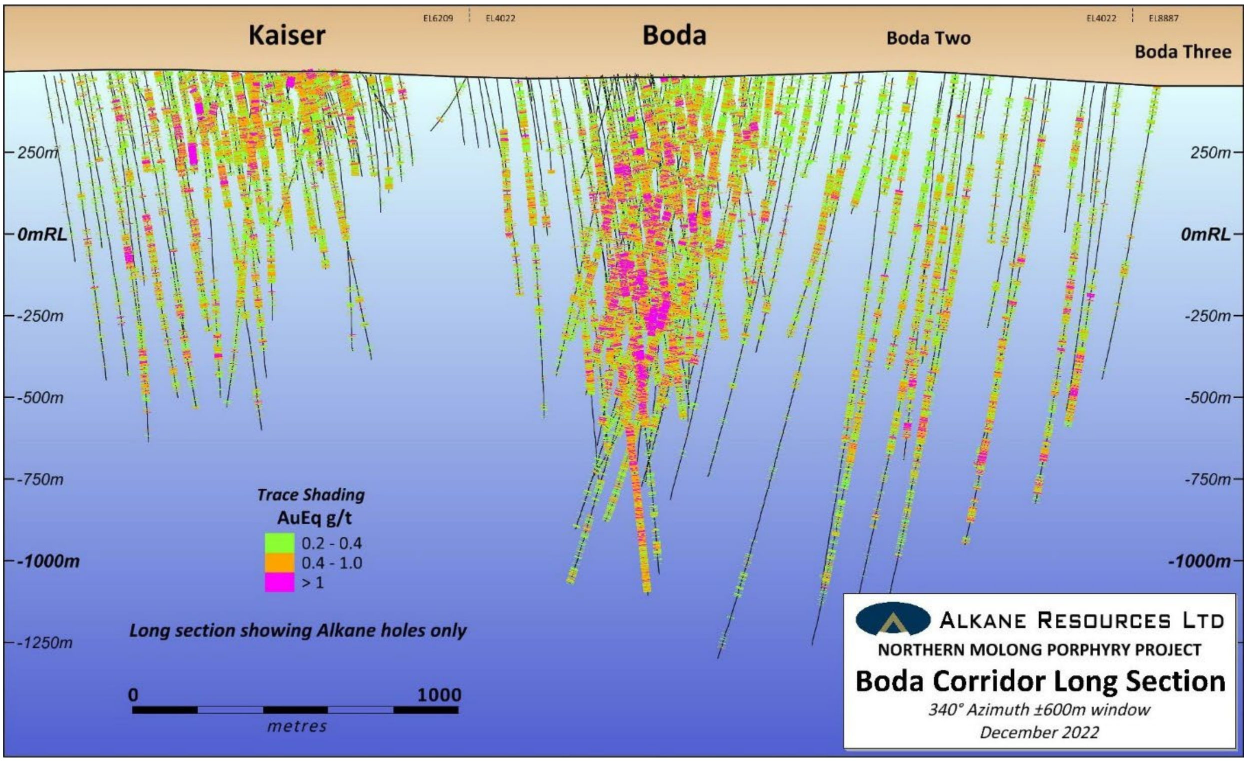
Apparent arithmetic inconsistencies are due to rounding

The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and that all material assumptions and technical parameters underpinning the estimates in the relevant market announcements continue to apply and have not materially changed. The Company confirms that the form and context in which any Competent Person's findings are presented have not been materially modified from the original market announcement.

Extensive RC and diamond core drilling continues at Boda-Kaiser to both infill the existing resources to enable re-estimation to Indicated Resource status, and extend the encompassing Inferred Resources. The revised estimates are scheduled for completion late in Q4 CY23 and Q1 CY24 for Boda and Kaiser respectively.

Drilling results announced post Boda Resource release 30 May 2022

18/07/22.	Kaiser RC Drilling Delineates Significant Au-Cu Mineralisation.
07/09/22	Copper Enriched Zone Near Surface at Kaiser.
25/10/22	Extensive Au-Cu Mineralisation at Korridor and New Drilling Results at Kaiser.
09/12/22	Final Kaiser Assay Results, Resource Estimation Underway.
28/03/23	Drilling Results Confirm Extensive Mineralisation at Boda Two.
20/06/23	Update – Extensive Mineralisation Outside of Boda Mineral Resource.
04/08/23	Boda Drilling Further Extends Mineralisation.
25/08/23	Further High Grade Gold and Copper Identified at Boda.



Competent Persons

*This **Mineral Resources and Ore Reserves Statement as a whole** has been approved by Mr D Ian Chalmers, FAusIMM, FAIG, (executive director of the Company) who 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, Mineral Resources and Ore Reserves'. Mr Chalmers has provided his prior written consent to the inclusion in this report of the Mineral Resources and Ore Reserves Statement in the form and context in which it appears.*

*The information in this report that relates to the **TGO Mineral Resource** estimates is based on, and fairly represents, information which has been compiled by Mr Craig Pridmore, Geology Manager Tomingley Gold Operations, who is a Member of the Australasian Institute of Mining and Metallurgy and an employee of Alkane Resources Ltd. Mr Pridmore has sufficient experience that is relevant to the style 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'. Mr Pridmore consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*

*The information in this report that relates to the **TGO Open Pit Ore Reserve** estimate is based on, and fairly represents, information which has been compiled by Mr John Millbank (Proactive Mining Solutions), an independent consultant, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Millbank has sufficient experience that is relevant to the style 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'. Mr Millbank consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*

*The information in this report that relates to the **TGO Underground Ore Reserve** estimate is based on, and fairly represents, information which has been compiled by Mr Christopher Hiller (Hiller Enterprises Pty Ltd), an independent consultant, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hiller has sufficient experience that is relevant to the style 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'. Mr Hiller consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*

*The information in this report that relates to **Roswell and San Antonio Mineral Resource** estimate is based on information compiled by Mr David Meates MAIG, (Alkane Exploration Manager NSW) who 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, Mineral Resources and Ore Reserves. Mr Meates has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to the **Roswell and San Antonio Open Pit Ore Reserve** estimate is based on, and fairly represents, information which has been compiled by Mr John Millbank (Proactive Mining Solutions), an independent consultant, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Millbank has sufficient experience that is relevant to the style 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'. Mr Millbank consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*

*The information in this report that relates to the **Roswell Underground Ore Reserve** estimate is based on, and fairly represents, information which has been compiled by Mr Christopher Hiller (Hiller Enterprises Pty Ltd), an independent consultant, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hiller has sufficient experience that is relevant to the style 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'. Mr Hiller consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.*

*The information in this report that relates to the **PHGP Mineral Resource** estimate is based on, and fairly represents, information which has been compiled by Mr Craig Pridmore, Geology Manager Tomingley Gold Operations, who is a Member of the Australasian Institute of Mining and Metallurgy and an employee of Alkane Resources Ltd. Mr Pridmore has sufficient experience that is relevant to the style 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'. Mr Pridmore has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

*The information in this report that relates to the **Boda and Kaiser Mineral Resource** estimates is based on, and fairly represents, information which has been compiled by Mr David Meates MAIG, (Alkane Exploration Manager NSW) who 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, Mineral Resources and Ore Reserves. Mr Meates has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

The information in this report that relates to the ***McLeans Mineral Resource*** *estimates is based on, and fairly represents, information which has been compiled by Mr David Meates MAIG, (Alkane Exploration Manager NSW) who 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, Mineral Resources and Ore Reserves. Mr Meates has provided his prior written consent to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

The information in this report that relates to previously reported exploration results and exploration targets is extracted from the Company's ASX announcements noted in the text of the announcement and are available to view on the Company's website. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original announcements and that the form and context in which the Competent Person's findings are presented have not been materially altered.

Disclaimer

This report contains certain forward-looking statements and forecasts, including possible or assumed reserves and resources, production levels and rates, costs, prices, future performance or potential growth of Alkane Resources Ltd, industry growth or other trend projections. Such statements are not a guarantee of future performance and involve unknown risks and uncertainties, as well as other factors which are beyond the control of Alkane Resources Ltd. Actual results and developments may differ materially from those expressed or implied by these forward-looking statements depending on a variety of factors. Nothing in this report should be construed as either an offer to sell or a solicitation of an offer to buy or sell securities.

This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference in this document have been, and will be, prepared in accordance with the JORC classification system of the Australasian Institute of Mining, and Metallurgy and Australian Institute of Geoscientists.

This document has been authorised for release to the market by Nic Earner, Managing Director.

ABOUT ALKANE - www.alkane.com.au - ASX: ALK

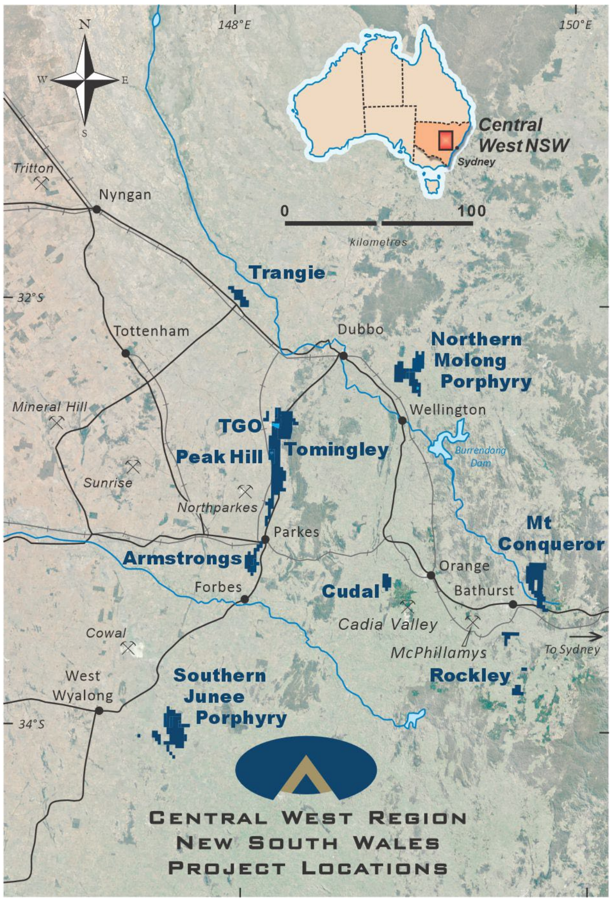
Alkane Resources intends to grow to become one of Australia's multi-mine gold and copper producers. Alkane Resources intends to grow to become one of Australia's multi-mine gold and copper producers.

The Company's current gold production is from the Tomingley Gold Operations in Central West New South Wales, where it has been operating since 2014 and is currently expediting a development pathway to extend the mine's life beyond 2030.

Alkane has an enviable exploration track record and controls several highly prospective gold and copper tenements. Its most advanced exploration projects are in the tenement area between Tomingley and Peak Hill, which have the potential to provide additional ore for Tomingley's operations.

Alkane's exploration success includes the landmark porphyry gold-copper mineralisation discovery at Boda in 2019. With drilling ongoing adjacent to the initial resource identified at Boda, Alkane is confident of further consolidating Central West New South Wales' reputation as a significant gold and copper production region.

Alkane's gold interests extend throughout Australia, with strategic investments in other gold exploration and aspiring mining companies, including ~9.0% of Calidus Resources (ASX: CAI).



APPENDIX 1

JORC Code, 2012 Edition – Table 1 report – Wyoming One

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The Wyoming One area has been evaluated using air core (AC), reverse circulation (RC) and diamond drilling (DD) techniques between May 2001 and June 2021 although not all of this drilling lies within the current resource outline. AC - 185 holes for 14593.8m – inclusive of 3 pre-collars totalling 294.2m RC - 149holes for 25356m – inclusive of 29 pre-collars totalling 4552.9m RC Grade Control – 1187 hole for 30331m DD - 502 holes totalling 95573.45m Face samples: 988 faces totalling ~5862m Sludge samples: 142 holes for 2439.2m AC samples were collected in large plastic bags at one metre intervals via a cyclone RC samples were collected at one metre intervals via a cyclone. DD sample intervals were defined by geologist during logging to honour geological boundaries. The resource model includes Grade Control holes drilled within the Wyoming 1 pit. These RC Grade control holes have limited impact on the Wyoming 1 Underground estimation but were essential to the creation of the entire geological model.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	AC and RC drilling completed to industry standards. Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 3 or 6m) and labelled with the hole number, down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	AC drilling samples collected at 1m intervals via a cyclone into large plastic bags. RC Drilling – the entire RC sample was collected at 1m intervals and delivered into a large plastic bag via a cyclone. DD Drilling – sample intervals were defined by geologists during logging to honour geological boundaries and cut in half with a saw. All Underground diamond holes were full core sampled. Intervals were honoured to match geological boundaries. All samples sent to the laboratory were crushed and/or pulverised to produce a ~100g pulp for assay process. All 1m RC & AC samples and core samples were fire assayed using a 50g charge and all RC and AC composite samples fire assayed using a 30g charge. Visible gold was occasionally observed in both core and AC/RC samples

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Initial reconnaissance drilling was completed to fresh rock using 75mm or 100mm air core with follow-up and deeper drilling completed by RC (usually 126 - 140mm diameter). Detailed resource definition drilling was completed primarily by RC techniques using a 130mm or 140mm diameter face sampling hammer. DD holes were pre-collared using either RC techniques or un-oriented PQ3 (83mm diameter) core drilling. Pre-collars were completed to competent material, with holes cased off and completed to depth using HQ3 (61mm diameter) core. The 2016/2017 Diamond drilling was collared with PQ3 and were reduced to HQ3 when the ground became competent. The HQ3 core was oriented using the 'BallMark', 'EzyMark' or 'Ace' (Reflex Act) core orientation tool depending upon the contractor and time period of when the drill program was drilled. All Underground diamond holes have been drilled using NQ core diameter.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	AC and RC - sample recovery was visually estimated and was generally very good (>90%) aided by the use of oversized shrouds through oxide material. Samples were even in size. Samples were rarely damp or wet. Sample quality was assessed by the sampler by visual approximation of sample recovery and if the sample was dry, damp or wet. A riffle splitter was used to ensure a representative sample was achieved for 1 metre samples. DD - core loss was identified by drillers and calculated by geologists when logging. Generally ≥95% was recovered and any loss was usually in portions of the oxide zone. Triple tube Large diameter, triple tube core (PQ3) was used through the oxide material to ensure the greatest recovery.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	*RC drilling was completed using oversized shrouds to maintain sample return in oxide zone and all samples were split using riffle or cone splitters. Use of RC rigs with high air capacity assists in keeping samples dry.* Triple tube coring was used at all times to maximise core recovery with larger diameter (PQ3) core used in the oxide and saprolite zones.
	• *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.*	There is no known relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	*AC & RC - each one metre interval was geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage).* *DD - all core was laid out in core trays and geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). A brief geotechnical log was also undertaken collecting parameters such as core recovery, RQD, fracture count, and fracture type and orientation. With the surface and underground Diamond programs, specific zones of the core has full geotechnical analysis undertaken. This included Alpha, Beta measurements for all fractures and internal structures, fracture fill type etc*
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	*All logging was qualitative with visual estimates of the various characteristics. Magnetic susceptibility data is quantitative.* *AC & RC - A representative sample of each one metre interval is retained in chip trays for future reference.*

Criteria	JORC Code explanation	Commentary
		DD - Core was photographed and all un sampled core is retained for reference purposes. Undeground Grade control diamond core unsampled material has been thrown away.
	• *The total length and percentage of the relevant intersections logged.*	All DD core and AC/RC chip samples have been geologically and geotechnically logged by qualified geologists.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	Surface DD - zones of visual mineralisation and/or alteration were marked up by the geologist and cut in half using an Almonté (or equivalent) core cutting saw. Samples submitted for analysis were collected from the same side in all cases to prevent bias. Sampling intervals were generally based on geology, were predominantly over 1m intervals but do not exceed 1.2 metres in length. The minimum core sample length was 0.3m. All mineralised zones were sampled, plus ≥6m of visibly barren wall rock. Underground DD: - zones of visual mineralisation and/or alteration were marked up by the geologist, Sampling intervals were generally based on geology, were predominantly over 1m intervals but do not exceed 1.3 metres in length. The minimum core sample length was 0.3m. All mineralised zones were sampled, plus ≥6m of visibly barren wall rock. Laboratory Preparation – drill core was oven dried prior to crushing to <6mm using a jaw crusher, split to 3kg if required then pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	*AC/RC – samples were collected at 1m intervals via a cyclone into large plastic bags. Spear samples were collected from each 1m sample and composited to 3m for initial analysis. Individual 1m samples from all composites assaying ≥0.2g/t Au were riffle split and resubmitted for analysis.* *Rare damp or wet samples were recorded by the sampler.* Laboratory Preparation – the entire RC sample (3kg) was dried and pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	Alkane (ALK) sampling techniques are of industry standard and considered adequate.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	AC – field duplicate samples were not regularly submitted for reconnaissance AC drilling RC – field duplicate samples collected at every stage of sampling to control procedures. DD – external laboratory duplicates used.
	• *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.*	RC - Duplicate samples were riffle split from bulk sample. Duplicates show generally excellent repeatability, indicating a negligible "nugget" effect.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are industry standard and considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	*For all 1m samples used in the resource estimate gold was determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill was dissolved in aqua regia and gold determined by flame AAS. For 3m composite samples gold was determined using a 30g charge (more rarely 50g charge).*

Criteria	JORC Code explanation	Commentary
		For other geochemical elements, samples were digested in aqua regia with each element concentration determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. These additional elements were generally only used for geological interpretation purposes, are not of economic significance and are not routinely reported.
	• *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.*	Not applicable to this report or deposit.
	• *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.*	*Commercially prepared Certified Reference Materials (CRM) and blanks were inserted at 1 in 50 samples. CRM's were not identifiable to the laboratory.* *Field duplicate samples were inserted at 1 in 50 samples (alternate to CRM's) for RC drilling programs.* *Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data was reported for each sample submission.* *Failed standards result in re-assaying of portions of the affected sample batches.*
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Drill data was compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.
	• *The use of twinned holes.*	Twinned holes have not been used at Wyoming One as twinning provides verification only for extremely limited areas of a deposit.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	*All drill hole logging and sampling data was hard keyed into Excel spreadsheet for transfer and storage in the Datashed database with verification protocols in place.* All primary assay data was received from the laboratory as electronic data files which were imported into sampling database with verification procedures in place. QAQC analysis was undertaken for each laboratory report. Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site. Data was also verified on import into mining related software.
	• *Discuss any adjustment to assay data.*	No assay data was adjusted.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	*Drill holes were laid out using hand held GPS (accuracy ± 2m) then surveyed accurately (± 0.1m) by licensed surveyors on completion.* Since mining commenced drill holes were set out and picked up using a RTK rover based GPS (± 0.1m) *RC & AC drill holes were surveyed using a single shot electronic camera at a nominal 30m down hole intervals.* DD holes were surveyed at nominal 30m down hole during drilling to maintain drilling direction and then at 6m intervals on retrieval of rod string using a multi shot electronic camera. Some of the more recent surface Diamond holes from the 2016/2017 program were surveyed by nth seeking gyro.
	• *Specification of the grid system used.*	All drill holes were originally laid out in AMG66 grid however since mining commenced in February 2014 have been transformed to MGA94 grid system to conform to reporting requirements for mine operations.

Criteria	JORC Code explanation	Commentary
	• *Quality and adequacy of topographic control.*	The area is very flat. A site based digital terrain model was developed from accurate (± 0.1m) survey control by licenced surveyors.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	The majority of exploration drilling at Wyoming One within the open pit was completed along east-west lines spaced 25m apart. However once the east-west lode orientation was confirmed for the '376' zone (this zone is the high grade mineralisation on the eastern contact of the porphyry intrusive contact) this portion of the deposit was assessed by south drilled holes was completed along north-south sections spaced 25m apart. The Underground infill drilling during the 2016/2017 campaign was drilled to ensure the drill hole intercept spacing within each lode was covered to a nominal 30m pattern. The drilling direction of these holes was optimised best as practical to the orientation of the mineralisation and geology to remove/reduce any potential sample bias for the estimation. The drill hole spacing is similar to that used at other Tomingley deposits and has been established to be sufficient. Surface in-pit RC Grade control drilling was undertaken on a nominal 10m x 10m drill spacing on all ore lodes. All Underground Grade control diamond drilling, infilled all lodes beneath the Wyoming 1 Open pit on a nominal 15 x 20m spacing. Areas within the underground have been infilled using face sampling and sludge drilling techniques
	• *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.*	The drill hole spacing has been shown to be appropriate by the visible continuity of mineralisation and geology between drill holes.
	• *Whether sample compositing has been applied.*	Sample compositing was not applied until resource estimation stage. RC & AC – samples were composited to 3m with 1m resamples assayed if the composite returned a gold value of >0.2g/t gold. One metre samples override 3m composites in the database. DD – core was sampled to geology.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Much care was given to attempt to intersect mineralisation at an optimal angle but in complex ore bodies this can be difficult. As noted above, drilling at Wyoming One was initially completed along both east-west and north-south lines, depending upon which portion of the deposit was being assessed.
	• *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.*	It is not thought that drilling direction will bias assay data at Wyoming One however east-west drilling will not provide optimum intersection of the 101' lode in the north where the 101 lode folds around the porphyry contact. The 2016/2017 drilling campaign specifically targeted the High grade mineralisation associated with the previously known "376" structure (now referred to as the High Grade 101 porphyry lode). These holes were orientated to intersect this mineralisation at an optimal angle and to confirm the mineralisation thickness. Targeted Underground Grade control drilling, Sludge sampling, Face sampling and mapping the development of this area has significantly improved the lode geometry in this area of the 101 lode and converted a significant portion into a measured resource classification.

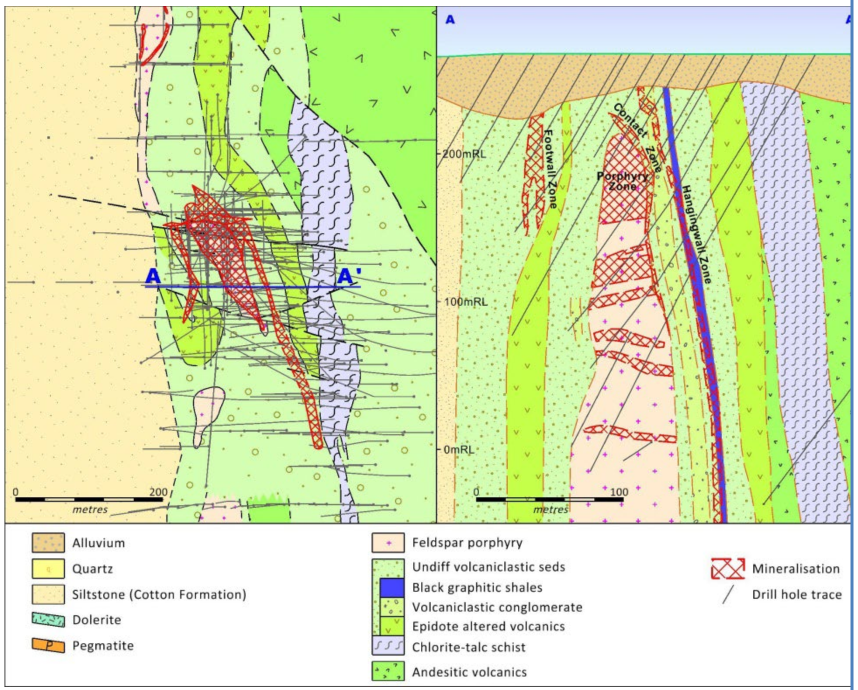
Criteria	JORC Code explanation	Commentary
Sample security	• *The measures taken to ensure sample security.*	All samples were bagged in tied numbered calico bags, grouped into larger tied polyweave bags and transported to the laboratory in Orange by Alkane personnel or courier. S ample submission sheets were delivered with the samples and also emailed to the laboratory. All sample submissions were documented via ALS tracking system and all assays were reported via email. Sample pulps were returned to site and were stored for an appropriate length of time (minimum 3 years). The Company has in place protocols to ensure data security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The Company does not routinely have external consultants verify exploration data until resource estimation procedures are deemed necessary. The Wyoming data was reviewed in 2010 and 2011 by Behre Dolbear (BDA) as part of the due diligence phase of the development of the project. BDA did not express any specific concerns with respect to the data other than to recommend the completion of some round robin assaying and completion of additional density determinations, both of which were undertaken for the Caloma Two and Wyoming 1 resource drilling.

Section 2 Reporting of Exploration Results

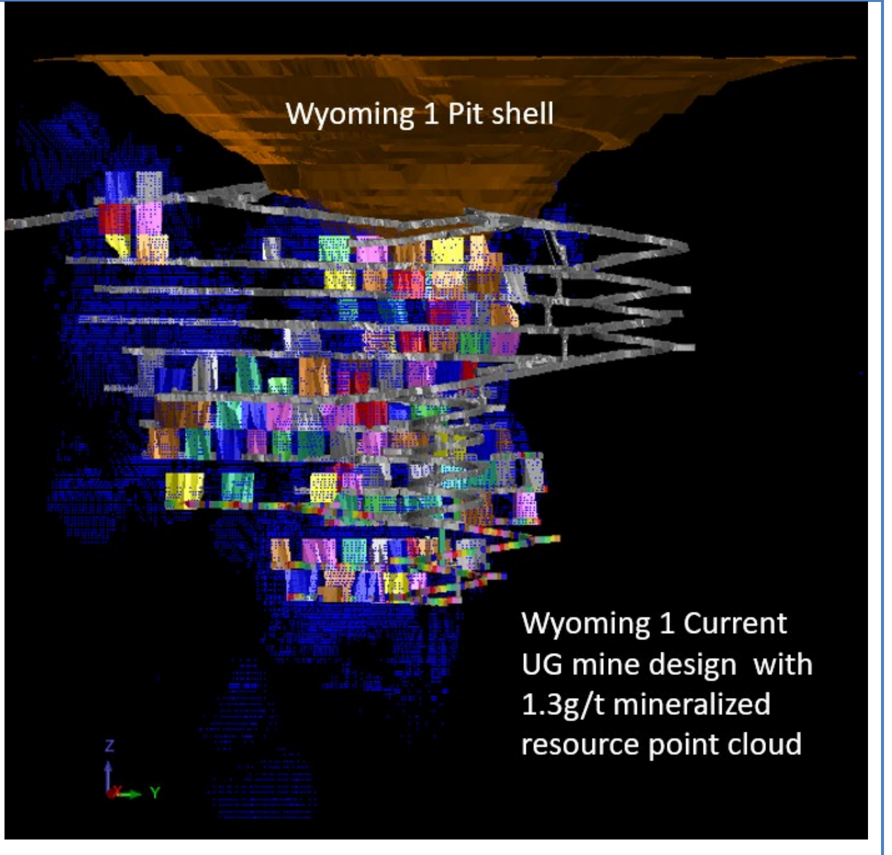
(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Wyoming One deposit lies within ML 1684 which is held in the name of Tomingley Gold Operations Pty Ltd, a wholly owned subsidiary of Alkane Resources Ltd.
	• *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.*	ML1684 expires on 11 February 2034.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	All reported drilling has been completed by ALK.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Geological nature of the Tomingley Deposits is well documented elsewhere. Mineralisation is associated with quartz veining and alteration focused within sub-volcanic basaltic-andesite sills and adjacent volcaniclastic sediments. The deposits appear to have formed as the result of a rheological contrast between the porphyritic sub-volcanic sills and the surrounding volcaniclastic sediments, with the sills showing brittle fracture and the sediments ductile deformation, and have many similarities to well documented orogenic - lode-style gold deposits. Mineralisation at Wyoming One is developed within a number of different zones which have been domained based on the geology, style of mineralisation and continuity of high mineralisation that can be separated: *Porphyry* – mineralisation hosted by a quartz stockwork within the carapace of a sub-volcanic sill with dimensions roughly 60m x 150m. High grade mineralisation is developed along the eastern and northern contact of the sediment and porphyry. This High Grade

Criteria	JORC Code explanation	Commentary
		mineralisation on the contact has been domained separately for the estimation and is currently referred known as the "High Grade 101 porphyry lode" mentioned below. Within the main porphyry body there are several internal mineralised stacked lodes that dip 45° to the NE. These structures were evident from the close spaced open pit RC Grade control drilling. Underground Diamond drilling has confirmed these stacked lodes and the targeting and defining of more internal porphyry mineralised structures will be a focus as mining continues. *Hangingwall* – a linear zone of mineralisation situated approximately 30m to hanging wall of the 'porphyry' mineralisation and hosted within quartz veins within silicified fine grained sediments and a brecciated carbonaceous mudstone. This zone is lithologically constrained with these fine grained sediment package which folds around the northern end of the porphyry; *'High Grade 101 Porphyry Lode'"* –This zone was previously known as the '376" structure interpreted to be a bounding structure and primary fluid conduit. This High Grade zone of mineralisation is developed at the eastern and northern contact of the porphyry and incorporates some of the contact metasediments which were impacted by the mineralisation. *Footwall* – a low grade zone located in a similar stratigraphic position to the hangingwall zone but footwall to the porphyry
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	Too numerous and not practical to summarise all drill hole data used. All drilling results have been reported previously
	• *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.*	Exclusion of drill hole data will not detract from the understanding of this report. All drill data has been previously reported, holes are close spaced and in an operating mine area.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	*Previously reported results have been –* *For uncut gold grades;* *Intercepts were defined (bounded) by 0.5g/t gold outer limit and may contain some internal waste;* Only intervals grading ≥1 g/t gold were reported; Grades were calculated by length weighted average.
	• *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.*	Exploration results have been previously reported as length weighted average grades with internal high grade intercepts reported separately.

Criteria	JORC Code explanation	Commentary
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* ○ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ○ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Previously reported exploration results include the drilled width and an estimate of true width.
Diagrams	• *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.*	*Cross sections and a plan showing geology with drill collars were included with previously reported exploration results. A typical plan and cross section are included below.* 

Criteria	JORC Code explanation	Commentary
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Data relating to all exploration drill holes has been reported in previous documentation of exploration results.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No additional or new drilling results are being reported at this time.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	The Wyoming 1 underground commenced in January 2019. Extensive underground Grade control Diamond drilling has occurred since the start up and within the reporting period. This drilling will continue to infill the known mineralisation and also look towards along strike and down dip extensions of the ore lodes.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	The upper portions of the Wyoming One UG deposit are well constrained by drilling however the high grade porphyry internal structures remain open at depth.

Criteria	JORC Code explanation	Commentary
		

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging data was entered into Excel via drop down menus. All raw data was loaded directly to the Access database from the assay, logging and survey derived files. (Datashed is the Companies Drill hole Database platform.
	• *Data validation procedures used.*	There are validation checks to avoid duplications of data. The data were further validated for consistency when loaded into Datashed and desurveyed. An extensive check on the consistency and adequacy of down-hole survey database continued throughout the projects inception.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *(If no site visits have been undertaken indicate why this is the case.)*	No site visit was undertaken by an external consultant since the release of the previous 2014 Underground release. Since the last release the geological/structural model of the Wyoming 1 deposit has been updated based on the mapping of the geology exposed within the development of the underground. All geostatistical analysis for the resource estimation was undertaken by Cube Consultancy who are based in Perth. The quoted resources were compiled by Mr Craig Pridmore, Geology Manager, Tomingley Gold Operations Pty Ltd, who has worked at TGO site since March 2015.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The geological model was built on structural data from core lithological logging, in pit Grade control logging,pit mapping, and underground mapping. The domain wireframes were built by the Alkane geologists most familiar with the deposit.
	• *Nature of the data used and of any assumptions made.*	Structural measurements from oriented drill core were used to assist in the geological interpretation along with lithological, alteration and mineralisation logging of RC chips and drill core. Mapped lithological contacts have been surveyed and digitised to complete the current model.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	The Wyoming One deposit was been drilled at a close-spacing in several different drilling campaigns and in several different drilling directions, reducing the likelihood that the geological interpretation will change significantly.
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	Geological (lithological) logging,in pit and underground mapping was used to develop a geological model. Alteration and mineralisation estimates along with grade guided the interpretation of the ore envelope wireframes at a nominal 0.5g/t Au lower cut-off. Gold mineralisation at Wyoming One has a close spatial relationship to feldspar porphyry which intrudes into andesitic volcaniclastic rocks and metasedimentary pelitic rock sequences. Mineralisation is associated with extensive alteration and quartz veining of the porphyry and volcanic rocks. In pit mapping has generally verified the geological interpretation on a macroscopic scale.
	• *The factors affecting continuity both of grade and geology.*	Mineralisation is directly associated with alteration and quartz veining.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The mineralisation occurs in several zones within a NNW-striking corridor 300m long and 220m wide. Mineralisation extends from about 25m below the surface for more than 400m vertical depth.
	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation*	18 mineralisation wireframes (domains) were interpreted by the Alkane geologists most familiar with the deposit to constrain the estimation. This includes an enclosing background

Criteria	JORC Code explanation	Commentary
Estimation and modelling techniques	*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.*	domain which was modelled to capture minor mineralization outside the main domains. Four surfaces were also used to separate material types - topography, alluvium, saprolite and base of oxidation surfaces. The material type classification was used to allocate density values. The drill hole data were flagged by the domain wireframes in priority order, to prevent double use the data in the intersecting zones. The samples were composited to 1m, the most common sample length and flagged by the topography, alluvium, saprolite and base of oxidation surfaces. Top-cuts were selected for each domain based on histograms, probability plots and cutting statistic plots. The top-cuts ranged from 7g/t gold to 40.0 g/t gold. In November 2019 Cube consultancy reviewed the drill data in Wyoming 1. The composite gold grades were first transformed to Standard Gaussian space in order to elucidate the underlying spatial structure. A Gaussian Variogram was then produced before back-transformed to real space for use in in Wyoming 1 DOK process. Reasonably robust variogram models were obtained for all estimation domains. Each domain used in the estimation had its own variogram model. The Underground Resource model incorporates the entire Wyoming 1 project and includes the estimation for the open pit. The Estimation technique used was Ordinary Kriging. A check estimate was made using the Inverse Distance Squared method. The minimum samples, maximum samples and search parameters used in the ID2 check estimate are were the same as the Kriged estimation values. Surpac was used for estimation. The orientation of the search ellipse for each domain was controlled by a Dynamic Anisotropy model that provided a unique dip and dip-azimuth for each block. Grade control drilling data is incorporated with exploration data and a new block model generated using the same parameters as the resource model for that sector of the ore body subject to the grade control drilling. .
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	The estimates were compared to those of previous published resource estimate made by Alkane. The variance between the models is based on modifications to the geological domains and mineralised domains which have been updated. These modifications were based on the in-pit geological mapping, underground mapping and greater definition through a significant underground grade control program and additional surface diamond holes.
	• *The assumptions made regarding recovery of by-products.*	No assumptions made - Estimates were made for gold, arsenic and copper; only gold is of economic significance.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	No deleterious elements identified for estimation
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	The primary block size was unrotated (5mE x 5mN x 5mRL) because of the narrow steeply dipping nature of the mineralized zones. Sub-blocking of 2.5mE x 2.5mN x 2.5mRl was also used were estimated. These block sizes were employed in the open pit based on the practical mining considerations and the fact he variogram nugget effects are low. These block sizes were used in the underground resource estimate below the open pit. The maximum search radius used was m with a search radius ratio of 3:1

Criteria	JORC Code explanation	Commentary
	• *Any assumptions behind modelling of selective mining units.*	No assumptions were made.
	• *Any assumptions about correlation between variables.*	No assumptions made0
	• *Description of how the geological interpretation was used to control the resource estimates.*	Only data from the same domain were used to make estimates. No soft boundaries were used between domains
	• *Discussion of basis for using or not using grade cutting or capping.*	The top-cut analysis was undertaken by using a combination of histograms, log-probability plots of composite gold grade and cutting statistic plots (plots of cut-off grade against Coefficient of Variation (CV) and total metal). Using the statistical information above the top cuts were picked using the following criteria 1) By visual inspection of the log-probability plots of composite gold grade, with a view towards identifying the point at the upper tail where the robustness of the distribution breaks down and where the plot goes off trend. 2) By visual 3D inspection of the spatial location of the grade outliers and the spatial relationship to neighbouring values. While the principal estimate was made using top-cuts, a check estimate was made without top-cutting.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	The estimates were verified using several different techniques and checked for local variability by comparing the estimated block grades with the average of the top-cut composites in each block.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated on a dry tonnage basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade (0.50 g/t Gold) for open pit able resources is relevant for the current mining operation for similar material in the adjacent deposits.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the 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.*	Mining of ore from the Wyoming One ore body commenced in 2016 and to date reconciliations, save for poorly defined inferred mineralisation in the background domain, have been as expected. The Wyoming One deposit open pit has been completed and the underground resource is currently being mined by underground mining methods. No dilution factors in the resource model were applied to the Block model estimation.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The metallurgy of the Tomingley deposits is well studied. The upper portion of the Wyoming 1 deposit has been completed. A total of 2.1M tonnes have been mined up to June 2022, with 3.0M tonnes of Wyoming 1 having been processed. During this time no metallurgical issues have arisen, with recoveries ranging between 85-92%.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential*	Project approval for the TGP was granted in July 2012 for mining from three open pits (Wyoming One, Wyoming Three and Caloma) and underground from Wyoming One deposit. Mining from the Wyoming Three and Caloma open pits commenced in December 2013 with processing of ore in February 2014. Mining of ore from the Wyoming One open pit

Criteria	JORC Code explanation	Commentary
	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.	commenced in January 2016 and was completed in January 2019. Underground mining commenced in January 2019.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Specific gravity measurements were completed by commercial laboratories on DD core samples of the different material types (alluvium, saprolite, totally oxidized and fresh). Oxidation was far more important than variations in lithology or alteration. The specific gravity measurements were applied on a dry basis. In December 2015 a large in-house density analysis campaign occurred on all the deposits with over 3,182 additional measurements taken. Using wet/dry density methods. All diamond hole drilled in the 2016/2017 campaign had SG measurements undertaken using the wet/dry method (SG = Mass of object/ (Mass of object) – (Mass of object in water). All measurements in the fresh material were constrained to each geological domain. The average Specific gravity reading was applied to each domain and used in the estimation.
	• *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.*	SG measurements completed on all material types – see above.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	No assumptions made – SG determined and individual values applied to each material type based on wire-framed domain.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	The resources were classified using drill density, geological confidence and mineralisation continuity. The actual break-points for the different resource classes were chosen by inspection of the model in relation to the drilling density and geological continuity. Any blocks outside the main mineralized/geological domains were classified as Inferred.
	• *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).*	Wyoming One Underground resource model which includes Grade control RC was estimated using high proportion of predominantly Diamond drill hole data.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The classification reflects the Competent Persons view of the deposit and its supporting data
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No external reviews undertaken
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The Wyoming One deposit consists of 18 mineralisation zones; Reasonable robust variogram models were obtained for all estimation domains (undertaken by Cube consultancy). The variograms show clear evidence of a relatively low nugget effect (between 14% and 25%), with exception of the footwall lode which does not impact on the underground. This coupled with a rapid deterioration in continuity over a distance of several meters, as indicated by the first spherical structure ranges and sills. These features are evident when the composite gold values are visually inspected, with gold values generally being similar within a distance of 2m to 3m but then changing rapidly at greater distances. As a consequence,

Criteria	JORC Code explanation	Commentary
		the second spherical structure does not exercise great influence over an OK estimate, generally having low sill values, with the exception of the hanging wall lode which is more continuous that the rest. No statistical or geostatistical method (non-linear or simulation) apart from ID2 estimation checks were used to quantify the relative accuracy of the estimate within confidence limits. Accuracy of the estimate is strongly dependent on: accuracy of the interpretation and geological domaining; accuracy of the drill hole data (location and values); orientation of local anisotropy; and Estimation parameters which are reflected in the global resource classification.
	• *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.*	The quoted underground resources are global, being based on drill hole data at exploration spacing. To ensure the resources have 'reasonable prospects of eventual economic extraction' the resources have been restricted by an indicative optimistic pit shell estimated at a gold price of $2000 per ounce and a gold cut off for eventual extraction by underground mining methods assessed at ≥1.3g/t gold.
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Mining of ore from the Wyoming One ore body commenced in 2016 and to date reconciliations have shown that the original resource model was performing well within expectations, Save for poorly defined inferred mineralisation in the background domain. Reconciled Tonnes, grade and total ounces mined are all within ~10% of the original resource model prediction with and overall increase in ounces. Over the period of mining the Block Estimation model has been modified and improved, with the Open pit and Underground run simultaneously and captured within the same Block model The estimation method has been changed from ID2 (original resource model estimate) to Ordinary Kriging. Close spaced Grade control drilling has been ongoing since the start of the open pit. This additional data collected with the mapping justified a change in modelling parameters and estimation techniques from ID2 to Ordinary Kriging. This change in estimation method has been used for the underground resource model which is an extension of the current open pit grade control block model. Comparisons between the Underground reconciled mined tonnes and grade and the Grade control model (same as the Underground Resource model) have shown that the reconciled mined tonnes are +13%, grade 16%% with an overall increase of+30% ounces. This indicates the model being implemented does have a reasonable level of accuracy with respect to grade estimation. The increase in grade has come from the high grade 101 porphyry lode where significant localised visible gold was noted during the mining process.

APPENDIX 1 (continued)

JORC Code, 2012 Edition – Table 1 report – Caloma One

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The Caloma area has been evaluated using air core (AC), reverse circulation (RC) and diamond drilling (DD) techniques between August 2004 and June2022 although not all of this drilling lies within the current resource outline. In addition RC grade control drilling is undertaken on a campaign basis to assist in ore mark-up in the pit. o AC - 342 holes for 19,955.4m o RC - 335 holes for 37337.5 m – inclusive of 12 pre-collars totalling 453m o RC Grade Control – 2892 holes for 78217 metres o DDH - 111 holes totalling 18161.9m o Face samples 45 faces totalling 340m o BH – 232 holes for 1382.6m AC samples were collected in large plastic bags at one metre intervals via a cyclone RC samples were collected at one metre intervals via a cyclone and riffle or cone splitter. DD sample intervals were defined by geologist during logging to honour geological boundaries. Underground diamond drilling targeting areas between the Caloma 1 and Caloma 2 UG resource were whole core sampled with sample intervals defined by the geologist.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	AC and RC drilling completed to industry standards. Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 3 or 6m) and labelled with the hole number, down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	AC drilling samples collected at 1m intervals via a cyclone into large plastic bags. RC Drilling – prior to November 2007, the entire RC sample was collected at 1m intervals and delivered into a large plastic bag via a cyclone. For resource definition drilling since Nov 2007 and all grade control drilling, approximately 12.5% (2-4kg) of total sample was delivered via cone or riffle splitter into a calico bag (for shipment to laboratory if required) with the remaining sample delivered into a large plastic bag and retained for future use if required. DD Drilling – sample intervals were defined by geologists during logging to honour geological boundaries and cut in half with a saw. Only the Underground infill diamond GC holes were whole core sampled. All samples sent to the laboratory were crushed and/or pulverised to produce a ~100g pulp for assay process. All 1m RC & AC samples and core samples were fire assayed using a 50g charge and all RC and AC composite samples fire assayed using a 30g charge. Visible gold was occasionally observed in both core and AC/RC samples

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	Initial reconnaissance drilling was completed to fresh rock using 75mm or 100mm air core with follow-up and deeper drilling completed by RC (usually 130 - 140mm diameter). Detailed resource definition drilling was completed primarily by RC techniques using a 130mm or 140mm diameter face sampling hammer. DD holes were pre-collared using either RC techniques or un-oriented PQ3 (83mm diameter) core drilling. Pre-collars were completed to competent material, with holes cased off and completed to depth using HQ3 (61mm diameter) core. HQ3 core was oriented using the "Ace" (Reflex Act) core orientation tool. Underground Diamond core was drilled as NQ.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	AC and RC - sample recovery was visually estimated and was generally very good (>90%) aided by the use of oversized shrouds through oxide material. Samples were even in size. Samples were rarely damp or wet. Sample quality was assessed by the sampler by visual approximation of sample recovery and if the sample was dry, damp or wet. Riffle and cone splitters were used to ensure a representative sample was achieved for 1 metre samples. DD - core loss was identified by drillers and calculated by geologists when logging. Generally ≥95% was recovered and any loss was usually in portions of the oxide zone. Triple tube Large diameter, triple tube core (PQ3) was used through the oxide material to ensure the greatest recovery.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	RC drilling was completed using oversized shrouds to maintain sample return in oxide zone and all samples were split using riffle or cone splitters. Use of RC rigs with high air capacity assists in keeping samples dry. Triple tube coring was used at all times to maximise core recovery with larger diameter (PQ3) core used in the oxide and saprolite zones.
	• *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.*	There is no known relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	AC & RC - each one metre interval was geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). DD - all core was laid out in core trays and geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). A brief geotechnical log was also undertaken collecting parameters such as core recovery, RQD, fracture count, and fracture type and orientation.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	All logging was qualitative with visual estimates of the various characteristics. Magnetic susceptibility data is quantitative. Magnetic susceptibility data is not collected for grade control drilling. AC & RC - A representative sample of each one metre interval is retained in chip trays for future reference. DD - Core was photographed and all unsampled core is retained for reference purposes.
	• *The total length and percentage of the relevant intersections logged.*	All DD core and AC/RC chip samples have been geologically and geotechnically logged by qualified geologists.
	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	DD - zones of visual mineralisation and/or alteration were marked up by the geologist and cut in half using an Almonté (or equivalent) core cutting saw. Samples submitted for analysis

Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample preparation		were collected from the same side in all cases to prevent bias. Sampling intervals were generally based on geology, were predominantly over 1m intervals but do not exceed 1.3 metres in length. All mineralised zones were sampled, plus ≥2m of visibly barren wall rock. Laboratory Preparation – drill core was oven dried prior to crushing to <6mm using a jaw crusher, split to 3kg if required then pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	AC/RC – for drilling completed prior to Nov 2007 spear samples were collected from each 1m sample and composited to 3m for initial analysis. Individual 1m samples from all composites assaying ≥0.2g/t Au were riffle split and resubmitted for analysis. For resource definition drilling completed since Nov 2007, for intervals with visual mineralisation and/or alteration the calico sample bag (1m samples) were numbered and submitted to the laboratory for analysis. Intervals without visual mineralisation and/or alteration were spear sampled and composited over three metres. For composited intervals returning grades >0.2g/t Au the calico bags were retrieved for assay of the individual 1 m intervals. Rare damp or wet samples were recorded by the sampler. All grade control drill holes are sampled at 1m intervals with all samples forwarded to the laboratory for analysis. Laboratory Preparation – the entire RC sample (3kg) was dried and pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	Alkane (ALK) sampling techniques are of industry standard and considered adequate.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	RC and grade control – field duplicate samples collected at every stage of sampling to control procedures. DD – external laboratory duplicates used.
	• *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.*	RC - Duplicate samples were riffle split from the riffle/conical split calico from the drill rig. Duplicates show generally excellent repeatability, indicating a negligible "nugget" effect. For grade control drilling duplicate samples are split at the drilling rig.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are industry standard and considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	For all 1m samples used in the resource estimate gold was determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill was dissolved in aqua regia and gold determined by flame AAS. For 3m composite samples gold was determined using a 30g charge (more rarely 50g charge). For other geochemical elements, samples were digested in aqua regia with each element concentration determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. These additional elements were generally only used for geological interpretation purposes, are not of economic significance and are not routinely reported.
	• *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.*	Not applicable to this report or deposit.

Criteria	JORC Code explanation	Commentary
	• *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.*	Commercially prepared Certified Reference Materials (CRM) and blanks were inserted at 1 in 50 samples. CRM's were not identifiable to the laboratory. Field duplicate samples were inserted at 1 in 50 samples (alternate to CRM's). Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data was reported for each sample submission. Failed standards result in re-assaying of portions of the affected sample batches. Screen fire assay checks (75µm mesh) were undertaken on 110 drill core samples. Screen fire assay data overrides all other methods.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Drill data was compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.
	• *The use of twinned holes.*	Twinned holes have not been used at Caloma Two as twinning provides verification only for extremely limited areas of a deposit.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	All resource definition drill hole logging and sampling data was hard keyed into Excel spreadsheet for transfer and storage in an access database with verification protocols in place. All grade control drilling data at Tomingley is stored in a "Datashed" Microsoft SQL database. All primary assay data was received from the laboratory as electronic data files which were imported into sampling database with verification procedures in place. QAQC analysis was undertaken for each laboratory report. Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site. Data was also verified on import into mining related software.
	• *Discuss any adjustment to assay data.*	No assay data was adjusted. Screen fire assays take precedence over all other assay techniques.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Drill holes were laid out using hand held GPS (accuracy ± 2m) then surveyed accurately (± 0.1m) by licensed surveyors on completion. Since mining commenced drill holes were set out and picked up using a RTK rover based GPS (± 0.1m) RC & AC drill holes were surveyed using a single shot electronic camera at a nominal 30m downhole intervals. Grade control drill holes complete since March 2015 which are greater than 24m in depth are surveyed down hole. DD holes were surveyed at nominal 30m down hole during drilling to maintain drilling direction and then at 6m intervals on retrieval of rod string using a multi shot electronic camera.
	• *Specification of the grid system used.*	All drill holes were originally laid out in AMG66 grid however since mining commenced in February 2014 have been transformed to MGA94 grid system to conform with reporting requirements for mine operations. Grade control drill holes laid out in MGA.
	• *Quality and adequacy of topographic control.*	The area is very flat. A site based digital terrain model was developed from accurate (± 0.1m) survey control by licenced surveyors.
	• *Data spacing for reporting of Exploration Results.*	Drilling was completed on east-west sections spaced nominally 20m apart with holes spaced at 20m intervals along the lines. The line spacing was increased to a nominal 40m in zones

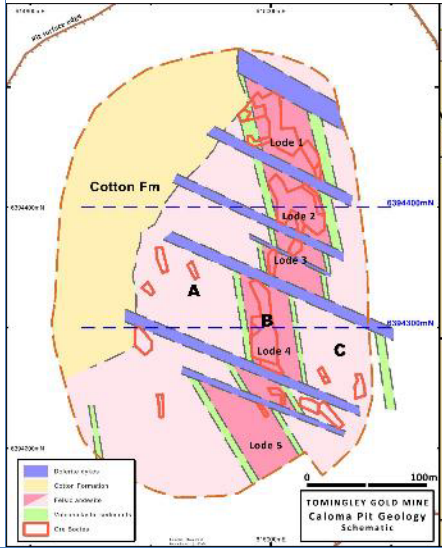
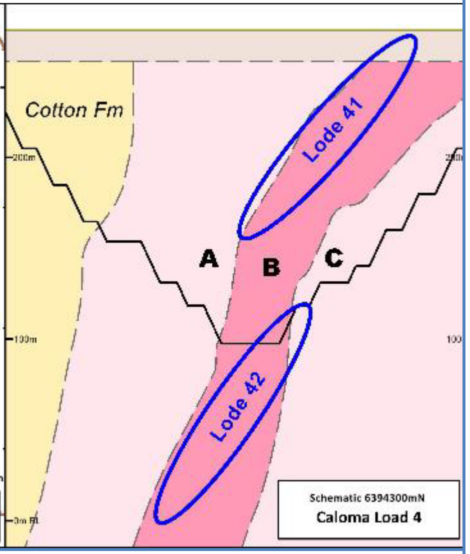
Criteria	JORC Code explanation	Commentary
Data spacing and distribution		thought peripheral to the main ore body and to the north. Grade control drilling is completed on a pattern ensuring a minimum of 10m x 10m pattern when combined with resource definition drill holes. The drill hole spacing is similar to that used at other Tomingley deposits and has been established to be sufficient.
	• *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.*	A Simulation Study for optimal drill spacing has been undertaken. There is a case to reduce the spacing from 10x10 to 10x8. With the minimal mine life and visual continuity of mineralisation between drill holes and when on the ground the 10x10 drill spacing has been deemed appropriate,
	• *Whether sample compositing has been applied.*	Sample compositing was not applied until resource estimation stage. RC & AC -exploration and resource definition drilling samples with no visible mineralisation or alteration were composited to 3m with 1m resamples assayed if the composite returned a gold value of >0.2g/t gold. One metre samples override 3m composites in the database. All grade control sample assayed at 1m intervals DD – core was sampled to geology.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Much care was given to attempt to intersect mineralisation at an optimal angle but in complex ore bodies this can be difficult. A number of drilling directions were used in the early drilling phases in an attempt to optimise the intersection angle. The chosen drilling direction (east at inclination of -60°) appears optimal based on reconciliation from the early mining periods.
	• *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.*	It is not thought that drilling direction will bias assay data at Caloma 1
Sample security	• *The measures taken to ensure sample security.*	All samples were bagged in tied numbered calico bags, grouped into larger tied polyweave bags and transported to the laboratory in Orange by Alkane personnel or courier. S ample submission sheets were delivered with the samples and also emailed to the laboratory. All sample submissions were documented via ALS tracking system and all assays were reported via email. Sample pulps were returned to site and were stored for an appropriate length of time (minimum 3 years). The Company has in place protocols to ensure data security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The Company does not routinely have external consultants verify exploration data until resource estimation procedures are deemed necessary. The Caloma data was reviewed in 2010, 2011 and 2014 by Behre Dolbear (BDA) as part of the due diligence phase of the development of the project and bank financing. BDA did not express any specific concerns with respect to the data other than to recommend the completion of some round robin assaying and completion of additional density determinations, both of which were undertaken for the Caloma Two resource drilling. A density campaign on all deposits using drill core was undertaken in December 2015. A total of 3,182 density measurements were taken The aim of the review was to assess variability from fresh rock density values applied in previous Resource and Grade Control models. Data measurement was restricted to materials below the fresh rock transition. Average density values recorded for fresh rock materials within each of the deposits were generally between

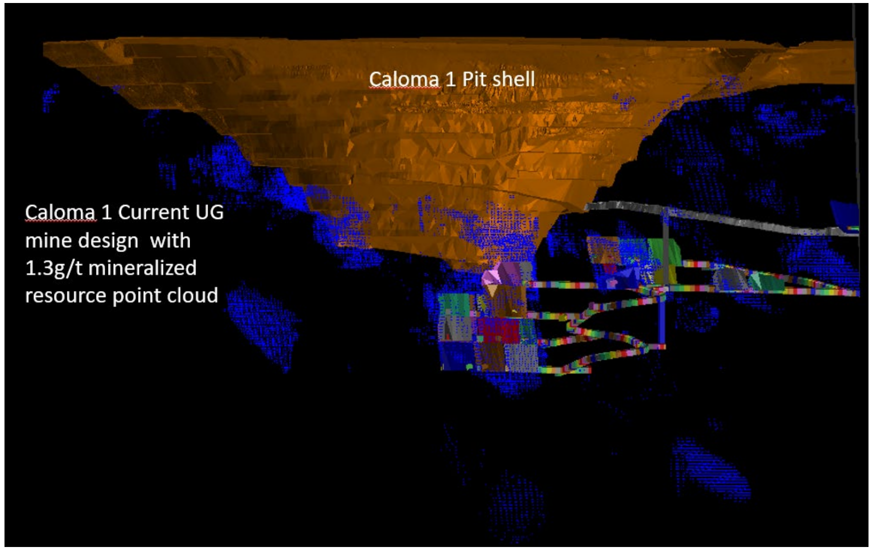
Criteria	JORC Code explanation	Commentary
		1 - 2% higher than the current assigned value. These new density values have been assigned to the latest Caloma 1resource model.

Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Caloma Deposit lies within ML 1684 which is held in the name of Tomingley Gold Operations Pty Ltd, a wholly owned subsidiary of Alkane Resources Ltd.
	• *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.*	ML1684 expires on 11 February 2034.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	All reported drilling has been completed by ALK.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Geological nature of the Tomingley Deposits is well documented elsewhere. Mineralisation is associated with quartz veining and alteration focused within sub-volcanic basaltic-andesite sills and adjacent volcaniclastic sediments. The deposits appear to have formed as the result of a rheological contrast between the porphyritic sub-volcanic sills and the surrounding volcaniclastic sediments, with the sills showing brittle fracture and the sediments ductile deformation, and have many similarities to well documented orogenic - lode-style gold deposits. Mineralisation at Caloma is developed within a series of stacked 'quartz lodes' which dip shallowly to the west and hosted dominantly within the sub-volcanic sills. The lodes are cross cut by a number of barren post mineralisation dolerite dykes.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	Too numerous and not practical to summarise all drill hole data used. All drilling results have been reported previously
	• *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.*	Exclusion of drill hole data will not detract from the understanding of this report. All drill data has been previously reported, holes are close spaced and in an operating mine area.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Previously reported results have been – ○ For uncut gold grades; ○ Intercepts were defined (bounded) by 0.5g/t gold outer limit and may contain some internal waste; ○ Only intervals grading ≥1 g/t gold were reported;

Criteria	JORC Code explanation	Commentary
		○ Grades were calculated by length weighted average.
	• *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.*	Exploration results have been previously reported as length weighted average grades with internal high grade intercepts reported separately.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* ○ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ○ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Previously reported exploration results include the drilled width and an estimate of true width. At Caloma the true width is approximately 80% of the drilled width.
Diagrams	• *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.*	Cross section and a plan showing geology with drill collars were included with previously reported exploration results. Typical plan and cross section included below. 
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Data relating to all exploration drill holes has been reported in previous documentation of exploration results.
Other substantive	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey*	No additional or new drilling results are being reported at this time.

Criteria	JORC Code explanation	Commentary
exploration data	*results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Mining within the Caloma open pit commenced in February 2014. Additional surface drilling has been completed to compliment an assessment of mining resources below the open pit by underground methods and also Underground diamond infill drilling following up on the mineralisation intersected by the surface drilling.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging data was entered into Excel via drop down menus. All raw data was loaded directly to the Access database from the assay, logging and survey derived files.
	• *Data validation procedures used.*	There are validation checks to avoid duplications of data. The data were further validated for consistency when loaded into Surpac and desurveyed. An extensive check on the consistency and adequacy of down-hole survey data for exploration and resource definition drill holes was carried out in 2009.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *(If no site visits have been undertaken indicate why this is the case.)*	The Caloma 1 Resource Model was developed by Mr Craig Pridmore who has been working at the site since March 2015. The quoted resources have been compiled by Mr Craig Pridmore, Geology Manager, Tomingley Gold Operations Pty Ltd.

Criteria	JORC Code explanation	Commentary
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The initial geological model was built on structural data from core and lithological logging with extensive pit mapping formed the backbone of the Geological/Structural model currently being implemented. The domain wireframes were built by the Alkane geologists most familiar with the deposit. The geological model is continuously being modified and improved as mining progresses. The broad geological model remains much as interpreted however the sub-volcanic sills have been separated into three individual units and constraints on the ore outlines tighten in line with the additional data available.
	• *Nature of the data used and of any assumptions made.*	Structural measurements from oriented drill core were used to assist in the geological interpretation for the resource model along with lithological, alteration and mineralisation logging of RC chips and drill core. Mapping within the open pit has greatly assisted with the refinement of the interpretation of the geology.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	The Caloma deposit was been drilled at a close-spacing in several different drilling campaigns, reducing the likelihood that the geological interpretation will change significantly. Drill holes were predominantly inclined to the east with some holes inclined to the north or west (early drilling). Reconciliation with grade control drilling and mining confirms this broad interpretation.
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	Geological (lithological) logging was used to develop a geological model. Alteration and mineralisation estimates along with grade guided the interpretation of the ore envelope wireframes at a nominal 0.25g/t Au lower cut-off. The Caloma deposit consists of a series of moderate to shallow west-dipping mineralised structures within the steep west dipping feldspar porphyritic host which is bounded by several thin volcaniclastic sediment lenses. These structures trend north-south over a strike length of 500 metres and range in width from a few metres to in excess of 20 metres. The mineralised structures have been displaced and offset by numerous east-west barren post-mineralisation dolerite dykes. Mineralisation is associated with extensive alteration and quartz veining of the porphyry and volcanic rocks.
	• *The factors affecting continuity both of grade and geology.*	Mineralisation is directly associated with silica, sericite, arsenopyrite, pyrite alteration and quartz veining.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	The mineralisation occurs in several west-dipping zones within a north-striking corridor 460m long and 420m wide. Mineralisation extends from about 5m below the surface for more than 350m vertical depth.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	The resource model has used all the exploration drill data (RC/ DD) and the grade control RC drilling. Grade control drill design was undertaken on a nominal 10m x 10m spacing. The resource model has incorporated sub-domaining of the main geological units and mineralised lodes. This sub-domaining has been incorporated into the resource model based on elements identified through in-pit mapping and increased drill density through the grade control drilling. There are nine Geological domains, these are comprised of the cotton formation, the cross cutting barren dolerites, and the three sub-volcanic sill domains (Feldspar Porphyry's) which are separated by thin volcaniclastic sediments. There are 8 mineralised domains which define the main high grade ore lenses of the deposit and two enclosing background domains to capture minor mineralisation outside the main domains.

Criteria	JORC Code explanation	Commentary
		Four surfaces were also used to separate material types - topography, alluvium, saprolite and base of oxidation surfaces. The material type classification was used to allocate density values. The drill hole data were flagged by the domain wireframes in priority order, to prevent double use of the data in any intersecting zones. The samples were composited to 1m, the most common sample length and flagged by the topography, alluvium, saprolite and base of oxidation surfaces. Top-cuts were selected for each domain based on histograms, probability plots and cutting statistic plots. The top-cuts ranged from 10g/t gold to 30.0 g/t gold for the mineralised zones. After top-cutting, the maximum coefficient of variation for the mineralised domains ranged from 1.11 to 4.81 indicating that the estimation would not be difficult. The principal estimation was made using Ordinary Kriging with Inverse Distance Squared checks made. The number of drill hole composites have significantly increased since the original exploration resource model release allowing for reliable variography to be undertaken in the main ore lodes. These variogram models have been incorporated in the resource block model. The orientation of the search ellipse for each domain was controlled by dynamic anisotropy, which uses the bounding mineralised surfaces of the lodes and discrete wireframes for the unconstrained mineralisation. This method provided a unique dip and dip-direction for each block. The principal estimation using Surpac software was ordinary kriging with ID2 checks using the same dynamic anisotropy. A parent block size of 5m x 2.5m x 2.5m with 1.25m sub-blocking was used in the block model. All blocks constrained within the dolerite wireframe domain were classified as waste with a grade of 0 g/t assigned to the blocks.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	Mining has been ongoing from the Caloma open pit since January 2014. In June 2015, a new geological/structural model was generated based on detailed inpit mapping, relogging of Diamond core holes and logging of Grade control holes. The estimation method was changed from ID2 to Ordinary Kriging and the reconciliation process was reviewed and modified. The geological model has been updated routinely since mining commenced. Since the change Caloma pit Grade control Model has reconciled very well with the new estimation process. With +1% tonnes, +3% grade for +4% increase in ounces.
	• *The assumptions made regarding recovery of by-products.*	No assumptions made - Estimates were made for gold, arsenic and copper; only gold is of economic significance.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	No deleterious elements identified for estimation
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	The primary block size for the resource model is 5m x 2.5m x 2.5m, with sub-blocking of 2.5m x 1.25m x 1.25m. The primary search on each domain is variable based on the variograms with a range from 30m to 60m with a Major/Semi ratio of 1 and a Major/Minor ratio of 5.
	• *Any assumptions behind modelling of selective mining units.*	Block size of 5mN x 2.5mE x 2.5m has been used for the following reasons: 1. A rule of thumb is that the block dimensions for OK should not be less than a third to half of the informing data spacing. This increased length in the northing direction would mean that only the easting dimension does not strictly meet this criterion. This should translate to

Criteria	JORC Code explanation	Commentary
		an improvement in estimation accuracy and precision, and therefore also the accuracy of ore allocation. 2. A 5mN x 2.5mE x 2.5mRL block equates to about 80t of fresh rock, which would essentially be a single haul truck load. 3. The continuity of mineralisation in the north-south orientation has a longer range no matter what the dip of the high grade lodes and so there will be only a minor impact on grade resolution for ore block definition.
	• *Any assumptions about correlation between variables.*	No assumptions made
	• *Description of how the geological interpretation was used to control the resource estimates.*	Hard boundaries on all domains within the resource model were used.
	• *Discussion of basis for using or not using grade cutting or capping.*	The top cuts were selected using a combination of histograms, probability plots and cutting statistic plots (plots of cut-off grade against Coefficient of Variation (CV) and total metal).
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Estimates were made using Ordinary Kriging with Inverse Distance checks. The model was compared to previous grade control models and the resource model. A variety of checks were used to identify variability between models and also the estimated block grades. Each step of the process has validation steps to ensure estimation validity. Some of the checks incorporated comparison of composites to actual raw drill hole data, 2.5m level comparison checks using various grade cuts. Visual checks of the block estimation against composite and raw drill hole data both on plan and section.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated on a dry tonnage basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade (0.50 g/t Gold) for open pittable resources is relevant for the current mining operation of this deposit.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the 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.*	The main part of the Caloma deposit is being mined by open pit methods. No dilution has been applied to the resource model. The resources are depleted for production.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The Caloma 1 deposit is currently being mined and processed with no significant differences in metallurgical recoveries from those estimated in the feasibility study.
Environmen-tal factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential*	Project approval for the TGP was granted in July 2012 for mining from three open pits (Wyoming One, Wyoming Three and Caloma 1) and underground from Wyoming One deposit. Mining from the Wyoming Three and Caloma open pits commenced in December 2013 with processing of ore in February 2014.

Criteria	JORC Code explanation	Commentary
	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.	
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Specific gravity measurements for the original resource model were completed by commercial laboratories on drill core samples of the different material types (alluvium, saprolite, totally oxidised and fresh). Oxidation was far more important than variations in lithology or alteration. The specific gravity measurements were applied on a dry basis. In December 2015 a large in-house density analysis campaign occurred on all the deposits with over 3,182 additional samples taken. The results were combined the original exploration density data and used in the current resource estimate.
	• *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.*	SG measurements completed on all material types – see above.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	No assumptions made – SG determined and individual values applied to each material type based on wire framed surfaces
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	*Resource Model* The resources were classified based on drilling density, geological confidence and grade continuity. The actual break-points for the different resource classes were chosen by inspection of the model in relation to the drilling density. As a general rule all areas with a 10m x 10m drill spacing was classified as measured. Zones with a nominal drill spacing of 20m x 25m has been classified as indicated, material that has been drilled to a 30m x 40m spacing is in the inferred category. The classifications are based on the confidence of ounce conversion. Measured would have a 90% conversion probability, indicated would have a 75% confidence level and inferred a 50% confidence in ounce conversion if mined.
	• *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).*	Caloma 1 was estimated using high proportion of Reverse Circulation (RC) drill hole data. The RC drilling was conducted using industry-standard methods and was not affected by high water flows, so there is no reason not to accept the RC results. Statistical studies showed that the RC drilling was of similar grade to the diamond drilling. Reconciliation has shown that the current estimation methods and modelling parameters are performing adequately with the reconciled ounces within 4% of the block model over the LOM
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The classification reflects the Competent Persons view of the deposit and its supporting data
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	No external audits have been carried out on the resource estimation. Cube Consultants have been used to review and update the estimation parameters for the Caloma 1 pit. The scope of work was: 1. Undertake exploratory data analysis on the 1m gold composites provided by Alkane. This included making top cut recommendations as well as an assessment of the suitability of the current estimation methodology. 2. Undertake a spatial structural analysis, for representative high and low grade domains, resulting in the modelling of gold grade variograms for use in the DOK estimation runs.

Criteria	JORC Code explanation	Commentary
		3. Undertake search neighbourhood analyses to assist with the choice of DOK search parameters. This included a consideration of tightly sampled grade control areas (10mN x 10mE) drilling to more widely sampled areas covered only by resource holes. 4. Deliver an opinion on the suitability of the current 10mN x 10mE grade control drill pattern. 5. Update the estimation parameter file for use in the DOK routine. 6. Produce a technical summary note explaining the process followed by Cube and briefly discussing the new estimation parameters.
	• *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.*	No statistical or geostatistical method (non-linear or simulation) was used to quantify the relative accuracy of the grade control estimate within confidence limits. Accuracy of the estimate is strongly dependent on: ○ accuracy of the interpretation and geological domaining; ○ accuracy of the drill hole data (location and values); ○ orientation of local anisotropy; and ○ estimation parameters which are reflected in the variogram model used and the parameters used that follow the resource model relatively closely.
	• *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.*	The resources are global, being based on drill hole data at exploration spacing. To ensure the resources have 'reasonable prospects of eventual economic extraction' the resources have been restricted by an indicative optimistic pit shell estimated at a gold price of $2000 per ounce with the potential open pittable component assessed at ≥0.5g/t gold cut off and material outside of the indicative pit with potential for eventual extraction by underground mining methods assessed at ≥1.3g/t gold.
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Reconciliation of the Caloma pit has shown the current geological model and estimation process is performing very well, with minor improvements being made to the model as more information is gathered. The reconciled tonnes versus the Model are +1%, +3% grade for -+4% increase in ounces. Based on the reconciled results and mining practices being implemented the resource model is deemed to have a high level of accuracy.

APPENDIX 1 (continued)

JORC Code, 2012 Edition – Table 1 report – Caloma Two

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The Caloma Two area has been evaluated using air core (AC), reverse circulation (RC) and diamond drilling (DD) techniques between May 2007 (early reconnaissance) and March 2012. Not all of this drilling lies within the current resource outline, there is some overlap in drilling with the southern end of Caloma (although there is no overlap in resources) and none of the air core drilling samples were used in the resource calculation. o AC - 48 holes for 3424m o RC - 196 holes for 28404m (inclusive of 2 pre-collar totalling 72m) o RC Grade Control – 443 hole for 15361m o DD - holes totalling 43919.78m o FS – 190 faces for 1106.4m o Sludge samples 1 hole for 10m RC samples were collected at one metre intervals via a cyclone and riffle or cone splitter. DD sample intervals were defined by geologist during logging to honour geological boundaries. During the 2015 4 Geotech diamond holes were drilled into the Caloma Two deposit. These are included in the total DD holes drilled. A significant surface DD and Underground Grade control diamond program, infilling the known Caloma 2 underground resource occurred during the 2020/2021 year. All these holes have been incorporated and used in the resource model.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	RC drilling completed to industry standards. Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 3 or 6m) and labelled with the hole number, down hole depth, length of drill run. Core was aligned and measured by tape, comparing back to this down hole depth consistent with industry standards.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	RC Drilling - approximately 10% (3-4kg) of total sample was delivered via cone or riffle splitter into a calico bag (for shipment to laboratory if required) with the remaining sample delivered into a large plastic bag and retained for future use if required. DD Drilling – sample intervals defined were by geologists during logging to honour geological boundaries and cut in half with a saw. All samples sent to laboratory were crushed and/or pulverised to produce a ~100g pulp for assay process. All RC and core samples were fire assayed using a 50g charge. Visible gold was occasionally observed in both core and RC samples

Criteria	JORC Code explanation	Commentary
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	The resource is based on 196 RC drill holes totalling 28,404 metres and 301 diamond core drill (DD) holes totalling 43919 metres. The in-pit grade control RC drilling was also used in the resource estimation. Detailed resource definition drilling was completed by RC techniques using a 130mm or 140mm diameter face sampling hammer. DD holes were pre-collared using either RC techniques or un-oriented PQ3 (83mm diameter) core drilling. Pre-collars were completed to competent material, with holes cased off and completed to depth using HQ3 (61mm diameter) core. HQ3 core was oriented using the "Ace" (Reflex Act) core orientation tool. The 21/22 surface and Underground diamond drill program was undertaken drilling NQ core. Drilling data used in the establishment of resource wireframes and the resource calculation is comprised of: o 55% RC – 639 holes totalling 53,743.85m (inclusive of 2 pre-collar totalling 72m) o 45% DD – 301 holes totalling 437919m
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC sample recovery was visually estimated and was generally very good (>90%) aided by the use of oversized shrouds through oxide material. Samples were even in size. Samples were rarely damp or wet. Sample quality was assessed by the sampler by visual approximation of sample recovery and if the sample was dry, damp or wet. Riffle and cone splitters were used to ensure a representative sample was achieved for 1 metre samples. DD - core loss was identified by drillers and calculated by geologists when logging. Generally ≥95% was recovered and any loss was usually in portions of the oxide zone. Triple tube Large diameter, triple tube core (PQ3) was used through the oxide material to ensure the greatest recovery.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	RC drilling was completed using oversized shrouds to maintain sample return in oxide zone and all samples were split using riffle or cone splitters. Use of RC rigs with high air capacity assists in keeping samples dry. Triple tube coring was used at all times to maximise core recovery with larger diameter (PQ3) core used in the oxide and saprolite zones.
	• *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.*	There is no known relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	RC - each one metre interval was geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). DD - all core was laid out in core trays and geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). A brief geotechnical log was also undertaken collecting parameters such as core recovery, RQD, fracture count, and fracture type and orientation.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	All logging was qualitative with visual estimates of the various characteristics. Magnetic susceptibility data is quantitative. RC - A representative sample of each one metre interval is retained in chip trays for future reference.

Criteria	JORC Code explanation	Commentary
		DD - Core was photographed and all unsampled core is retained for reference purposes.
	• *The total length and percentage of the relevant intersections logged.*	All DD core and RC chip samples have been geologically and geotechnically logged by qualified geologists.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	DD - zones of visual mineralisation and/or alteration were marked up by the geologist and cut in half using an Almonté (or equivalent) core cutting saw. Samples submitted for analysis were collected from the same side in all cases to prevent bias. Sampling intervals were generally based on geology, were predominantly over 1m intervals but do not exceed 1.3 metres in length. All mineralised zones were sampled, plus ≥2m of visibly barren wall rock. Laboratory Preparation – drill core was oven dried prior to crushing to <6mm using a jaw crusher, split to 3kg if required then pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	RC – for intervals with visual mineralisation and/or alteration, the calico sample bag (1m samples) were numbered and submitted to the laboratory for analysis. Intervals without visual mineralisation and/or alteration were spear sampled and composited over three metres. For composited intervals returning grades >0.2g/t Au the calico bags were retrieved for assay of the individual 1 m intervals. Rare damp or wet samples were recorded by the sampler. Laboratory Preparation – the entire RC sample (3kg) was dried and pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples were discarded. A pulp packet (±100g) is stored for future reference.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	Alkane (ALK) sampling techniques are of industry standard and considered adequate.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	RC – field duplicate samples collected at every stage of sampling to control procedures. DD – external laboratory duplicates used.
	• *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.*	RC - Duplicate samples were riffle split from the riffle/conical split calico from the drill rig. Duplicates show generally excellent repeatability, indicating a negligible “nugget” effect.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are industry standard and considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Gold was determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill was dissolved in aqua regia and gold determined by flame AAS. For other geochemical elements, samples were digested in aqua regia with each element concentration determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. These additional elements were generally only used for geological interpretation purposes, are not of economic significance and are not routinely reported.
	• *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.*	Not applicable to this report or deposit.

Criteria	JORC Code explanation	Commentary
	• *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.*	Commercially prepared Certified Reference Materials (CRM) and blanks were inserted at 1 in 50 samples. CRM's were not identifiable to the laboratory. Field duplicate samples were inserted at 1 in 50 samples (alternate to CRM's). Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data was reported for each sample submission. Failed standards result in re-assaying of portions of the affected sample batches. Screen fire assay checks (75µm mesh) were undertaken on 110 drill core samples. Screen fire assay data overrides all other methods.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Drill data was compiled and collated, and reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.
	• *The use of twinned holes.*	Twinned holes have not been used at Caloma Two as twinning provides verification only for extremely limited areas of a deposit.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	All drill hole logging and sampling data was hard keyed into Excel spreadsheet for transfer and storage in an access database with verification protocols in place. All primary assay data was received from the laboratory as electronic data files which were imported into sampling database with verification procedures in place. QAQC analysis was undertaken for each laboratory report. Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site. Data was also verified on import into mining related software.
	• *Discuss any adjustment to assay data.*	No assay data was adjusted. Screen fire assays take precedence over all other assay techniques.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Drill holes were laid out using hand held GPS (accuracy ± 2m) then surveyed accurately (± 0.1m) by licensed surveyors on completion. RC drill holes were surveyed using a single shot electronic camera at a nominal 30m down hole intervals. DD holes were surveyed at nominal 30m down hole during drilling to maintain drilling direction and then at 6m intervals on retrieval of rod string using a multi shot electronic camera.
	• *Specification of the grid system used.*	All drill holes were originally laid out in AMG66 grid however since mining commenced in February 2014 have been transformed to MGA94 grid system to conform with reporting requirements for mine operations.
	• *Quality and adequacy of topographic control.*	The area is very flat. A site based digital terrain model was developed from accurate (± 0.1m) survey control by licenced surveyors.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	Exploration Drilling was completed on north-south sections spaced nominally 20m apart with holes spaced at 20m intervals along the lines. The line spacing was increased to a nominal 40m in zones thought peripheral to the main ore body and to the east. Underground grade control infill drilling and the 20/21 surface infill drilling was completed on a nominal 15x20m spacing. The drill hole spacing is similar to that used at other Tomingley

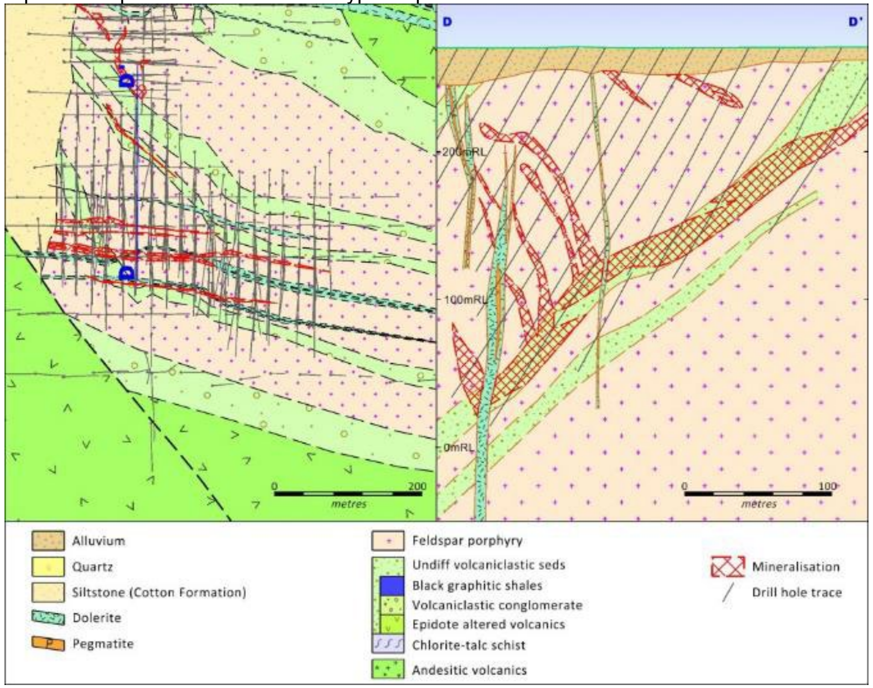
Criteria	JORC Code explanation	Commentary
		deposits and has been established to be sufficient. Some areas have been reduced to 15 x 15 due to the structural complexity of certain areas.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	The drill hole spacing has been shown to be appropriate by the visible continuity of mineralisation between drill holes. In some areas the drill spacing has been reduced.
	• *Whether sample compositing has been applied.*	Sample compositing was not applied until resource estimation stage. RC samples with no visible mineralisation or alteration were composited to 3m with 1m resamples assayed if the composite returned a gold value of >0.2g/t gold. One metre samples override 3m composites in the database. DD – core was sampled to geology.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Much care was given to attempt to intersect mineralisation at an optimal angle but in complex ore bodies this can be difficult. The chosen drilling direction (south at inclination of -60°) is consistent with structural measurements obtained from oriented drill core.
	• *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.*	It is not thought that drilling direction will bias assay data at Caloma Two.
Sample security	• *The measures taken to ensure sample security.*	All samples were bagged in tied numbered calico bags, grouped into larger tied polyweave bags and transported to the laboratory in Orange by Alkane personnel or courier. S ample submission sheets were delivered with the samples and also emailed to the laboratory. All sample submissions were documented via ALS tracking system and all assays were reported via email. Sample pulps were returned to site and were stored for an appropriate length of time (minimum 3 years). The Company has in place protocols to ensure data security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The Company does not routinely have external consultants verify exploration data until resource estimation procedures are deemed necessary. The Caloma Two data has not been audited nor reviewed by external parties however the data for other deposits within the TGP was reviewed in 2010 and 2011 by Behre Dolbear (BDA). BDA did not express any specific concerns with respect to the data other than to recommend the completion of some round robin assaying and completion of additional density determinations, both of which were undertaken for the Caloma Two resource drilling.

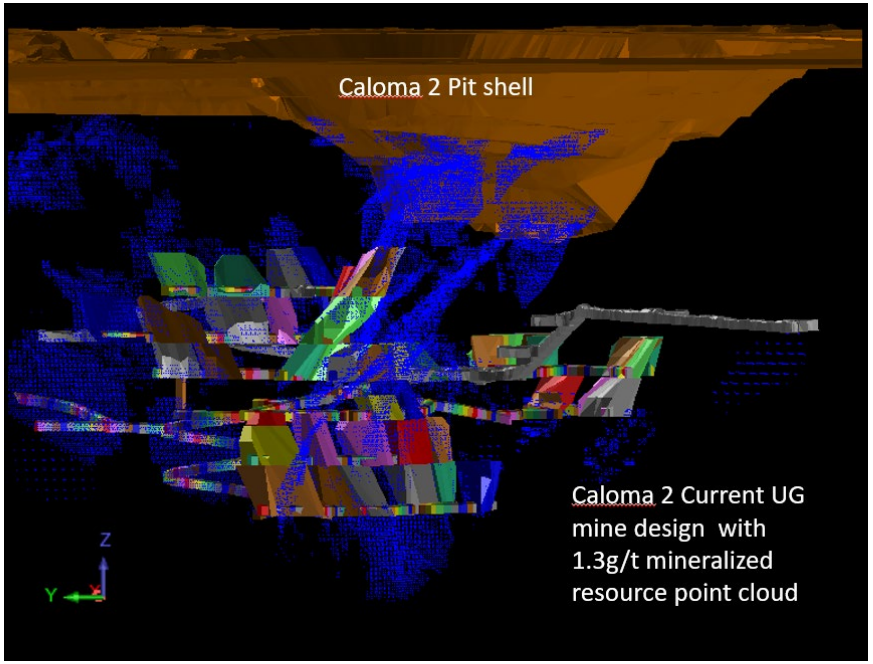
Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	The Caloma Two Deposit lies within ML 1684 which is held in the name of Tomingley Gold Operations Pty Ltd, a wholly owned subsidiary of Alkane Resources Ltd.
	• *The security of the tenure held at the time of reporting along with any known*	ML1684 expires on 11 February 2034.

Criteria	JORC Code explanation	Commentary
	impediments to obtaining a licence to operate in the area.	
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	All reported drilling has been completed by ALK.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Geological nature of the Tomingley Deposits is well documented elsewhere. Mineralisation is associated with quartz veining and alteration focused within sub-volcanic basaltic-andesite sills and adjacent volcaniclastic sediments. The deposits appear to have formed as the result of a rheological contrast between the porphyritic sub-volcanic sills and the surrounding volcaniclastic sediments, with the sills showing brittle fracture and the sediments ductile deformation, and have many similarities to well documented orogenic - lode-style gold deposits. Mineralisation at Caloma Two is developed within a series of 'quartz lodes' which dip north at flat to moderate angles and hosted dominantly within the sub-volcanic sills. Mineralisation is also developed along a sediment contact zone which appears to be a potential linking structure with the Caloma mineralisation to the north. There is also evidence for the development of an inverted saddle reef at depth. The lodes are cross cut by a number of post mineralisation dolerite dykes.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	Too numerous and not practical to summarise all drill hole data used. All drilling results have been reported previously
	• *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.*	Exclusion of drill hole data will not detract from the understanding of this report. All drill data has been previously reported, holes are close spaced and in an operating mine area.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Previously reported results have been – For uncut gold grades; Intercepts were defined (bounded) by 0.5g/t gold outer limit and may contain some internal waste; Only intervals grading ≥1 g/t gold were reported; Grades were calculated by length weighted average.
	• *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.*	Exploration results have been previously reported as length weighted average grades with internal high grade intercepts reported separately.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents are reported.

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* ○ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ○ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Previously reported exploration results include the drilled width and an estimate of true width. The mineralisation is structurally complex and true widths are variable depending on the ore zone intersected however range between 60% and 80% of drill intersection.
Diagrams	• *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.*	Cross section and a plan showing geology with drill collars were included with previously reported exploration results. A typical plan and cross section are included below. 
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Data relating to all drill holes has been reported in previous documentation of exploration results.
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No additional or new drilling results are being reported at this time.

Criteria	JORC Code explanation	Commentary
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	No further work is planned in the short term however drilling to test the continuation of mineralised structures at depth for an underground resource definition will be contemplated.
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	A pit design has been established and material has been included in the mining schedule. 

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	Logging data is entered into Excel via drop down menus. All raw data is loaded directly to the Access database from the assay, logging and survey derived files.
	• *Data validation procedures used.*	There are validation checks to avoid duplications of data. The data are further validated for consistency when loaded into Datamine and desurveyed.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *(If no site visits have been undertaken indicate why this is the case.)*	The quoted resources were compiled by Mr Craig Pridmore, Geology Manager Tomingley Gold Operations Pty Ltd, who has worked at TGO site since March 2015.
	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The geological model is built on structural data from core and lithological logging. The lode strike orientations are similar to Wyoming Three which sits in a similar structural position.

Criteria	JORC Code explanation	Commentary
Geological interpretation	• *Nature of the data used and of any assumptions made.*	Structural measurements from oriented drill core were used to assist in the geological interpretation along with lithological, alteration and mineralisation logging of RC chips and drill core.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	A steep dipping interpretation was initially proposed however this was inconsistent with structural measurements obtained from oriented drill core.
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	Geological (lithological) logging was used to develop a geological model. Alteration and mineralisation estimates along with grade guided the interpretation of the ore envelope wireframes at a nominal 0.25g/t Au lower cut-off. The majority of mineralisation is hosted by a quartz veined and altered feldspar ± augite porphyritic andesite of probable sub-volcanic origin. Dolerite dykes post-date mineralisation and all mineralised lodes are terminated at the dolerite contacts.
	• *The factors affecting continuity both of grade and geology.*	Mineralisation is directly associated with alteration and quartz veining.
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Strike length ~ 360m Width ~ 100m Depth ~ 20m from below surface to ~ 250m below surface from deepest drilling intercept.
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	23 mineralisation wireframes (domains) and 5 dolerite wireframes were interpreted and used as constraints for the resource modelling. Four surfaces were also used to separate material types - topography, alluvium, saprolite and base of oxidation surfaces. The drill hole data were flagged by dolerite and mineralised domain wireframes in priority order, to prevent double use the data in the intersecting zones. The samples immediately outside the mineralised zones were re-flagged, if they contained more than 0.25 g/t gold, in order to prevent any overestimation that could be caused by use of assay boundaries. This re-flagging is also useful for the RC samples that are not broken at barren dyke boundaries. The samples were composited to 1m, the most common sample length and flagged by the topography, alluvium, saprolite and base of oxidation surfaces. The top-cut declustered data had Coefficient of Variation (CV's) of less than 1.7 for the mineralised zones, allowing use of Ordinary Kriging for estimation. Average variogram models were fitted for the mineralised zones and dolerite dykes. Estimates were by Ordinary Kriging methods. Datamine Studio 3 V22 was used. The resources are limited by an indicative pit design to ensure they have reasonable prospects for eventual economic extraction.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	There are no previous estimates or any production data to provide any validation.
	• *The assumptions made regarding recovery of by-products.*	No assumptions made - Estimates were made for gold, arsenic and copper; only gold is of economic significance.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	No deleterious elements identified for estimation

Criteria	JORC Code explanation	Commentary
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	The primary block size was small (5m x 2.5m x 5m) because of the narrow dipping nature of the mineralisation zones. The average drill hole spacing is 10x10m in the open pit and is a nominal 15x20 in the underground Block size is 5 x 2.5 x5 with sub-blocking down to 1.25x1.25x1.25.
	• *Any assumptions behind modelling of selective mining units.*	No assumptions were made.
	• *Any assumptions about correlation between variables.*	No assumptions were made
	• *Description of how the geological interpretation was used to control the resource estimates.*	Only data form the same domain were used to make estimates.
	• *Discussion of basis for using or not using grade cutting or capping.*	The drill hole data were declustered using the polygonal method for statistical analysis and determination of top-cuts. The top cuts were selected using a combination of histograms, probability plots and cutting statistic plots (plots of cut-off grade against Coefficient of Variation (CV) and total metal).
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Estimates were made by Ordinary Kriging, with check estimates by Inverse Distance Squared (ID2) and Nearest Neighbour methods. The estimates were verified using several different techniques and checked for local and global variability. The checks included comparison with estimates made by different estimation methods, and against the declustered composites.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated on a dry tonnage basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade (0.50 g/t Gold) for open pittable resources is being used for the other Tomingley deposits. This takes into account current mining costs and metallurgical recovery for similar material.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the 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.*	Mining of ore from the Caloma 2 ore body commenced in 2017 and to date reconciliations, save for poorly defined inferred mineralisation in the background domain, have been grade positive. The main part of the Caloma 2 deposit is currently being mined by open pit methods.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	Metallurgical test work on Caloma Two material has not been undertaken to date however, the metallurgy of the other Tomingley deposits is well studied. It is likely that Caloma Two will have similar metallurgical characteristics. The Caloma 2 deposit is currently being mined and processed. The two main ore rock types being mined are of Andesitic composition and of Sedmentray composition. The Ore ohosted within the Andesite shows no significant differences in metallurgical recoveries from those estimated in the feasibility study. The initial processing of the sedimentary hosted ore has shown lower recoveries. Metallurgical testwork is being undertaken on the sedimentary ore to assess the potential issue.

Criteria	JORC Code explanation	Commentary
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	Project approval for the TGP was granted in July 2012 for mining from three open pits (Wyoming One, Wyoming Three and Caloma) and underground from Wyoming One deposit. Mining from the Wyoming Three and Caloma open pits commenced in December 2013 with processing of ore in February 2014. Development approval for the Caloma Two open pit was granted in July 2016.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	Specific gravity measurements were completed by commercial laboratories on DD core samples. At least 5 samples if possible were selected for each of the 8 categories; weathered porphyry, weathered mineralised porphyry, fresh porphyry, fresh mineralised porphyry, weathered sediment, weathered mineralised sediment, fresh sediment, and fresh mineralised sediment. The specific gravity measurements were applied on a dry basis. In December 2015 a large in-house density analysis campaign occurred on all the deposits with over 3,182 additional measurements taken.
	• *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.*	SG measurements completed on all material types – see above.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	No assumptions made – SG determined and individual values applied to each material type based on wire-framed surfaces
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	The resources were classified using drill density, geological confidence and mineralisation continuity. The actual break-points for the different resource classes were chosen by inspection of the model in relation to the drilling density and geological continuity. Any blocks outside the main mineralized/geological domains were classified as Inferred or deemed unclassified
	• *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).*	The use of RC drilling limits the amount of geological information that can be logged, and boundaries of mineralisation zones cannot be precisely located.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The classification reflects the Competent Persons view of the deposit and its supporting data
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	As this is the first mineral resource estimation for this deposit, there have not been any audits or reviews.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	The Caloma Two deposit consists of 17 narrow mineralisation zones; consequently there are relatively few drill hole data in each zone. This has limited the accuracy of any fitted variogram model and forced the use of average variogram models. The use of an approximate variogram model does not greatly affect the accuracy of kriged grades as kriging is a very robust estimation process. It does, however, limit the accuracy of the variance of the estimates and any confidence limits that might be statistically inferred.

Criteria	JORC Code explanation	Commentary
		No statistical or geostatistical method (non-linear or simulation) was used to quantify the relative accuracy of the estimate within confidence limits. Accuracy of the estimate is strongly dependent on: o accuracy of the interpretation and geological domaining; o accuracy of the drill hole data (location and values); o orientation of local anisotropy; and o estimation parameters which are reflected in the global resource classification.
	• *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.*	The quoted resources are global, being based on close spaced grade control drill hole data to exploration spacing. The resources have been depleted based on mining to end of June 2018. To ensure the resources have 'reasonable prospects of eventual economic extraction', the open pittable resources have been restricted by an indicative optimistic pit shell estimated at a gold price of $2000 per ounce with the potential open pittable component assessed at ≥0.5g/t gold cut off.The Underground Resource is restricted to material below the current final pit design,below the highest Stope level currently designed, with potential for eventual extraction by underground mining methods assessed at ≥1.3g/t gold.
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Mining of ore from the Caloma 2 ore body commenced in 2017 and to date reconciliations have shown that the original resource model was performing within expectations, Save for poorly defined inferred mineralisation in the background domain. Reconciled Tonnes, against the original exploration resource model with in line with each other. The reconciled grade was 32% higher than predicted with an overall total ounces mined increase of 32%. Over the period of mining the Block Estimation model has been modified and improved, with the Open pit and Underground run simultaneously and captured within the same Block model The original exploration estimation method was remained as ID2 (original resource model estimate). Close spaced Grade control drilling has been ongoing since the start of the open pit. This additional data collected with the mapping has justified a review change in modelling parameters and estimation techniques from ID2 to Ordinary Kriging. This change in estimation method has will be used for the underground resource model which is an extension of the current open pit grade control block mode going forward. Comparisons between the open cut reconciled mined tonnes and grade of the Grade control model have shown that the reconciled mined tonnes are +6%, grade +8% with an overall increase of +14% ounces. This indicates the model being implemented does have a reasonable high level of accuracy although is slightly conservative.

APPENDIX 2

Section 4 Estimation and Reporting of Ore Reserves

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

Criteria	JORC Code explanation	Commentary
Mineral Resource estimate for conversion to Ore Resees	• *Description of the Mineral Resource estimate used as a basis for the conversion to an Ore Reserve.*	The Mineral Resource estimate that this reserve is based upon has been complied by Mr Craig Pridmore, Geology Manager for Alkane Resources Ltd. Mr Pridmore is employed at the Tomingley Gold Operation. The mineral resource estimates have been completed using block models developed by Mr Craig Pridmore for Caloma, using data supplied by Alkane Resources Ltd (Alkane). The models produced incorporated all mineralisation in the Caloma deposit to permit reconciliation of production to date. The depletion of these resource models utilised surveyed data from the end of month production records in June 2021. The following table comprises the Mineral Resources for the Tomingley Gold Project which were compiled by Mr Craig Pridmore, Geology Manager for Alkane.

TOMINGLEY GOLD OPERATION MINERAL RESOURCES (30 June 2023)

DEPOSIT	MEASURED		INDICATED		INFERRED		TOTAL		Total Gold
	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	Tonnage (Kt)	Grade (g/t Au)	(Koz)
Open Pittable Resources (cut off 0.40g/t Au)									
Caloma One	0	0.0	0	0.0	0	0.0	0	0.0	0
Sub Total	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**	**0.0**	**0**
Underground Resources (cut off 1.3g/t Au)									
Wyoming One	988	2.8	725	2.2	375	1.8	2,088	2.4	163
Wyoming Three	46	2.2	24	2.0	20	1.9	90	2.1	6
Caloma One	359	2.5	1113	2.0	328	2.0	1,800	2.1	123
Caloma Two	115	2.5	1066	2.3	360	2.2	1,541	2.3	115
Sub Total	**1,508**	**2.7**	**2,928**	**2.2**	**1,083**	**2.0**	**5,519**	**2.3**	**407**
TOTAL	**1,508**	**2.7**	**2,928**	**3.8**	**1,083**	**3.4**	**5,519**	**2.3**	**407**

Criteria	JORC Code explanation	Commentary
	• *Clear statement as to whether the Mineral Resources are reported additional to, or inclusive of, the Ore Reserves.*	The Mineral Resources reported are inclusive of the Ore Reserves.

Criteria	JORC Code explanation	Commentary
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *(If no site visits have been undertaken indicate why this is the case.)*	The Competent Person for the Ore Reserves, Mr. John Millbank is an independent consultant engaged by Tomingley Gold Operations Pty Ltd (TGO), a whole owned subsidiary of Alkane. Mr Millbank has contributed to the mine planning processes at TGO since commencement of operations in 2013, and has been closely involved with site operations since this time. A site visit for the Ore Reserves calculations was completed on the 7th June 2021.
Study status	• *The type and level of study undertaken to enable Mineral Resources to be converted to Ore Reserves.* *(The Code requires that a study to at least Pre-Feasibility Study level has been undertaken to convert Mineral Resources to Ore Reserves. Such studies will have been carried out and will have determined a mine plan that is technically achievable and economically viable, and that material Modifying Factors have been considered.)*	The Tomingley Gold Mine is an operational open pit mine and CIP processing plant. The mine is based on the extraction and treatment of ore from underground operations and remnant stockpiles from open cut mining operations. Previous open pits – Caloma, Caloma Two, Wyoming One and Wyoming Three had been completed to economic limits by June 2019. This reserve statement is based upon a cutback to Caloma pit using current economics. The TGO processing plant utilises two stage crushing, single stage grinding and a gravity/CIL gold recovery circuit. The plant has a designated throughput of 1.25mtpa of oxide ore and 1.0mtpa of fresh (sulphide) ore. The plant has been operational since February 2014. • The Tomingley Gold Mine was subject to a Definitive Feasibility Study including the estimation of an initial Mineral Resource and Ore Reserve for the Wyoming One, Wyoming Three and Caloma open pits (2009, 2009 and 2012 respectively). Caloma 2 has been subsequently optimized and designed using Whittle and Surpac software by Proactive Mining Solutions and in-house personnel. The current Ore Reserve has been calculated by the Competent Person using the designed pit and associated depletion as at the end of 30 June 2021. • The Site has been operational since January 2014 and has achieved the design objectives set out in the DFS. • This Reserves Statement is based upon well understood costs and physicals from what is now a mature operation. Cost modelling has been completed to a budget level. • Mining and Processing modifying factors are well understood considering the longevity of the operation. • The end of June 2021 mine survey information has been used to differentiate material mined from in-situ material. • Due to the longevity of the operation, the nature of the study, and prior reconciliation of performance, no modifying factors have been applied that will transition the measured resource to a probable reserve. All Measured resource has been translated to a proved reserve classification.
Cut-off parameters	• *The basis of the cut-off grade(s) or quality parameters applied.*	• A lower block cut-off grade of 0.4g/t Au has been applied to the 'diluted' resource block model in calculating this Ore Reserve. The lower cut has been selected with consideration to mine ability, and incremental cash operating margins (i.e. processing costs). • The lower cut-off has been calculated based upon, - a $2000 per ounce gold price excluding royalties, - using process recoveries based on actual achieved for the historical mining of Caloma. - estimated processing and administration costs for the life of mine plan, based upon achieved costs for the 2020 to 2021 financial year. • The cut-off grade has been verified by using costs and metallurgical recoveries from the

Criteria	JORC Code explanation	Commentary
		previous mining and processing operations and expected Gold Price. The calculated lower block cut off of 0.4g/t is conservative when historic costs and processing recoveries are applied.
Mining factors or assumptions	• *The method and assumptions used as reported in the Pre-Feasibility or Feasibility Study to convert the Mineral Resource to an Ore Reserve (i.e. either by application of appropriate factors by optimisation or by preliminary or detailed design).*	Open cut truck excavator mining, with some free dig material in the upper oxide zones and drill and blast in the lower oxide and fresh materials.
	• *The choice, nature and appropriateness of the selected mining method(s) and other mining parameters including associated design issues such as pre-strip, access, etc.*	• Equipment size and methods selected typical of moderate scale open pit gold mining. 120 tonne class excavators, 90 tonne mechanical drive haul trucks. • Dual lane in pit ramps at 24 m wide and 1:8.5 gradient for the majority of the pits. Single lane ramps at 15m wide have been designed to access the final stages of the mine. These have shown to be successful for the mine so far. • Mining is on five metre high benches and is mined in two, two and a half metre high flitches, to reduce mining dilution. These flitch heights are typical for gold mining and match the size of mining equipment selected.
	• *The assumptions made regarding geotechnical parameters (e.g. pit slopes, stope sizes, etc), grade control and pre-production drilling.*	In Pit ore boundaries are defined by Reverse Circulation Grade control drilling on 10 metre by 10 metre, to 10 metre by 5 metre patterns depending on the size and quality of the mineralisation being grade controlled. Geotechnical parameters as advised by specialised geotechnical consultants for Caloma. Site visits are conducted regularly by the consultants, and parameters reviewed. Any modifications to wall design are addressed in design. The same consultants have been used at TGO since production commenced and are well familiar with the ground conditions.
	• *The major assumptions made and Mineral Resource model used for pit and stope optimisation (if appropriate).*	Pit Optimisation parameters have been confirmed to an appropriate level of accuracy through subsequent mining operations, along with reconciliation of actual performance to date. Parameters have been applied directly to designs, and these designs have then been subjected to financial analysis, to confirm profitability. Mine optimisation has excluded the inferred portion of the resource.
	• *The mining dilution factors used.*	The resource model has been based on a model that includes all grade control information for the project to date. Grade interpolation has been completed using ordinary kriging. A second grade interpolation has been generated using mineable boundaries, and applying average grades within those boundaries. Material that has lower grade and where the average grade for the mineable block falls below cut off is set to waste. This effectively removes the interstitial low grade from ore zones and eliminates the reliance on selective mining sized blocks within the resource model. Resource definition drilling is backed by reconciliation of the project to date. Reconciliation of grade control drilling versus mill production to date in Caloma shows the grade control drilling underestimates by approximately 4% on ounces fed. No dilution factor has been applied additional to the work completed within the block model.
	• *The mining recovery factors used.*	Assumed 100% recovery of the models, due to acceptable reconciliation to date and work that has been completed on the model to create a mineable ore zone within the model.
	• *Any minimum mining widths used.*	Pit Design has been limited to a minimum working width of 20 metres.
	• *The manner in which Inferred Mineral Resources are utilised in mining studies and the sensitivity of the outcome to their inclusion.*	Inferred resources contained in the mineralised ore wireframes are included in the current mine schedule for Caloma. The proportion of inferred in pit resource is less than 2% of ore

Criteria	JORC Code explanation	Commentary
		tonnes and is not considered significant. Reconciliations to date for Caloma show the original resource model is over reporting tonnes by 15% and under reporting grade by 11% for a total over report of ounces by 7% against Mill feed. This is based on 100% of the original pit ore being mined thus far, and includes the inferred in pit mining resource. Reconciliation excluding the inferred resource over performs the model estimates, with 9% under reporting of tonnes, 17% over reporting of grade, and overall under reporting of 10% for contained ounces. When the au_sched grade item is applied, which has been modified to mining blocks, the overall model reporting error is 1% under on tonnes, 3% over on grade and 4% under on ounces. Reconciliation to date of the cutback for which this reserve statement applies has shown an increase of 8% of overall ounces on ore mined versus ore planned. Consequently no further reconciliation factors have been applied to the au_sched item..
	• *The infrastructure requirements of the selected mining methods.*	• All required infrastructure is currently in place, including surface works for Caloma. There is adequate tailings storage available with the current facilities in place.
Metallurgical factors or assumptions	• *The metallurgical process proposed and the appropriateness of that process to the style of mineralisation.*	Ore from the Tomingley Project will be treated at the Tomingley Gold Plant which is described above.
	• *Whether the metallurgical process is well-tested technology or novel in nature.*	The technology is well tested and has been successfully operated for six years.
	• *The nature, amount and representativeness of metallurgical test work undertaken, the nature of the metallurgical domaining applied and the corresponding metallurgical recovery factors applied.*	The DFS plan uses 96% metallurgical recovery for oxide and 91% for fresh for an overall recovery of 93%. Each pit, had specific metallurgical test work undertaken for the DFS which is made up of leach and gravity recovery. The metallurgical test work is representative of all material types and areas of the ore bodies. The range of recoveries used are within the parameters of the individual pit recoveries. Processing of ores from each pit to completion including those from Caloma , have shown process recoveries to fall within the DFS limits.
	• *Any assumptions or allowances made for deleterious elements.*	No deleterious elements extracted.
	• *The existence of any bulk sample or pilot scale test work and the degree to which such samples are considered representative of the ore body as a whole.*	Process recovery for the 2016/2017 financial year averaged 91.47%. A blend of 24% oxide and 76% fresh material was processed for the year. This results in process recovery being 1% less than the LOM Plan. Process recovery for the 2020/2021 financial year, with ore being primarily from underground mining sources, was over 89%.
	• *For minerals that are defined by a specification, has the ore reserve estimation been based on the appropriate mineralogy to meet the specifications?*	N/A – no minerals defined by a specification.
Environmental	• *The status of studies of potential environmental impacts of the mining and processing operation. Details of waste rock characterisation and the consideration of potential sites, status of design options considered and, where applicable, the status of approvals for process residue storage and waste dumps should be reported.*	• All environmental approvals are in place for operating within the Caloma pit. • Waste will be sent to either the existing Wyoming Three or Caloma Two pit voids as backfill. • There is sufficient volume in the RSF design to allow for all the material in the current LOM..
Infrastructure	• *The existence of appropriate infrastructure: availability of land for plant development, power, water, transportation (particularly for bulk commodities), labour, accommodation; or the ease with which the infrastructure can be provided, or accessed.*	• Infrastructure has already been constructed for open pit mining and processing. Works to site included access road, a water pipeline, a 66 KV power line, site drainage, topsoil stockpiling, waste dump construction, Residue Storage Dams, Process Water Dams,

Criteria	JORC Code explanation	Commentary
		associated offices, workshops, fuel and laydown areas. Sufficient site infrastructure has been constructed to process ore at 1.25 MTPA. • All surface drainage works for Caloma have been carried out. • The site relies upon local employment drawing employees from Tomingley, Peak Hill, Dubbo and Parkes Region.
Costs	• *The derivation of, or assumptions made, regarding projected capital costs in the study.*	No allowance was made for capital costs in this reserve analysis although pre-stripping of waste for Caloma may be capitalised. The economic analysis is based on total cash costs. Projected All In Sustaining Costs have been calculated from the LOM Plan and are less than the predicted realised gold price, leaving margin.
	• *The methodology used to estimate operating costs.*	• Operating costs – Mining and Process o Current wage rates. o Projected fuel price for 2021 o Current contract rates for equipment hire, drilling contractor and explosive supplier. o Current explosives costs and estimates of requirements for blast hole drilling, blasting, excavation and processing based on the varying rock types. o Current work rates and OEM specs for excavator productivity. o Truck hours based on OEM specs and projected haul cycles from mine plan. o Contract Prices for Processing Consumables o Current contract prices for power and estimated usage o Associated onsite administration cost and a portion of head office costs are not included. These costs are distributed to existing underground operations.
	• *Allowances made for the content of deleterious elements.*	N/A – No deleterious elements extracted
	• *The source of exchange rates used in the study.*	Gold price is expressed in Australian dollars and no exchange rate is required.
	• *Derivation of transportation charges.*	No transportation charges have been applied in economic analysis as these are included in the mining costs. Ore will be delivered directly from the pit to the ROM stockpiles beside the existing plant within estimated mining costs. Gold transportation costs to the Mint are included in the refining component of the milling charges assumed in the study.
	• *The basis for forecasting or source of treatment and refining charges, penalties for failure to meet specification, etc.*	Processing operating costs outlined above.
	• *The allowances made for royalties' payable, both Government and private.*	Royalties payable at rate of 4% ex-mine value to the NSW State Government have been considered. There are no other royalties' due.
Revenue factors	• *The derivation of, or assumptions made regarding revenue factors including head grade, metal or commodity price(s) exchange rates, transportation and treatment charges, penalties, net smelter returns, etc.*	• Assume 100% ore mining recovery of the regularised Model. • Selling costs and Royalties included in costs to give a net revenue per ounce. • No deleterious metals present that incur smelter penalties. • A base gold price of AUD$ 2000 /Oz excluding royalties in this ore reserve assessment. • Exchange rates, royalties and transport charges dealt with above.
	• *The derivation of assumptions made of metal or commodity price(s), for the principal metals, minerals and co-products.*	No assumptions made. The gold dore is to be sold at spot price.
	• *The demand, supply and stock situation for the particular commodity, consumption trends and factors likely to affect supply and demand into the future.*	• There is a transparent quoted derivative market for the sale of gold; • The Dore Gold is sent to the Perth Mint at commercial rates for refining. The Tomingley

Criteria	JORC Code explanation	Commentary
Market assessment		Gold Operations Pty Ltd sell the gold into the open market at the spot value for gold.
	• *A customer and competitor analysis along with the identification of likely market windows for the product.*	N/A There is a transparent quoted derivative market for the sale of gold
	• *Price and volume forecasts and the basis for these forecasts.*	N/A There is a transparent quoted derivative market for the sale of gold
	• *For industrial minerals the customer specification, testing and acceptance requirements prior to a supply contract.*	N/A – not assessing industrial minerals
Economic	• *The inputs to the economic analysis to produce the net present value (NPV) in the study, the source and confidence of these economic inputs including estimated inflation, discount rate, etc.*	• The operation is currently operating at a processing rate of 1.1 MTPA. • The preliminary analysis carried out did not estimate the NPV but rather simple cash flow based on a variety of possible gold prices; or • For all deposits, the optimal pit shell was chosen as that with the highest discounted cash flow from the Whittle Four-X pit Optimisation. The pits were designed from the chosen shell. Pit designs where then back calculated for undiscounted return using the whittle input costs to ensure profitability within limits.
	• *NPV ranges and sensitivity to variations in the significant assumptions and inputs.*	Sensitivity analysis was included in the Whittle optimization and simple cash flow analysis were completed for gold prices ranging from $1800 - $2200
Social	• *The status of agreements with key stakeholders and matters leading to social licence to operate.*	• The TGO site is located on flat farm land with the Newell Highway separating Caloma and the Wyoming (pits and processing) side of operations. Surrounding the site is the village of Tomingley (600 m to the north) and local operating farms. • All key stakeholder agreements are in place, including a Voluntary Planning Agreement (VPA) with the Narromine Shire Council. The Company has close working relationships with the local communities.
Other	• *To the extent relevant, the impact of the following on the project and/or on the estimation and classification of the Ore Reserves:*	
	○ *Any identified material naturally occurring risks.*	A risk analysis was undertaken as part of the Feasibility Study and Environmental Assessment and no naturally occurring risks were identified.
	○ *The status of material legal agreements and marketing arrangements.*	Majority of production is sold into the spot gold market.
	○ *The status of governmental agreements and approvals critical to the viability of the project, such as mineral tenement status, and government and statutory approvals. There must be reasonable grounds to expect that all necessary Government approvals will be received within the timeframes anticipated in the Pre-Feasibility or Feasibility study. Highlight and discuss the materiality of any unresolved matter that is dependent on a third party on which extraction of the reserve is contingent.*	The operation is situated on a granted Mining Lease which expires in 2034. All statutory and government approvals have been obtained along with the required development approvals for Caloma.
Classification	• *The basis for the classification of the Ore Reserves into varying confidence categories.*	The classification of the Tomingley Gold Operations, Caloma open cut deposit (July 2021) has been carried out in accordance with the recommendations of the JORC code 2012.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	Yes. The Caloma deposits are robust at current gold prices and this has been proven over past eight years of operations.

Criteria	JORC Code explanation	Commentary
	• *The proportion of Probable Ore Reserves that have been derived from Measured Mineral Resources (if any).*	No probable reserves have been derived from Measured Resources – all measured resources converted to Proved Reserves.
Audits or reviews	• *The results of any audits or reviews of Ore Reserve estimates.*	The Ore Reserves estimates have been completed by Competent Persons external to Alkane Resources and Tomingley Gold Operations. No further review has been conducted.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Ore Reserve 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 reserve within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors which could affect the relative accuracy and confidence of the estimate.*	The resource block models from which the mining reserve has been derived was based on a geostatistical estimation completed by Mr Craig Pridmore who is satisfied with the resource categories quoted. Within the reserve estimation process the effects of included dilution have been accounted for to produce an anticipated selective mining unit grade. The effects of this dilution are more pronounced in narrow zones of mineralisation, leading to overall grade reduction and loss of some narrow zones to waste through a drop below cut-off grade.
	○ *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.*	The material included in the LOM schedule is only material that has been estimated inside of designated ore zones. The estimated material outside of the ore zones has not been included.
	○ *Accuracy and confidence discussions should extend to specific discussions of any applied Modifying Factors that may have a material impact on Ore Reserve viability, or for which there are remaining areas of uncertainty at the current study stage.*	The assumption that the high grade (plus 1 g/t) and the low grade (0.4-1.0 g/t) could be wholly separated has not been proved, although low grade material is being recovered. This has resulted in more high-grade material and less low-grade material than as predicted in the resource models. A revised technique using grade control drilling and modelling a separate attribute called au_sched has shown some improvement for this. The estimation technique used essentially smooths the grade and allows for low grade within the high grade mineable ore blocks.
	○ *It is recognised that this may not be possible or appropriate in all circumstances. These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	Reconciliation to date of the au_sched attribute shows an underestimate of 4% on ounces recovered from milling operations.

APPENDIX 3

ALKANE RESOURCES LTD SHORT FORM ORE RESERVE REPORT

Tomingley Underground Ore Reserves

TENEMENT:	*ML1684*
OWNER:	Alkane Resources Ltd 100%
OPERATOR:	Alkane Resources Ltd (ABN 35 000 689 216) 89 Burswood Road, BURSWOOD, WA 6100
COMMODITIES:	Gold
COMPILED BY:	Christopher Hiller
REPORT BY:	Christopher Hiller
REPORTING DATE:	30 June 2023

Project Summary

The Tomingley Gold Operation (TGO) is located on the Newell Highway, two kilometres south of the town of Tomingley, Tomingley is 54kms south west of Dubbo and 67kms North of Parkes, Central New South Wales. TGO's mining operations are currently focussed on the Wyoming and Caloma deposits and this forms a small portion of the Tomingley Gold Project (TGP) exploration licences.

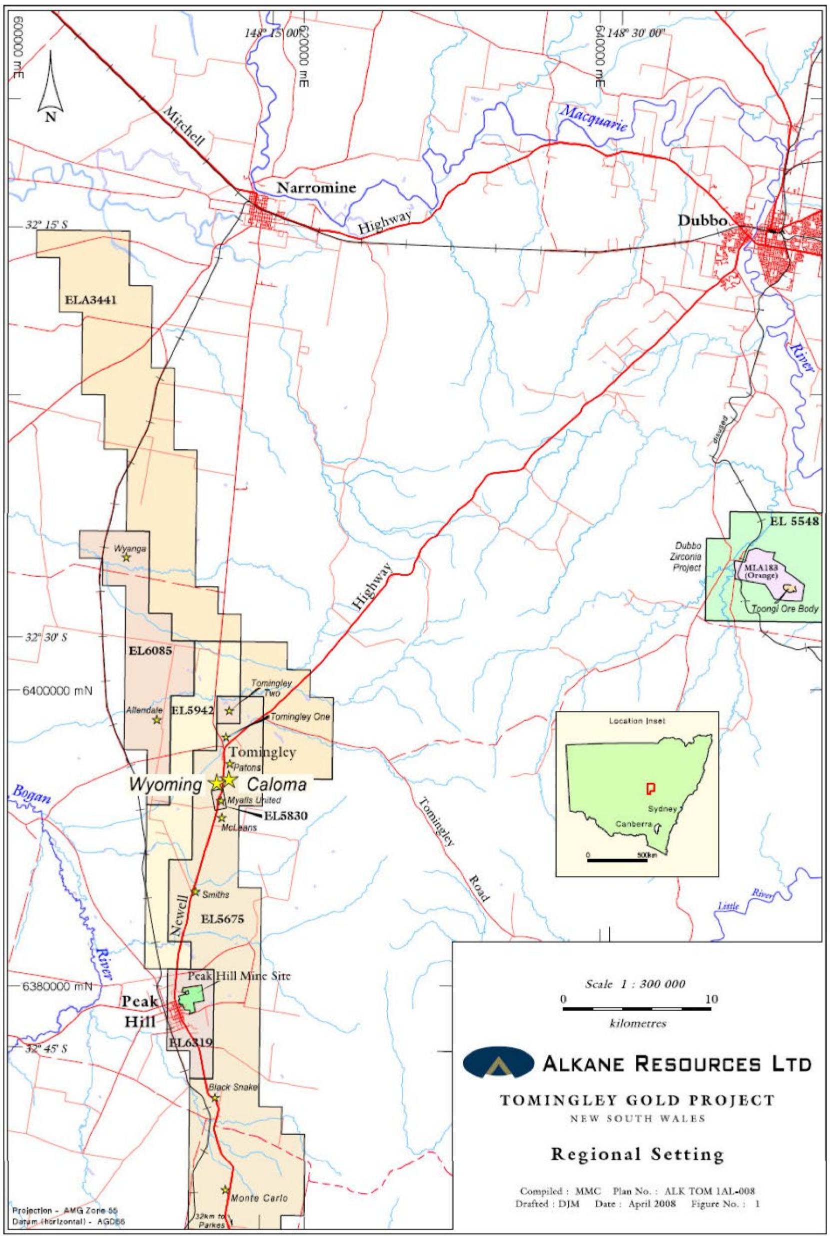


Figure 1: Regional Setting of the TGP

The gold mineralisation is hosted within volcaniclastic sediments, rare lavas and shallow intrusive porphyritic rocks. The volcanic units are of trachy-andesite to basaltic trachy-andesite composition. The volcaniclastic rocks, which contain very rare detrital quartz, are dominated by well bedded sandstones and siltstones with minor breccias, lithic conglomerates and black mudstones centred at the Wyoming One and Myalls United area, reducing in grainsize to dominantly peperitic graphitic mudstones north at Wyoming Three and the Caloma deposits. The volcanics appear to terminate further north at the historic Tomingley workings within the township.

The volcaniclastic units are intruded by numerous coarse feldspar ± augite porphyritic bodies which commonly show peperitic contacts and are interpreted as shallowly emplaced sills. Wyoming Three, Caloma One and Caloma Two sills that host mineralisation are all correlative but are chemically distinct from Wyoming One and Myalls United mineralised sills.

A narrow, marginally discordant, chlorite-talc schist has also been located by drilling just to the east of the sills at Wyoming One. This likely represents a mafic-ultramafic precursor, similar to olivine rich lavas (picrites) described in the Molong Belt.

Current mining activities comprise of underground mining of Wyoming One, Caloma One and Caloma Two orebodies. The cut back of the Caloma One pit is completed. TGO is operated on a residential basis with personnel residing in Dubbo, Narromine and Parkes in the Central West of New South Wales.

Two mining methods are used to mine the underground resource including, Longhole Open Stoping (LHOS) with loose or cemented rockfill (CRF) and top-down LHOS with rib pillars and no fill. The choice of mining method is determined by value of the resource, orebody width and geotechnical factors.

Stoping configurations are predominantly single-lift stoping (25m vertical interval) with strike length of 20-30m. The stoping method (as illustrated in Figure 2) involves establishing a slot using conventional long-hole drill and blast techniques and then the stoping front is retreated along strike. The installation of brow cables and the use of a concurrent strike-retreat blasting sequence assist in controlling ground stability. Depending on the mining method used CRF or loose rockfilled is filled into the stopes upon completion of mining. For the LHOS with rib pillars there is no fill placement.

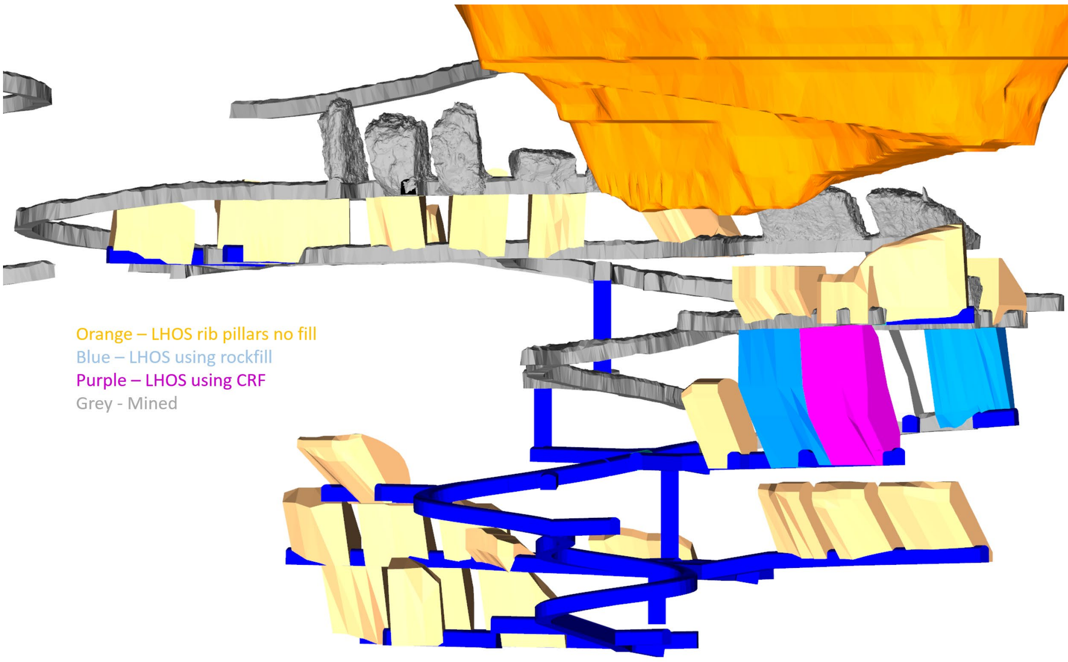


Figure 2: Isometric View of Caloma One Pit and Stope Shapes

Ore production is scheduled at 1,100 ktpa which is trucked to surface using a fleet of five underground trucks (MT65). The truck fleet is matched with four Caterpillar R2900 loaders operating on a combination of tele-remote and manual control. Normal drilling fleet includes two development jumbos (DD420/422i) and two production drills (DL431/432).

Primary ventilation for Wyoming One is supplied by three 110kw, 1.4m diameter, single stage fans wall mounted underground. These fans will support mining down to the extent of Wyoming One ore deposit. Primary ventilation for the Caloma orebodies is supplied using a similar configuration. The ventilation layout is illustrated in Figure 3.

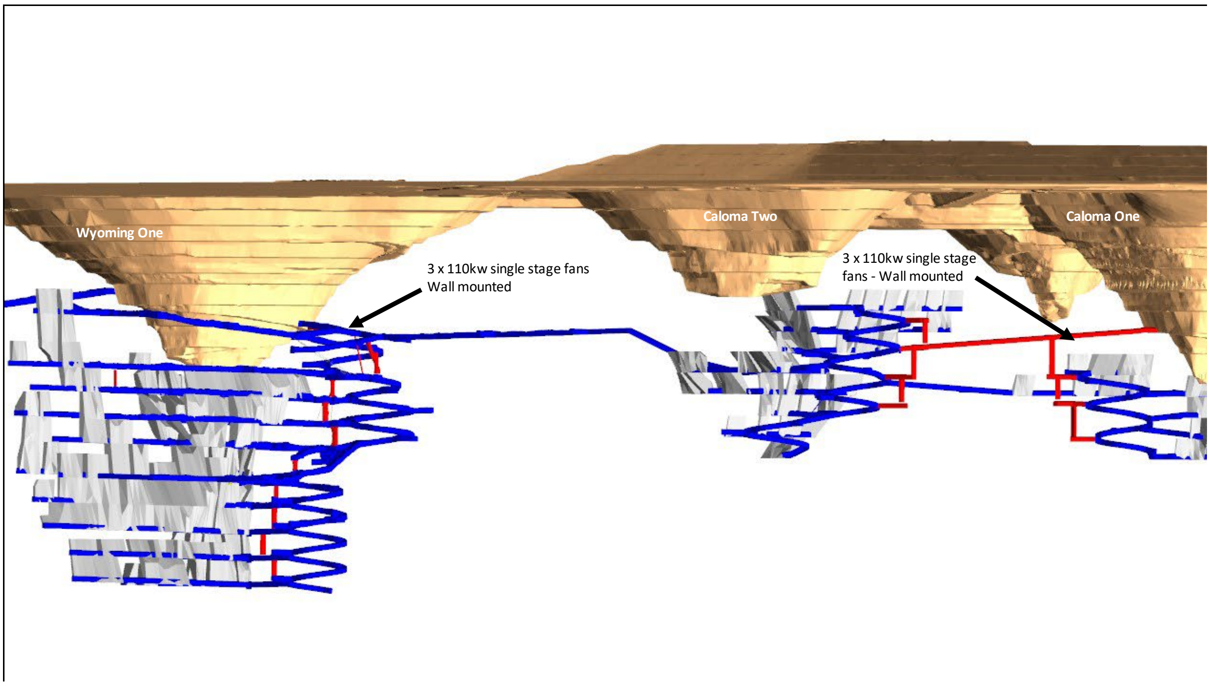


Figure 3: Primary Ventilation for Wyoming One, Caloma One and Caloma Two

Electrical infrastructure servicing TGO can deliver 10MW. The site currently uses 7.5MW; this falls within the current 10.0MW peak allowance. Underground mining currently uses 3.0MW, power is reticulated to Wyoming One, using a 1.3km high voltage cable from the mill. Power to the Caloma orebodies is provided by a further 600m extension of the high voltage cable along the access drive.

Tailings are begin deposited into stage nine (of RFS1), no additional stages are planned for construction at RSF1. Stage nine allows for storage at the current processing rate until December 2023. A second tailing dam (RFS2) has been approved for stage one and two. Stage one allows storage of a further 3.0Mt with construction currently underway. Construction of stage one is expected to be completed in November 2023.

All TGO ore is trucked to the TGO processing plant which is located adjacent to the Wyoming Three pit. The plant consists of a crushing circuit, single-stage milling circuit and hybrid carbon-in-leach (CIL) circuit with one designated leach tank and numerous adsorption tanks. Gold is recovered from activated carbon into concentrated solution. Electrowinning and smelting are conducted in an adjacent secure gold room. The tailings from the process are thickened and pumped to a paddock-type tailings storage facility with multi-spigot distribution. Gold doré bars are transported to the Perth Mint for refining.

The reported Ore Reserve is based on the Measured and Indicated Mineral Resources from the current site based mine design. Figure 4 shows the Ore Reserve design, colour coded by Ore Reserve classification.

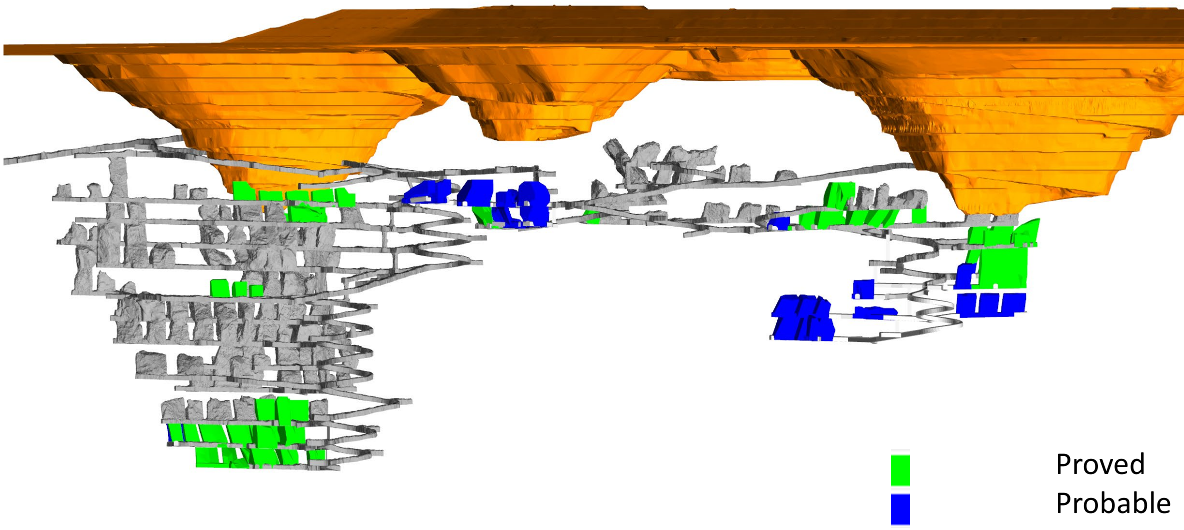


Figure 4: Isometric view of TGO Life-of-Mine design by Ore Reserve classification

The Ore Reserve estimate for TGO is shown in Table 1 below. The Ore Reserve is reported in accordance with the requirements of the 2012 Edition of the JORC Code, "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

Classification	Cut-off	Tonnes (kt)	Grade (g/t)	Ounces (koz)
Wyoming One				
Proved	1.3g/t Au	260	2.09	17
Probable		85	1.80	5
Subtotal		345	2.01	22
Caloma One				
Proved	1.3g/t Au	156	1.73	9
Probable		392	1.66	21
Subtotal		548	1.68	30
Caloma Two				
Proved	1.3g/t Au	26	1.51	1
Probable		252	1.80	15
Subtotal		278	1.78	16
Total				
Proved	1.3g/t Au	442	1.93	27
Probable		729	1.73	41
Total		1,171	1.80	68

Table 1: Tomingley Gold Operation Ore Reserve Summary – 30 June 2023

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JORC 2012 Table 1 Checklist of Assessment and Reporting Criteria

Section 4 Estimation and Reporting of Ore Reserves

Criteria	Comments
Mineral Resource estimate for conversion to Ore Reserves	• The underground Ore Reserve estimate is based on the Mineral Resource estimate carried out by Alkane Resources Ltd. Gold grade was estimated using ordinary kriging for Wyoming One, Caloma One and Caloma Two. • The Mineral Resources are reported exclusive of the Ore Reserve. • The Mineral Resource model used to estimate this Reserve is described as; wyoming1_gc_02072023.mdl, caloma_02072023.mdl and caloma2_29062023.mdl.
Site visits	• The Competent Person is Christopher Hiller a full-time employee of Hiller Enterprises Pty Ltd. Christopher has been providing mining engineering support, since February 2020. Christopher is a member of the Australasian Institute of Mining and Metallurgy.
Study status	• Wyoming One is an operating underground mine, having commenced capital development in December 2018 and stoping in February 2020. The life of mine design is updated and reviewed on a quarterly basis. • Capital development to access Caloma One and Two commenced in July 2020 and stoping in November 2021. The life of mine design is updated and reviewed on a quarterly basis. • The mine has been in full production since 2014 and is achieving design objectives. • Any further studies undertaken are to extend the mine or optimise the current operating practices.
Cut-off parameters	• Two cut-off grades have been calculated and applied based on current costs and modifying factors for the Life-of-Mine plan. A gold price of AU$2,350/oz was provided by Alkane Resources Ltd and was used in this calculation. ○ **Fully Costed** cut-off grade of 1.3 g/t and this includes all costs associated with the extraction and processing of ore material ○ **Incremental Development** cut-off grade of 0.5 g/t applies to all development ore material.
Mining factors or assumptions	• The TGO Ore Reserve has been estimated based on detailed mine development and stope designs. Modifying factors for dilution and mining recovery have been applied post-geological interrogation to generate the final diluted and recovered Ore Reserve. • The Life-of-Mine plan used for budgeting at the Tomingley Gold Operations utilises two mining methods

	○ Top down long hole open stoping using rib pillars with no fill ○ Bottom up long hole open stoping using cemented or loose rockfill. • Stope size, development placement and ground support strategies have been designed in line with recommendations from the current ground control management plan. • 5,400m of grade control drilling is planned within Wyoming One, Caloma One and Caloma Two orebodies. • The model used to estimate the Ore Reserve is consistent with that which forms the basis of the Mineral Resource estimate for the TGO deposits. The models are internally known as wyoming1_gc_02072023.mdl, caloma_02072023.mdl and caloma2_29062023.mdl. • Planned dilution has been accounted for in the creation of the Stope Shapes. Unplanned mining dilution of 15% for LHOS with pillars and LHOS using CRF or loose rockfill has been used. This factor has been applied in Deswik Scheduler. • A 95% mining recovery factor has been applied to both LHOS using rib pillars and LHOS using cemented or loose rockfill. • Waste development excavations are given a 10% overbreak. No further dilution factors or mining recovery factors have been applied to development ore. • A global minimum mining width of 3m is used. While the ore body width generally exceeds the minimum mining width, where the ore body is narrower stoping outlines are designed to honour the minimum width and include planned dilution. • All ore in the Ore Reserve estimate is classified as a Proved or Probable Ore Reserve. No Inferred Mineral Resources is included in the Ore Reserve. The Inferred Mineral Resources in the Life-of-Mine plan have been removed from the Ore Reserve estimate. • The infrastructure requirements of the stoping methods used are already in place and maintenance of this infrastructure has been included in the economic evaluation. • The capital and operating costs of this additional infrastructure to support underground mining have been included in the economic evaluation which demonstrates the economic viability of the Ore Reserve.
Metallurgical factors or assumptions	• All TGO ore is trucked to the TGO processing plant which is located adjacent to the Wyoming Three pit. The plant consists of a crushing circuit, single-stage milling circuit and hybrid carbon-in-leach (CIL)

	circuit with one designated leach tank and numerous adsorption tanks. Gold is recovered from activated carbon into concentrated solution. Electrowinning and smelting are conducted in an adjacent secure gold room. The tailings from the process are thickened and pumped to a paddock type tailings storage facility with multi-spigot distribution. • The technology associated with processing of TGO ore is currently in operation and is based on industry standard practices. • Mine production and cash flow estimates are based on a metallurgical recovery of 87%, which is consistent with current performance. • No deleterious elements extracted. • N/A – no minerals defined by a specification. • The current tailings storage facility is adequate for processing until December 2023, with a second tailings storage facility approved to store a further 3.0Mt with construction to be completed in November 2023.
Environmental	• TGO is currently compliant with environmental regulatory agreements under the NSW Environmental Planning and Assessment Act 1979 and Protection of the Environment Operations Act 1997. • TGO was subject to numerous environmental studies as part of the Environmental Assessment (EA) for the Tomingley Gold Project during the approvals phase and all required approvals were granted prior to the commencement of mining. The EA included documentation regarding the underground mine which is still relevant today. • The original Project Approval (PA 09_0155) has been superseded by a more recent Development Consent (SSD 9176045) that covers both the TGO and TGEP deposits. All previously approved activities continue under the new approval which will remain in force until 31 December 2032. PA 09_0155 will be surrendered within 12 months of physical commencement under SSD 9176045, expected to occur in Q4 2023. • The Rehabilitation Management Plan (RMP) has been prepared and is available on the Alkane website. The Rehabilitation Outcome Documents, subcomponents of the RMP which consist of the proposed Rehabilitation Completion Criteria and proposed Final Landform and Rehabilitation Plan, have been prepared, and submitted to the Resources Regulator for approval. • All external reporting against the environmental licenses is recorded and reported in the Annual Environmental Report available on the Alkane Resources Ltd website.
Infrastructure	• Infrastructure has been constructed for underground mining and processing. Works on site include access road, a water pipeline, a 66

	KV power line, site drainage, topsoil stockpiling, waste dump construction, Residue Storage Dams, Process Water Dams, associated offices, workshops, fuel, and laydown areas. Sufficient site infrastructure has been constructed to process ore at 1.1Mtpa. • The underground specific infrastructure in place includes ○ Underground primary ventilation fans ○ Secondary fans ○ Portals ○ Pump station ○ Mobile equipment ○ Compressors ○ HV to portals ○ Substations ○ Rescue equipment • Labour is sourced from Tomingley, Narromine, Dubbo, and Parkes region and as such the operation requires no accommodation or messing facilities. • Central NSW has many active mining operations within a short distance of TGO and as such the ability to procure labour and infrastructure services for the operation does not pose any major challenges.
Costs	• All costs used in the estimation of Ore Reserves are based on the Ore Reserve plan. This plan excludes the Inferred Mineral Resources in the Life-of-Mine plan. • Mining capital estimates have been made using, wherever possible, budget pricing obtained from reputable suppliers. The few instances where costs could not be obtained from these sources, costs were obtained by benchmarking of similar sized Australian mines. • The operating cost estimates have been derived from the past years of operating costs. • No deleterious elements are modelled in the Mineral Resources Models nor has there been any concern with this during the period TGO has been producing gold dorè. • Gold price is expressed in Australian dollars and no exchange rate is required. A gold price of AU$2,350/oz has been used in all calculations. • Transport charges for dorè to the Perth Mint are included in the refining charges and based on historical charges incurred by TGO. • Site treatment charges are well known due to the current processing of fresh rock ore material from underground. Refining charges have been assumed to be AU$1.50/oz in accordance with historical charges incurred by TGO by the Perth Mint.

	• A 4% New South Wales state royalty of revenue less processing and selling costs has been allowed for in the financial evaluation.
Revenue factors	• A gold price of AU$2,350/oz has been used in all revenue calculations for the Ore Reserve.
Market assessment	• All gold doré produced at the TGO processing plant is transported to the Perth Mint for refining. • The gold market is driven by several factors and fluctuates dependant on physical supply and demand, political tensions, and global instability. In times of uncertainty gold is seen to be a stable and safe "currency" and this has maintained its value for a significant period. • TGO currently sells gold at spot price and via forward sale contracts. 112,500 ounces at an average gold price of $2,820 per ounce is currently under sale contracts between September 2023 to December 2026. • The Underground mine would contribute only a small portion of the overall volume of output and is unlikely to have any impact on the market.
Economic	• The underground operation at TGO is an operating asset. • The financial analysis used the costs as well as the revenue from gold sales, together with the mine schedule to calculate a net cashflow per month for the duration of the project. This cashflow is then discounted to derive at the projects Net Present value (NPV). This NPV excludes depreciation, amortisation, and taxes. • No inflation of costs has been undertaken as there has been no forward speculation on gold price. It is the net cashflow that drives NPV and this is assumed to remain consistent (i.e. gold price and inflation move in the same direction). • Life-of-Mine plans are updated on a quarterly basis. These plans reflect current and projected performances for the Ore Reserve. • Sensitivities have been undertaken for both the entire mining inventory and the reserve version of the financial model.
Social	• Alkane Resources Ltd's social licence to operate is underpinned by the excellent relationship that the Company has built, over many years, with the local community of Tomingley. • TGO has a set up a community consultation committee that meets quarterly to discuss the activities on the mine, interaction with the local community and any concerns from local residents, the committee includes:

	◦ Independent Chairperson, ◦ TGO Environment and Community Manager, ◦ TGO Operations Manager, ◦ Narromine Shire Council Representative, ◦ 3 x Community Representatives, ◦ An Aboriginal Community Representative.
Other	• A company risk register is maintained to address and mitigate against all foreseeable risks that could impact the Ore Reserve. • Contracts are in place for all critical goods and services required to operate the mine. • The TGO underground operations are an operating asset in full production with all required government and statutory permits and approvals are in place.
Classification	• The Ore Reserve includes only Proved and Probable classifications. • The Ore Reserve is in line with expectations given the low capital cost associated with the project and due to the locality. The Competent Person is confident that it is an accurate estimation of the current TGO reserve. • The economically minable component of the Measured Mineral Resource has been classified as a Proved Ore Reserve. • The economically minable component of the Indicated Mineral Resource has been classified as a Probable Ore Reserve.
Audits or reviews	• The Ore Reserve has undergone internal reviews to ensure quality and consistency. No external reviews have been undertaken.
Discussion of relative accuracy/ confidence	• The Ore Reserve estimate has been prepared in accordance with the guidelines of the JORC Code (2012). The relative confidence of the estimates contained fall with the criteria of Proved and Probable Ore Reserves. • The Ore Reserve has been estimated in line with the Alkane Resources Ltd Ore Reserve process. • The main factors which could affect the confidence of the assessment include: ◦ **Stope stability**, this has been assessed by a reputable geotechnical consultancy and remains relevant. ◦ **Modifying factors**, these are in line with industry accepted norms ◦ **Costs**, cost have been sourced from the past years of capital and operating costs.

	○ **Revenue**, revenue assumptions used are in line with TGO expectations and gold price used below current spot prices.

APPENDIX 4

McLeans Mineral Resource Estimate

Over the past four years Alkane has conducted an extensive regional exploration program which led to the definition of the Roswell and San Antonio Deposits and the discovery and definition of a Resource at the McLeans prospect.

Geology

The Tomingley gold deposits are interpreted as orogenic gold systems positioned within a major structural zone. This style of deposit is well documented globally with the more significant examples in Australia being the Archean greenstone belts of the Yilgarn Craton in WA and the Paleozoic slate belts in Victoria.

The McLeans deposit is hosted in the Mingelo Volcanics, a strongly deformed and hydrothermally altered belt of Ordovician volcanics that are predominantly andesitic volcaniclastic breccias, lesser sandstone/siltstone units, lavas, shallow intrusives and black mudstones. The Mingelo Volcanics are overlain by the younger Cotton Formation siltstones.

The drilling has defined mineralisation at McLeans that is primarily hosted by one 'brittle' andesite with similar texture and geochemistry as the andesite that is host to the majority of mineralisation at the Roswell deposit (904,000oz gold). This andesite is host to structural zones generated by a competency contrast between the 'brittle' volcanics and surrounding 'ductile' volcaniclastic sediments.

The McLeans host andesite starts approximately 130m below the surface, extends approximately 250m in strike and remains open at depth. The andesite averages a thickness of 60m but thins to 25m along its upper and northern margins forming a 'keel'.

Mineralisation is characterised as similar to the Tomingley gold mineralisation, as quartz-carbonate-pyrite-arsenopyrite veins hosted in a phyllic-altered volcanic unit. The mineralisation at McLeans is interpreted as three subvertical en échelon sheeted lodes. With high-grade ore shoots focused along the 'keel' that remains open at depth along the northern edge of the andesite.

The mineralisation at the McLeans Deposit is displaced by post-mineral dolerite dykes that were modelled but are volumetrically very minor, generally less than 1 m true thickness.

Weathering of the volcaniclastic bedrock overlying the andesite has developed a saprolitic clay profile extending approximately 20 metres from the base of alluvium to fresh rock. The weathered bedrock lies beneath a Cainozoic alluvium overburden of 5 metres thick.

Mineral Resource

The Mineral Resource Estimation was calculated on the McLeans deposit using 14 RC and diamond drill holes with a nominal 80m drill hole spacing for a total of 4,808 metres. Cut-off grades were determined from the current cut-offs utilised by the Tomingley Gold Operations of 1.3g/t Au for underground.

Table 1 Mineral Resource Estimate – September 2023

Project	Resource Category	Cut-Off	Tonnes (Mt)	Gold Grade g/t	Gold Metal (Koz)
McLeans (UG)	Inferred	1.3g/t Au	0.87	2.51	70
	Total	**1.3g/t Au**	**0.87**	**2.51**	**70**

The Mineral Resource will be subject to further infill and extensional drilling from positions established from the exploration drive, with a view to improve the confidence in the estimation and define the continuity of the mineralisation down dip along the north keel structure.

Exploration Upside at McLeans

The Mineral Resource remains open at depth and the distribution of grade and the modelled shape of the host andesite indicates the bulk of the gold is contained in a 'keel' where the andesite host thins at the top and down its northern margin. The high-grade mineralisation in the keel remains open at depth along the northern edge and there is potential for improved grade elsewhere in the defined lodes, particularly along the contact of the andesite.

MCLEANS MINERAL RESOURCE – Supporting information

The Mineral Resource Statement for the Roswell Mineral Resource Estimate (MRE) is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

In the opinion of Alkane, the resource estimation reported is a reasonable representation of the global gold mineral resource within the Roswell deposit, based on reverse circulation and diamond drilling sampling data available as of August 2023, and is detailed below:

Drilling Techniques

The McLeans deposit has been evaluated using all of Alkane's reverse circulation (RC) and diamond drilling (DD) holes within the prospect area. No previous companies' exploration drilling in the region (shallow air-core and RAB holes) was used in the assessment.

Drilling at the Roswell deposit has been completed since 2004 for a total of 14 RC and diamond core holes for 4,808 metres. Drilling statistics are summarised in Table 2.

McLeans Drilling Statistics (air-core drill holes excluded)				
Hole Type	**Reverse Circulation (diamond pre-collars)**	**Reverse Circulation**	**HQ/NQ3 Diamond**	**Total**
No. Holes	2	7	7	**14** (excl. pre-collars)
Metres	744.7	1,512	2,551.1	**4,807.8**

Table 2 Summary Drilling Statistics

Initial shallow reconnaissance drilling to fresh rock is completed using 90mm (3.5") air core. Gold and arsenic anomalism was followed up with deeper drilling completed by RC (usually 144mm or 5¾") and RC pre-collared HQ3 diamond core drilling. Drilling is broadly spaced along east-west sections, except for four HQ diamond drilled holes that were fanned from an underground drill cuddy/stockpile. Air-core drilling was not used in the resource estimation.

Estimation Methodology

Grade estimation was completed using Inverse Distance Squared (ID2) with dynamic anisotropy to optimise search ellipse orientation within the lodes. All wireframing and estimation was completed with Datamine Studio RM software.

Sample data was composited into one metre downhole lengths using a best fit methodology. A block size of 5mX x 5mY x 5mZ and sub-blocking down to 2.5mX x 2.5mY x 2.5mZ was used.

A top cut analysis was carried out by a visual inspection of the data using histograms, percentile analysis and sensitivity analysis for individual domains to identify population outliers. The sensitivity analysis involved analysing varying cap values, to estimate the contribution of each sample to the overall metal content. Capping was deemed necessary for two of the three domains.

The base of oxide is only around 20 metres vertically below surface in the vicinity of the McLeans mineralisation. The shape and depth of the majority of the McLeans mineralisation, and proximity to existing underground infrastructure, indicates that it most likely would be mined from underground. For the purposes of discussing volumes of ore with a reasonable prospect of eventual economic extraction, any fresh mineralisation within 20 metres of the base of oxide is excluded from any resources reported here. All domain boundaries are hard boundaries where only composite samples within that domain were used to estimate blocks coded as within that domain.

Validation of the modelling parameters and processes of estimation included visual inspections in section, plan and in 3D.

Classification Criteria

Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, as well as metal distribution. There is no material classified as Indicated or Measured.

Cut-Off Grade

The Mineral Resource cut-off grade for reporting of gold resources for the McLeans deposit selected as 1.3 g/t for underground mining. This was based upon economic parameters utilised at Tomingley Gold Operations where deposits of the same style, commodity, comparable size and mining methodology are currently being extracted.

Mining

Underground could be potentially mined via medium- to small-scale mechanised underground mining methods, similar to that currently being applied at Tomingley Gold Operations.

No dilution or cost factors were applied to the estimate.

Metallurgy

The metallurgy of the Tomingley deposits is well studied. Tomingley Gold Operations has been processing ore since 2014 from its four deposits and during this time no significant metallurgical issues have arisen, with recoveries averaging between 85% - 94%. No metallurgical work has been conducted on McLeans however work on Roswell ore 500 metres to the southwest, suggests it has similar metallurgical qualities as per the Tomingley deposits. Further metallurgical test work is ongoing.

No metallurgical recovery factors were applied to the Mineral Resources or Resource Tabulations.

The following tables are provided to ensure compliance with the JORC Code (2012) edition requirements for the reporting of exploration results.

JORC Code, 2012 Edition – Table 1 report – McLeans September 2023

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	The McLeans deposit has been evaluated using reverse circulation and diamond drilling techniques. Reverse Circulation (RC) samples are collected at one metre intervals via a cyclone and riffle or cone splitter. Intervals outside of visual ore zones are composited to 3 metres. Diamond Drilling (DD) sample intervals are defined by geologist during logging to honour geological boundaries.
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	RC drilling completed to industry standards. Core is laid out in suitably labelled core trays. A core marker (core block) is placed at the end of each drilled run (nominally 3 or 6m) and labelled with the hole number, down hole depth, length of drill run. Core is aligned and measured by tape, comparing back to this down hole depth consistent with industry standards.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	RC Drilling - approximately 10% (3kg) of total sample is delivered via cone or riffle splitter into a calico bag with the remaining sample delivered into a large plastic bag and retained for future use if required. DD Drilling – sample intervals defined by geologist during logging to honour geological boundaries. All samples sent to laboratory are crushed and or pulverised to produce a ~100g pulp for assay process. All samples are fire assayed using 50g charge. Visible gold is occasionally observed in core.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	The resource is based on 7 RC drill holes totalling 2,257 metres (including diamond pre-collars) and 7 diamond core (DD) drill holes totalling 2,551 metres of core. Conventional RC drilling using 100mm rods and 144mm face sampling hammer. Diamond drill holes were either drilled from surface (1 hole) or pre-collared from surface using RC drilling through to competent material averaging 250 metres depth and cased down to triple tube HQ3 (61mm diameter) core tails or drilled HQ from underground (4 holes). HQ/HQ3 core is oriented using the "Reflex" core orientation tool.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	RC - sample recovery is visually estimated and generally very good (>90%) aided by the use of oversized shrouds through oxide material. Samples are even sized. Samples are occasionally damp or wet in RC holes drilled below 300 metres. Sample quality is

Criteria	JORC Code explanation	Commentary
		assessed by the sampler by visual approximation of sample recovery and if the sample is dry, damp or wet. Riffle and cone splitters were used to ensure a representative sample was achieved on all 1 metre samples. DD - core loss is identified by drillers and calculated by geologists when logging. Generally ≥99% was recovered.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	RC drilling completed using oversized shrouds to maintain sample return in oxide zone and all samples are split using riffle or cone splitters. Use of RC rigs with high air capacity assists in keeping samples dry. Triple tube coring is used at all times to maximise core recovery.
	• *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.*	There is no known relationship between sample recovery and grade.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	RC - each one metre interval is geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). DD - all core is laid out in core trays and geologically logged for characteristics such as lithology, weathering, alteration (type, character and intensity), veining (type, character and intensity) and mineralisation (type, character and volume percentage). A detailed geotechnical log is also undertaken collecting parameters such as core recovery, RQD, fracture count, and fracture type and orientation.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	All logging is qualitative with visual estimates of the various characteristics. RC - A representative sample of each one metre interval is retained in chip trays for future reference. DD - Core is photographed and all unsampled core is retained for reference purposes.
	• *The total length and percentage of the relevant intersections logged.*	All DD core and RC chip samples have been geologically and geotechnically logged by qualified geologists.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	DD - zones of visual mineralisation and/or alteration are marked up by the geologist and cut in half using a Corewise automatic core cutting saw. The right half is sampled to sampling intervals that are generally based on geology but do not exceed 1.3 metres in length. The left half is archived. All mineralised zones are sampled, plus >5m of visibly barren wall rock. Laboratory Preparation – drill core is oven dried prior to crushing to <6mm using a jaw crusher, split to 3kg if required then pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples are discarded. A pulp packet (±100g) is stored for future reference.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	RC - for each one metre interval with visual mineralisation and/or alteration the calico sample bag is numbered and submitted to the laboratory for analysis. Intervals without visual mineralisation and/or alteration are spear sampled and composited over three metres. Damp or wet samples are recorded by the sampler. For composited intervals returning grades >0.2g/t Au the calico bags are retrieved for assay.

Criteria	JORC Code explanation	Commentary
		Laboratory Preparation – the entire RC sample (3kg) is dried and pulverised in an LM5 (or equivalent) to ≥85% passing 75µm. Bulk rejects for all samples are discarded. A pulp packet (±100g) is stored for future reference.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	ALK sampling techniques are of industry standard and considered adequate.
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	RC – field duplicate samples collected at every stage of sampling to control procedures DD – external laboratory duplicates used.
	• *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.*	RC - Duplicate samples are riffle split from the riffle/conical split calico from the drill rig. Duplicates show generally good repeatability, indicating a negligible "nugget" effect.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are assumed to be within industry standard and considered appropriate.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	Gold is determined using a 50g charge fused at approximately 1100°C with alkaline fluxes, including lead oxide. The resultant prill is dissolved in aqua regia and gold determined by flame AAS. For other geochemical elements samples are digested in either aqua regia or a multi-acid digest with each element concentration determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. These additional elements are generally only used for geological interpretation purposes, are not of economic significance and are not routinely reported.
	• *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.*	Not applicable to this report or deposit.
	• *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.*	Commercially prepared Certified Reference Materials (CRM) are inserted at 1 in 40 samples. CRM's are not identifiable to the laboratory. Field duplicate samples are inserted at 1 in 40 samples (alternate to CRM's). Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data is reported for each sample submission. Failed standards result in re-assaying of portions of the affected sample batches.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative company personnel.*	Drill data is compiled and collated and reviewed by senior Alkane staff.
	• *The use of twinned holes.*	Twinned holes have not been used at McLeans.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	Early drill hole logging and sampling data is hard keyed into excel spreadsheet for transfer and storage in an access database with verification protocols in place. More recent data is verified in the field and uploaded using Geobank. All primary assay data is received from the laboratory as electronic data files which are imported into sampling database with verification procedures in place. QAQC analysis is undertaken for each laboratory report. Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup.

Criteria	JORC Code explanation	Commentary
		Data is also verified on import into mining related software.
	• *Discuss any adjustment to assay data.*	No assay data was adjusted. In the case of assay checks the original assay is utilised as there was no statistical variability.
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	Drill holes are laid out using hand-held GPS (accuracy ± 2m) then surveyed accurately with DGPS_RTK (± 0.1m) by surveyors or trained Alkane staff on completion. RC drill holes are surveyed using a single shot electronic camera at a nominal 30m down hole interval. DD are surveyed at nominal 30m down hole during drilling to maintain drilling direction and then at 6m intervals on retrieval of rod string using a multi shot electronic camera.
	• *Specification of the grid system used.*	MGA94 Zone 55 grid system was used.
	• *Quality and adequacy of topographic control.*	A site based digital terrain model was developed from accurate (± 0.1m) survey control by licenced surveyors.
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	Nominal drill hole spacing is 60-80m but can nearer to 100m in some deeper parts of the andesite. There is a robust strong geological model at McLeans and the data spacing is deemed to be sufficient in reporting a Mineral Resource.
	• *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.*	The drill hole spacing is appropriate to determine grade and geological continuity for an Inferred Mineral Resource Classification at McLeans.
	• *Whether sample compositing has been applied.*	RC – samples with no visible mineralisation or alteration are composited to 3m with 1m resamples assayed if the composite returned a gold value of >0.2g/t gold. One metre samples override 3m composites in the database. DD – core is sampled to geology with sample sizes ranging from 0.3m to 1.3m. Sample compositing to 1m was applied for the resource estimation.
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	Surface drilling has intersected the sub-vertical lodes at approximately 50% of true width and normal to their strike. Drilling from underground has intersected the lodes at approximately 90% of true widths.
	• *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.*	It is not thought that drilling direction will bias assay data at McLeans.
Sample security	• *The measures taken to ensure sample security.*	All samples are bagged in tied numbered calico bags, grouped into larger tied polyweave bags and transported 5 minutes away to Tomingley Gold Mine. The samples are placed in large sample cages with a sample submission sheet and couriered to ALS in Orange via freight truck. All sample submissions are documented via ALS tracking system and all assays are reported via email.

Criteria	JORC Code explanation	Commentary
		Sample pulps are returned to site and stored for an appropriate length of time (minimum 3 years). The Company has in place protocols to ensure data security.
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	The Company does not routinely have external consultants verify exploration sampling techniques. The Company has provided accurate resource estimations at Tomingley Gold Operations using these described sampling techniques.

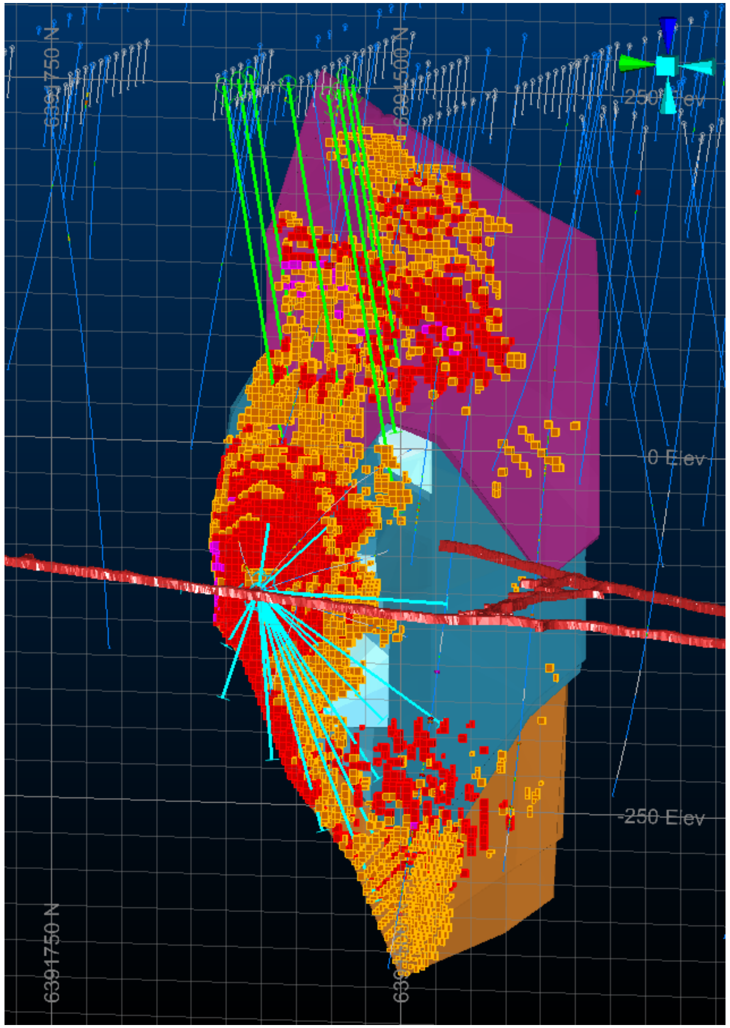
Section 2 Reporting of Exploration Results

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	ML1858 is 100% owned by Tomingley Gold Operations Pty Ltd is a subsidiary of Alkane Resources Ltd (ALK).
	• *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.*	ML1858 is due to expire 19 July 2044.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	All reported drilling was completed by ALK.
Geology	• *Deposit type, geological setting and style of mineralisation.*	Mineralisation at McLeans is similar to the well documented Tomingley Gold Deposits. McLeans, like Tomingley, is associated with quartz veining and alteration focused within andesitic volcanics and adjacent volcaniclastic sediments. The deposits appear to have formed as the result of a competency contrast between the volcanics and the surrounding volcaniclastic sediments, with the volcanics showing brittle fracture and the sediments ductile deformation and have many similarities to well documented orogenic - lode-style gold deposits.
Drill hole Information	• *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:* ○ *easting and northing of the drill hole collar* ○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* ○ *dip and azimuth of the hole* ○ *down hole length and interception depth* ○ *hole length.*	All material information has been previously reported in the following announcements: 8 June 2004, ASX Announcement; 16 September 2021, ASX Announcement; 17 November 2022, ASX Announcement; 10 July 2023, ASX Announcement.

Criteria	JORC Code explanation	Commentary
	• *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.*	All drill data used in the estimate have been reported.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.*	Exploration results previously reported – for uncut gold grades; Intercepts are defined (bounded) by 0.25g/t gold outer limit and may contain some internal waste; Only intervals grading ≥0.4 g/t gold are reported; Grades are calculated by length weighted average.
	• *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.*	Exploration results previously reported as length weighted average grades with internal high grade intercepts reported separately.
	• *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	No metal equivalents are reported.
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* ○ *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* ○ *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	Previously reported exploration results include an estimate of true width.
Diagrams	• *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.*	Cross sections and a plan showing geology with drill collars were included with previously reported exploration results detailing the unfolding significant discovery. Various plans and sections illustrating the modelled ore zones with all drill traces are included in the announcement.
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	Data relating to all exploration drill holes has been reported in previous documentation of exploration results.

Criteria	JORC Code explanation	Commentary
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	No other exploration data is considered material.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).*	Additional drilling is planned from surface and from the underground drive to infill the drilling to a nominal 40m x 40m spacing to convert the inferred resources to Indicated. This drilling will also test the continuation high grade mineralised structures forming along the keel of the andesite at depth.

Criteria	JORC Code explanation	Commentary
	• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	 The image above shows estimated blocks above the 1.3g/t cut-off, with high grade (red and magenta) coloured blocks forming along the upper and northern contact of the keel of the andesite. Proposed surface (green) and underground (pale blue) drilling to bring the higher-grade portion of McLeans to Indicated and highlighting the high grade potential down dip for further exploration.

Section 3 Estimation and Reporting of Mineral Resources

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

Criteria	JORC Code explanation	Commentary
Database integrity	• *Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.*	The earliest drilling involved logging data entered into Excel via drop down menus. All raw data was subsequently captured directly through Geobank Mobile and validated before uploading into the Geobank database.
	• *Data validation procedures used.*	There are validation checks to avoid duplications of data. The data are further validated for consistency when loaded into Geobank and desurveyed.
Site visits	• *Comment on any site visits undertaken by the Competent Person and the outcome of those visits.* *(If no site visits have been undertaken indicate why this is the case.)*	The Competent Person has visited drill sites, regularly visits the exploration office for geological discussions, drilling updates, viewing of the data and of the core. The deposit is completely covered by 5m of barren alluvium and there is nothing to see on the surface.
Geological interpretation	• *Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.*	The geological model is built on structural data from core and lithological logging. The lode strike orientations are similar to Tomingley which approximate the strike of the volcanic bodies. The domain wireframes were built by Alkane geologists.
	• *Nature of the data used and of any assumptions made.*	Structural measurements from oriented drill core was used to assist in the geological interpretation along with lithological, alteration and mineralisation logging of RC chips. Lithogeochemistry was used to help define the different lithologies.
	• *The effect, if any, of alternative interpretations on Mineral Resource estimation.*	The mineralisation is largely constrained by an andesite host 250m x 60m beginning 130m below surface and is open at depth. The andesite is subvertical and mimics the orientation of the three lodes, a similar model to the Roswell deposit 500m to the southwest. No alternative interpretation was developed.
	• *The use of geology in guiding and controlling Mineral Resource estimation.*	Geological (lithological) logging together with lithogeochemistry was used to develop a geological model. Alteration and mineralisation estimates along with grade guided the interpretation of the ore envelope wireframes. The majority of mineralisation is hosted by a quartz veined and altered andesite, however there is evidence that along the eastern margin that mineralisation also 'leaks' above the andesite and is hosted within the volcaniclastics as a lower grading structure. Dolerite dykes post-date mineralisation, however when modelled were volumetrically insignificant being less than 1m in thickness. Reporting of the resource begins 20m below the base of oxidation as to what could realistically be mined by underground methods.
	• *The factors affecting continuity both of grade and geology.*	Mineralisation is directly associated with alteration and veining. High grading mineralisation is associated with the upper and northern contact of the andesite where the host thins to approximately half of its thickness forming a keel like structure.

Criteria	JORC Code explanation	Commentary
Dimensions	• *The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.*	Strike length ~ 250m Width ~ 60m Depth ~ 40m from below surface to ~ 550m below surface
Estimation and modelling techniques	• *The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.*	The resource model has used all the exploration drill data. 3 mineralisation wireframes (domains) and 1 volcanic host wireframe were interpreted and used as constraints for the resource modelling. Three surfaces were also used to separate material types - topography, alluvium and base of oxidation surfaces. The drillhole data was flagged by the domain wireframes in priority order, to prevent double use of the data in any intersecting zones. The mineralised zones of greater than 0.20g/t gold were wireframed and the samples within their respective zones were flagged, in order to prevent any overestimation that could be caused by use of assays outside these boundaries. Top-cuts were selected for each domain based on a visual inspection of the data using histograms, log-transformed probability plots, percentile analysis and sensitivity analysis for individual domains. The sensitivity analysis involved analysing varying cap values, to estimate the contribution of each sample to the overall metal content. Capping was deemed necessary for tow out of three domains. A optimum block size was selected to be 5mX x 5mY x 5mZ and a sub-blocking size of 2.5mX x 2.5mY x 2.5mZ. Grade estimation was completed using Inverse Distance Squared (ID2) using a search volume of 100 m x 100 m x 30 m with the orientation dictated by dynamic anisotropy. These search volumes were generated by multiplying the search radii of the primary volume by 2 and 3, respectively. All wireframing and estimation was completed with Datamine Studio RM and various search parameters were tested for comparison.
	• *The availability of check estimates, previous estimates and/or mine production records and whether the Mineral Resource estimate takes appropriate account of such data.*	There is no previous production data to provide any validation.
	• *The assumptions made regarding recovery of by-products.*	No assumptions made - estimates were made only for gold.
	• *Estimation of deleterious elements or other non-grade variables of economic significance (eg sulphur for acid mine drainage characterisation).*	No deleterious elements identified for estimation.
	• *In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.*	An optimum block size to be 5mX x 5mY x 5mZ and a sub-blocking size of 2.5mX x 2.5mY x 2.5mZ was determined as appropriate for a nominal 60-80m drill spacing and narrow vein style of mineralisation. The average drill hole spacing was 60-80m. A search volume of 100 m x 100 m x 30 m with the orientation dictated by dynamic anisotropy.
	• *Any assumptions behind modelling of selective mining units.*	No assumptions made
	• *Any assumptions about correlation between variables.*	No assumptions made

Criteria	JORC Code explanation	Commentary
	• *Description of how the geological interpretation was used to control the resource estimates.*	Only data form the same domain were used to make estimates.
	• *Discussion of basis for using or not using grade cutting or capping.*	Top-cuts were selected for each domain based on a visual inspection of the data using histograms, log-transformed probability plots, percentile analysis and sensitivity analysis for individual domains. The sensitivity analysis involved analysing varying cap values, to estimate the contribution of each sample to the overall metal content. Capping was deemed necessary for two out of three domains of 15g/t gold for each.
	• *The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.*	Validation of the modelling parameters and processes of estimation included visual inspections in section, plan and in 3D; the model and wireframes were also examined by the senior staff at TGO.
Moisture	• *Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.*	The tonnages were estimated on a dry tonnage basis.
Cut-off parameters	• *The basis of the adopted cut-off grade(s) or quality parameters applied.*	The cut-off grade of 1.3 g/t gold is the cut-off used for the underground operations at Tomingley. These cut-offs take into account likely mining costs and metallurgical recovery for similar material.
Mining factors or assumptions	• *Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the 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.*	It is assumed as that the resource is only 300m from the underground development at Roswell and the andesite with the high grading keel is 120m below surface that it will be mined underground. 1.3g/t gold cut-off was used and assumes this material could be mined economically using the same cut-off as used at Tomingley underground operations.
Metallurgical factors or assumptions	• *The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.*	The metallurgy of the nearby other Tomingley deposits is well studied. A metallurgical study suggests of Roswell only 500m southwest of McLeans has similar metallurgical characteristics.
Environmental factors or assumptions	• *Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.*	The Tomingley Gold Operations have been operating since 2013 with an approved EIS plan and environmental licences. The Tomingley Gold Extension Project had its mining lease 1858 recently approved and includes the McLeans Deposit.
Bulk density	• *Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.*	The bulk of mineralisation at McLeans sits within the main andesite host, the subset of specific gravity samples collected within the andesite (n = 86/172) were used to provide the average density used in the resource estimate. Measurements collected outside the

Criteria	JORC Code explanation	Commentary
		andesite have a nearly identical average and range of specific gravity values. McLeans MRE used an average density of 2.77 t/m^3.
	• *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.*	SG measurements completed on all material types – see above.
	• *Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.*	No assumptions made – SG determined and values applied to each domain.
Classification	• *The basis for the classification of the Mineral Resources into varying confidence categories.*	*Resource Model* Mineral Resources were classified as Inferred to appropriately represent confidence and risk with respect to data quality, drill hole spacing, geological and grade continuity, mineralisation volumes, as well as metal distribution. There is no material classified as Indicated or Measured. Inferred Mineral Resources were defined where a good level of geological confidence in geometry, continuity, and grade, was demonstrated, and were identified as areas where: - Drill spacing was averaging a nominal 80m, or where drilling was within 80m of the block estimate; - Domains were restricted to the strike of the modelled andesite; and - Number of samples used to estimate individual domains. Remaining estimated blocks were unclassified if after three multiples of the search radii had not selected 4 samples from a minimum of two drill holes.
	• *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).*	The use of RC drilling limits the amount of geological information that can be logged, and boundaries of mineralisation zones cannot be precisely located.
	• *Whether the result appropriately reflects the Competent Person's view of the deposit.*	The classification reflects the Competent Persons view of the deposit and its supporting data.
Audits or reviews	• *The results of any audits or reviews of Mineral Resource estimates.*	The exploration MRE was reviewed by senior TGO staff and raised no issues.
Discussion of relative accuracy/ confidence	• *Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.*	No statistical or geostatistical method (non-linear or simulation) was used to quantify the relative accuracy of the estimate within confidence limits. Accuracy of the estimate is dependent on: accuracy of the interpretation and geological domaining; accuracy of the drill hole data (location and values); and orientation of and parameters of the search ellipses used.
	• *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*	The resources are Inferred, being based on drill hole spacing and geological continuity. To ensure the resources have 'reasonable prospects of eventual economic extraction' the resources have used TGO economic gold cutoff grades of +1.3g/t Au for underground.

Criteria	JORC Code explanation	Commentary
	used.	
	• *These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.*	There has not been any production from McLeans.