ASX and MEDIA RELEASE

21 January 2025



Gold Intercepts Below San Antonio Resource at Tomingley

Core drilling results from targets below the open cut resource at the San Antonio deposit suggest a steep plunge to potential underground mineable mineralisation. Significant gold intercepts include:

SAR003D	3 metres grading 1.79g/t Au from 273 metres;
incl	1 metre grading 2.43g/t Au from 274 metres;
and	2 metres grading 5.03g/t Au from 416 metres;
and	1 metre grading 2.98g/t Au from 464 metres.
SAR004D	1 metre grading 2.78g/t Au from 334 metres;
and	6 metres grading 1.37g/t Au from 711 metres;
and incl	6 metres grading 1.37g/t Au from 711 metres; 1 metre grading 2.44g/t Au from 711 metres;
	G G G.

- The San Antonio gold resource has over 1km of continuous strike length and remains largely undrilled at depth beneath the planned open cuts. Additional drilling is planned to test down-dip of several high-grade domains in fertile host rocks such as andesites, monzodiorites and dacites.
- Regional exploration around Tomingley has restarted for 2025. Exploration comprises of a first-pass 17,000m program of aircore drilling across recently identified buried volcanic rocks and structures interpreted from drone magnetic surveys. RC and diamond core drilling is planned to test El Paso, Tomingley Two and new targets identified by Alkane's previous work. This is expected to total ~3,200m of drilling.

Alkane Resources Limited (ASX: ALK) ('Alkane' or 'the Company') is pleased to announce the latest exploration results for drilling in the region around the Company's Tomingley Gold Operations (Tomingley) in Central New South Wales.

Alkane Managing Director, Nic Earner, said: "The broader Tomingley region has many occurrences of gold mineralisation. As well as potential mine extensions of our existing undergrounds we are doing early-stage work on identifying new mining areas."

CONTACT : NIC EARNER, MANAGING DIRECTOR, ALKANE RESOURCES LTD, TEL +61 8 9227 5677

INVESTORS : NATALIE CHAPMAN, CORPORATE COMMUNICATIONS MANAGER, TEL +61 418 642 556

MEDIA : PAUL RYAN, CITADEL-MAGNUS, TEL +61 409 296 511



Tomingley Gold Project (TGP)

Alkane Resources Ltd 100%

The Tomingley Gold Project (TGP) covers approximately 440 km² stretching 60 km north-south along the Newell Highway from Tomingley in the north, through Peak Hill and almost to Parkes in the south. The TGP contains Alkane's currently operating Tomingley Gold Operations (Tomingley), an open pit and underground operation with a 1Mtpa processing facility with a mine life that extends beyond 2030.

Over several years, Alkane conducted an extensive regional exploration program that led to the definition of Indicated and Inferred Mineral Resources of the Roswell and San Antonio deposits (ASX Announcement 2 May 2022 and ASX Announcement 16 February 2021), separate from the established resources and reserves at Tomingley. Alkane completed a 2.7 km long drive from the Wyoming One open cut to Roswell and commenced underground mining of stope ore in April 2024. Roswell and San Antonio now form part of the Tomingley operations, with the processing of ore mined from underground at Roswell continuing.

The exploration focus at Tomingley is to define additional underground resources and reserves for the operation. The San Antonio mineralisation is largely hosted within an andesite volcanic unit, which is similar to that hosting the orebodies at Roswell and Tomingley. An initial open pit operation was designed based on a Probable Ore Reserve of 4.1 million tonnes grading 1.6g/t Au (214 koz) within the Indicated and Inferred Resources of 7.32 million tonnes grading 1.73g/t Au (406 koz) (ASX Announcement 9 Sept 2022). Further underground potential is yet to be assessed.

Central to and below the planned open cuts, a separate monzodiorite unit is located 50m west of the main andesite. The western monzodiorite hosts Inferred mineralisation domains defined by only four core drill holes. The lateral and deeper extensions to the western monzodiorite mineralisation domains were tested by five diamond core drill holes for a total of 2,968 metres. Significant intercepts using a 1.3g/t Au cutoff include:

SAR003D	3 metres grading 1.79g/t Au from 273 metres;
incl	1 metre grading 2.43g/t Au from 274 metres;
and	2 metres grading 5.03g/t Au from 416 metres;
and	1 metre grading 2.98g/t Au from 464 metres.
SAR004D	1 metre grading 2.78g/t Au from 334 metres;
SAR004D and	1 metre grading 2.78g/t Au from 334 metres; 6 metres grading 1.37g/t Au from 711 metres;
	5 5 G

Drill hole SAR004D targeted approximately 100m down-dip and south of the western monzodiorite Inferred mineralisation. The drill hole intersected approximately 6 metres of substantial quartz veining hosted in sericite-carbonate altered monzodiorite with arsenopyrite-pyrite mineralisation forming along the vein selvages. The significant quartz veining is estimated at 60% of the rock mass and likely forms a quartz shoot plunging steeply north within the monzodiorite host rock.





SAR004D (711m – 717m) – Quartz veined sericite-carbonate altered monzodiorite with arsenopyrite-pyrite selvage mineralisation. Interval graded 6m at 1.37g/t Au from 711m.

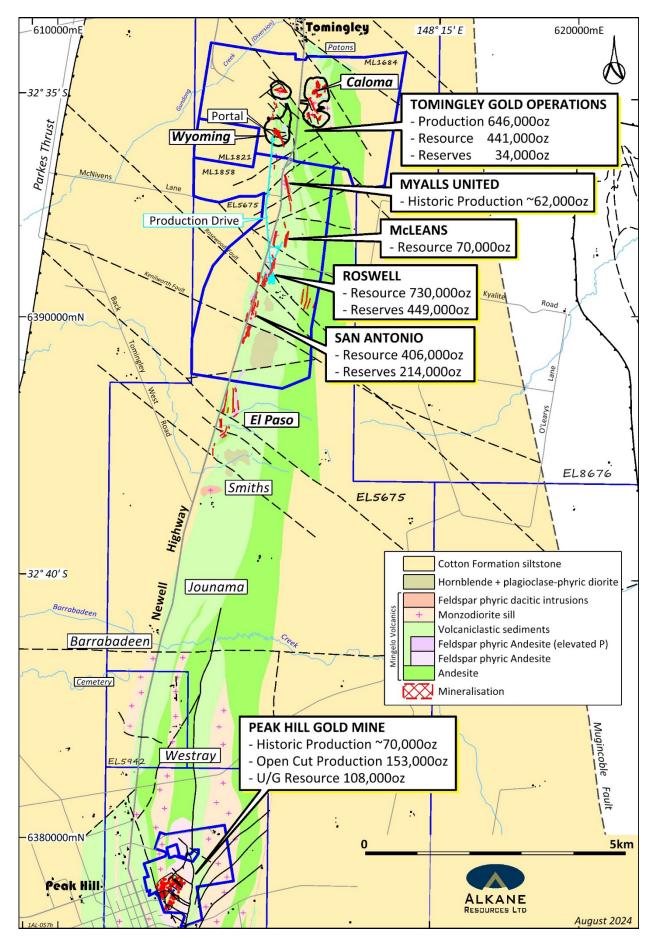
Drill hole SAR003D targeting the centre of the Inferred mineralisation domains hosted by the western monzodiorite. The drill hole intersected several narrow subvertical mineralised shear zones with significant gold intercepts of 2m grading 5.03g/t Au from 416m, and 1m grading 1.84g/t Au from 508m. The shear zones are 1-2m thick comprising of strongly shear foliated to partial mylonised, bleached silicasericite altered monzodiorite. It is interpreted this ductile deformation is occurring between two steeply north plunging quartz lodes/shoots (as observed in SAR004D) hosted within the monzodiorite.

Currently, there is minimal drill testing beneath the greater than 1km strike length of gold resource at San Antonio (see long section below) within the andesite host. A detailed shallow grade control drilling program has commenced to enable pre-mining ore outlines to be defined. This detailed 3D information should assist in the definition of high-grade structures that can be projected down, dip and plunge. Further surface drilling will be planned post that program to further evaluate the underground potential for the San Antonio deposit.

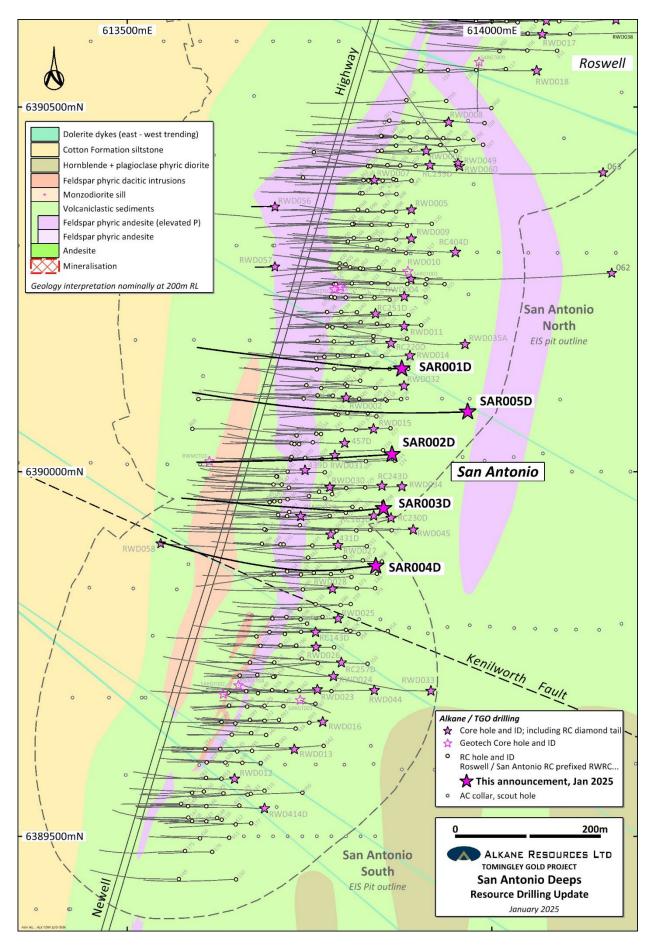
Regional exploration for the TGP restarted in December 2024. This initial program comprises of a high-definition drone magnetic survey, 17,000 metres of first pass aircore drilling focusing on the eastern margin of the belt of Mingelo Volcanics between El Paso and Peak Hill, and 3,200 metres of RC/DD drilling focusing on El Paso and Tomingley Two prospects. El Paso and Tomingley Two are located within 7 km of the Tomingley processing facility. Drilling results are expected to be available in Q2 2025.

The regional exploration program is in addition to extension drilling that routinely occurs from underground at Tomingley.

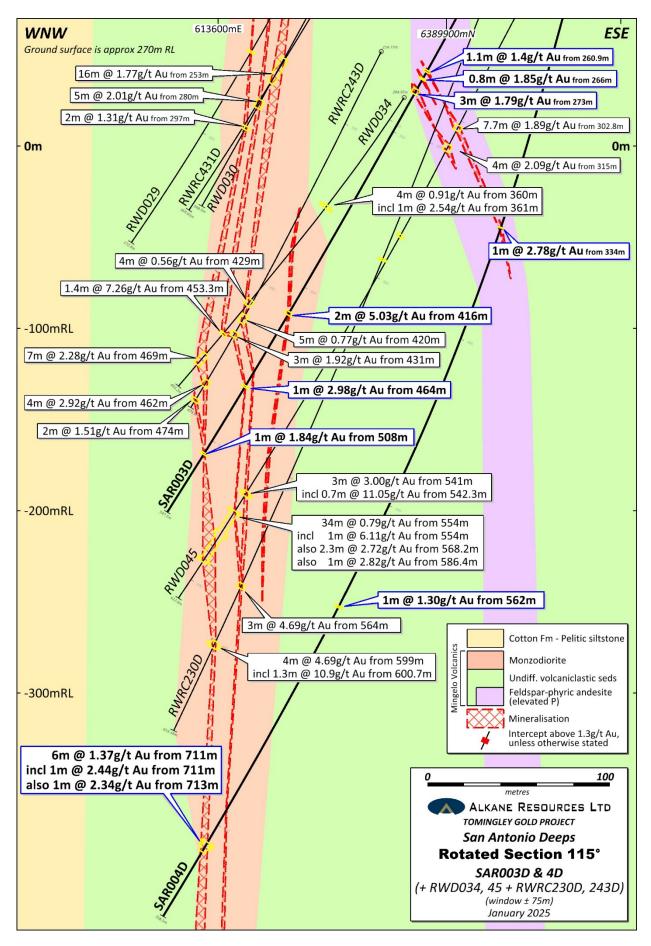




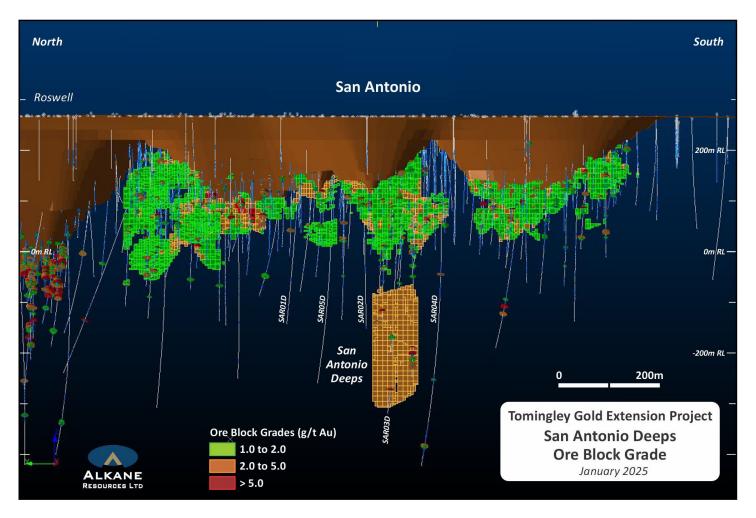




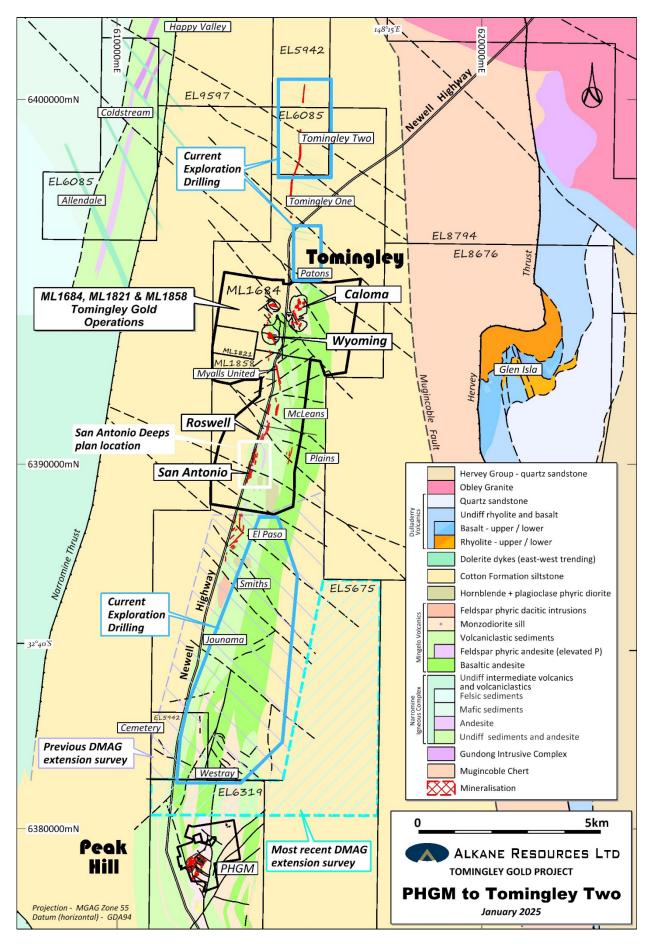














	TOMINGLEY GOLD OPERATIONS SIGNIFICANT DRILLING RESULTS – November 2022 (>1.3g/t Au)										
Hole ID	Easting (MGA)	Northing (MGA)	RL (m)	Dip	Azimuth (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	Au (g/t)	Prospect
SAR001D	613876	6390141	270	-60	282	509					
SAR002D	613863	6390024	270	-60	282	500.4	No significant results				
SAR003D	613851	6389950	270	-60	282	547.1	260.9	262	1.1	1.40	
and							266	266.8	0.8	1.85	
and							273	276	3	1.79	
incl							274	275	1	2.43	San Antonio
and							416	418	2	5.03	
and							464	465	1	2.98	
and							470	471	1	1.31	
and							508	509	1	1.84	
SAR004D	613841	6389871	270	-60	282	758.5	334	335	1	2.78	
and							562	563	1	1.30	
and							711	717	6	1.37	
incl							711	712	1	2.44	
also							713	714	1	2.34	
SAR005D	613967	6390082	270	-60	282	653.5		No signific	ant results		

True widths are approximately 50% of intercept width.

ASX announcements containing relevant information to historic drill holes:

17 January 2020	Roswell and San Antonio Resource Definition Drilling Update
9 March 2020	Roswell and San Antonio Resource Definition Drilling Update
20 April 2020	Initial San Antonio Inferred Resource
22 June 2020	Significant Thick High-Grade Intercepts Confirmed by Infill
16 July 2020	Additional Significant Results from Infill Roswell and San Antonio Resource Drilling
28 August 2020	High Grade Depth Extensions Identified at Roswell
16 December 2020	Resource Drilling Update for San Antonio
27 January 2020	Final Assays Received for Resource at San Antonio
16 February 2021	Updated San Antonio Resource Estimation



Competent Person

Unless otherwise advised above or in the Announcements referenced, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr David Meates, MAIG, (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 consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Previous Information

The information in this report that relates to exploration results 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

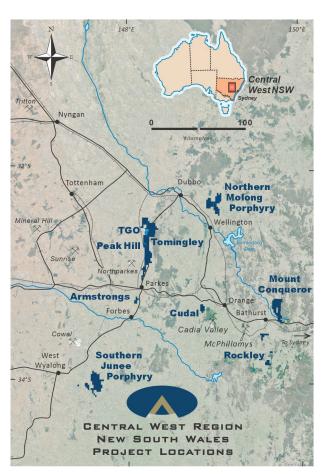
Alkane Resources intends to grow to become one of Australia's multi-mine gold and copper producers.

The Company's current gold production is from the Tomingley Gold Operations in Central West New South Wales, which has been operating since 2014 and has operating plans extending 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 has 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 exploration drilling ongoing and an economic development pathway shown in a scoping study, 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.





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 TOMINGLEY GOLD PROJECT – Regional Exploration January 2025

Section 1 Sampling Techniques and Data

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

Criteria	J	ORC Code explanation	C	ommentary
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. Include reference to measures taken to ensure sample representativity and the appropriate calibration of any measurement tools or systems used.	•	Ophir Drilling Pty Ltd undertook diamond core drilling (DD) DD sample intervals were defined by geologist during logging to honour geological boundaries, cut in half by diamond saw, with half core sent to ALS Laboratories Sampling and QAQC procedures are carried out using Alkane protocols as per industry best practice.
	•	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 with inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.	•	Core was laid out in suitably labelled core trays. A core marker (core block) was placed at the end of each drilled run (nominally 3m) 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. Half core is sampled with a Corewise automatic core saw. Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish.
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).	•	Triple tube diamond drilling with PQ3/HQ3 wireline bit producing 83mm diameter (PQ3) and 61.1mm diameter (HQ3) sized orientated core (using a Reflex orientation tool).
Drill sample recovery	•	Method of recording and assessing core and chip sample recoveries and results assessed.	•	DD - core loss was 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.	•	Sample quality is qualitatively logged. Triple tube coring is always used to maximise core recovery for diamond drilling.
	•	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.



Criteria	JORC Code explanation	Commentary
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. 	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)
		A detailed geotechnical log on the diamond core 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	Mostly logging was qualitative with visual estimates of the various characteristics. In addition, magnetic susceptibility data (quantitative) was collected to aid in logging.
		All drill holes were geologically logged into Geobank Mobile, followed by validation before importing into Alkane's central Geobank database.
		Qualified and experienced geologists logged all drill holes.
	The total length and percentage of the relevant intersections logged	All drill holes were logged in full.
Sub-sampling techniques and sample	If core, whether cut or sawn and whether quarter, half or all core taken.	Core sawn with half core samples submitted for analysis.
preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	No non-core sub sampling undertaken.
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	 Samples were delivered by Alkane personnel to ALS Minerals Laboratory, Orange NSW. Crushed with 70% <2mm (ALS code CRU-31), split by riffle splitter (ALS code SPL-21), and pulverised 1000grm to 85% <75um (ALS code PUL-32). Crushers and pulverisers are washed with QAQC tests undertaken (ALS codes CRU-QC, PUL-QC).
	 Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples 	Internal QAQC system in place to determine the accuracy and precision of assays.
	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	Non-biased core cutting using an orientation line marked on the core.
	Whether sample sizes are appropriate to the grain size of the sampled material.	Sample are of appropriate size.
Quality of assay data	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	ALS Minerals Ltd analysed all samples.



Criteria	JORC Code explanation	Commentary
and laboratory tests		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 with gold determined by flame AAS.
	 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. 	No geophysical tools were used to determine any element concentrations
	 Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and 	Commercially prepared Certified Reference Materials (CRM) are inserted at 1 in 40 samples. CRM's are not identifiable to the laboratory.
	precision have been established.	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 reviewed by senior staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary.
accayg	The use of twinned holes.	No twinned holes have been drilled.
	 Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. 	 All drill hole logging and sampling data is entered directly into Geobank Mobile in the field for validation, transfer and storage into Geobank database with verification protocols in place.
		 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.
		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. 	Drillholes are laid out and picked up on completion using DGPS surveyed accurately (± 0.1m) by trained surveyors.
	Specification of the grid system used.	• GDA94, MGA (Zone 55)



Criteria	J	ORC Code explanation	Co	ommentary
	٠	Quality and adequacy of topographic control.	•	DD and RC drillhole collars DGPS surveyed accurately (± 0.1m) by trained surveyors on completion. 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	•	At this exploration stage, data spacing is variable with the focus on identifying new deeper zones of mineralisation.
	•	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 mineralisation domain tested by this drilling is classified as Inferred based on its data distribution and hosted in the same monzodiorite domain. All the new drilling intersected the monzodiorite host and their spacing and distribution will be sufficient to further inform this Inferred resource mineralisation domain.
	•	Whether sample compositing has been applied	•	DD – core is sampled to geology with sample sizes ranging from 0.3m to 1.3m.
Orientation of data in relation to		Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	•	Drilling suggests a broadly subvertical to steep east dipping geometry of the mineralisation and hosting volcanic stratigraphy at San Antonio.
geological structure	•	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	•	Estimated true intervals ~50% of downhole lengths.
Sample security	٠	The measures taken to ensure sample security.	•	All samples are bagged into tied calico bags, before being grouped into polyweave bags and transported ~2hr to ALS Minerals Laboratory in Orange by courier. All sample submissions are documented via ALS tracking system with results reported via email.
			•	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.	•	No audits or reviews have been conducted at this stage



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	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.	All six licences (EL5675, EL5942, EL6085, EL8676, EL8794 and EL9597) in the Tomingley Gold Project are owned 100% by Alkane.
status	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.	The drilling is on Mining Lease 1858 held by Tomingley Gold Operations (a fully owned subsidiary of Alkane Resources Ltd) that expires on 19 July 2044.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Not applicable, new drilling in on a Mining Lease granted to Tomingley Gold Operations.
Geology	Deposit type, geological setting and style of mineralisation.	 Mineralisation at Tomingley is associated with quartz veining and alteration focused within sub-volcanic andesite sills and adjacent volcaniclastic sediments. The deposits appear to have formed as the result of a competency contrast between the 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.
		Geological nature of the Tomingley Deposits is well documented elsewhere.
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: a 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.	See body of announcement.
	 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 DD drill holes have been reported in this announcement.
	 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 reported for uncut gold grades, grades calculated by length weighted average



Criteria	JORC Code explanation	Commentary
Data aggregation methods	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.	 Reported intercepts (>1.3g/t Au) are calculated using a broad lower cut of 1.3g/t Au although grades lower than this may be present internally (internal dilution). No top cut has been used. Short intervals of high grades that have a material impact on overall intersection are reported as separate (included) intervals.
	 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').	estimated to be 50% of the down hole lengths.
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.	Plans showing geology with drill collars are included in the body of the announcement. An appropriate sectional view for any significant results.
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.	Comprehensive reporting has been undertaken with all drill holes listed in the included table.
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 material exploration data exists for reporting.
Further work	The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).	See body of announcement. It is recommended that further drilling is undertaken to better define the high grading shoots hosted in the western monzodiorite, as well as testing depth extensions to all mineralisation domains for the purpose of defining an underground resource at San Antonio.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive	See figures included in the announcement.