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ASX ANNOUNCEMENT

ALKANE RESOURCES

15 October 2026

Deep Drilling Intersects Epithermal Mineralisation 1km Below Proprietary Pit at Peak Hill

Perth, Western Australia - Alkane Resources Limited (ASX: ALK, TSX: ALK, OTCQX: ALKRY) ('Alkane') is pleased to announce the latest exploration results at its Peak Hill Gold Project (Peak Hill) in New South Wales.

Summary

- Alkane was awarded an NSW Critical Minerals exploration grant of $165,000 to explore for a copper-gold porphyry at Peak Hill.
- One diamond core drill hole (PHD084), was completed to 1,651 m, intersecting transitional phyllic alteration beneath the Great Eastern open cut suggesting the targeted porphyry environment may be deeper. A study has been commissioned to evaluate the proximity of possible porphyry intrusives to PHD084 before further testing this target.
- Deeper down hole and approximately 1 km vertically below the Proprietary open cut, PHD084 intersected the same advanced argillic alteration (pyrophyllite-silica) similar to that mapped at surface, indicating a strong vertical continuation of the previously mined epithermal mineralisation.
- Assays show elevated gold and copper within the sulphide mineralisation although at lower grades than seen within the drilling approximately 1km above within the core of the deposit. This lower tenor may be indicative of the beginning of a transitional zone to the porphyry setting or the drilling simply intercepted the system on the periphery.
- 6,600m of drilling is planned to commence in November to test the area between PHD084 and the Proprietary Inferred Resource. The aim of the drilling is to assess the vertical continuity of grade and to ascertain whether the PHD084 may have missed the high-grade core of the system.

Drilling result highlights

Intercepted mineralisation within epithermal to porphyry traditional environment:

- 0.42 g/t Au over 6.4m from 1,000.6 metres including;
  - 1.02 g/t Au over 2m.

Interpreted 1km depth extension to the Peak Hill epithermal system:

- 0.11g/t Au and 0.02% Cu over 153m including;
  - 0.46 g/t Au and 0.06% Cu over 4.8m.

Alkane Managing Director, Nic Earner, said:

"The NSW Critical Minerals Exploration grant supported Alkane to drill a very deep hole beneath Peak Hill, exploring for a copper-gold porphyry system. Whilst the hole did not resolve the target, it did highlight the potential for the shallow epithermal gold resource at Peak Hill to extend to a significant depth below the Proprietary pit. The drilling highlights the potential for mineralisation to continue at significant depth beneath Peak Hill and identifies a substantial area for further exploration. Follow-up drilling is set to commence in 2026 and aims to delineate scale of epithermal gold deposit whilst also providing further system information and vectoring towards a potential copper–gold porphyry system below."

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Peak Hill Gold Project

Alkane Resources Ltd 100%

The Peak Hill Gold Project (Peak Hill) is located on a group of Mining Leases about 60 km southwest of Dubbo in the Central West of NSW, and only 10 km south of Alkane's operating Tomingley Gold Operations (TGO) (Figure 2). Peak Hill was a fully operational open pit gold mine operated by Alkane that is currently under care and maintenance. There are four pits, the main Proprietary-Parkers Pit and three satellite pits, Bobby Burns, Crown and Great Eastern.

The oxidised cap of the Peak Hill system was mined by Alkane from 1998 to 2005. The refractory sulphide orebody beneath the pits has a JORC (2012) Inferred Resource of 1.02Mt grading 3.29g/t Au and 0.15% Cu[1]. Gold and copper metal prices have significantly increased since this resource was estimated, and the project has justified further examination.

In 2025, Alkane was awarded a NSW Critical Minerals and High-Tech Metals Exploration Program collaborative grant of $165,000 to drill a deep hole beneath the Peak Hill epithermal gold deposit to explore for a copper-gold porphyry that is likely causing the epithermal gold mineralisation at Peak Hill.

The Peak Hill deposit is interpreted as a high sulphidation epithermal gold system likely caused by a deeper magmatic source. This style of deposit is well documented globally, although usually in better preserved younger geological terrains than the Ordovician volcanic provinces of the Macquarie Arc in NSW.

The deposit is hosted by strongly deformed and hydrothermally altered Ordovician volcanic rocks of the Mingelo Volcanics that is also host to the Tomingley orogenic gold deposits. The Mingelo Volcanics are predominantly andesitic volcaniclastic breccias, lesser sandstone/siltstone units, black mudstones, and lavas with minor intrusives.

The hydrothermal alteration is evident over a 3 km long by 0.5 km wide north-south trending zone that appears to be focused on coarser grained permeable breccias and volcaniclastic rocks, with coherent andesite lavas significantly less altered. The core of the alteration envelope is an elliptical zone (500 m by 400 m) of advanced argillic alteration (extensive pyrophyllite and muscovite-illite alteration with residual silica-pyrite mineralised zones). High pyrite concentrations, with the copper sulphide assemblage dominated by enargite, tennantite and luzonite, are often focused within higher grade structures within the residual silica-pyrite zones.

A 2023 Honours study in collaboration with CODES (University of Tasmania) determined that the hydrothermal system at Peak Hill is beginning to transition to high temperature phyllic alteration in the previously deepest drill holes of approximately 400m deep[2]. Phyllic alteration typically sits above the potassic alteration that is usually associated with porphyry copper-gold deposits, suggesting Peak Hill occupies the roots of a deeply eroded epithermal system and a porphyry source could be present at a potentially economic depth (see Figure 1).

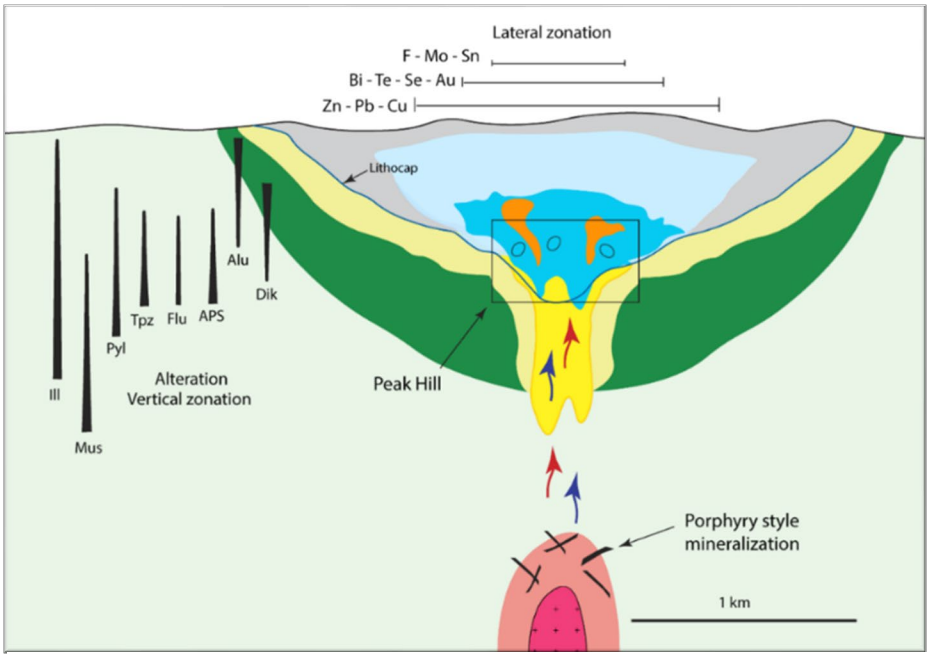

Figure 1. Schematic model of Peak Hill in the porphyry-epithermal environment.

[1] ASX Announcement 11 September 2026 "Tomingley Resources & Reserves Statement FY26"

[2] M. P. Young – "Geology, Alteration, Mineralisation and Geochemistry of the Peak Hill deposit NSW – Genetic and Exploration Implications'. (Honours Thesis, CODES, University of Tasmania).

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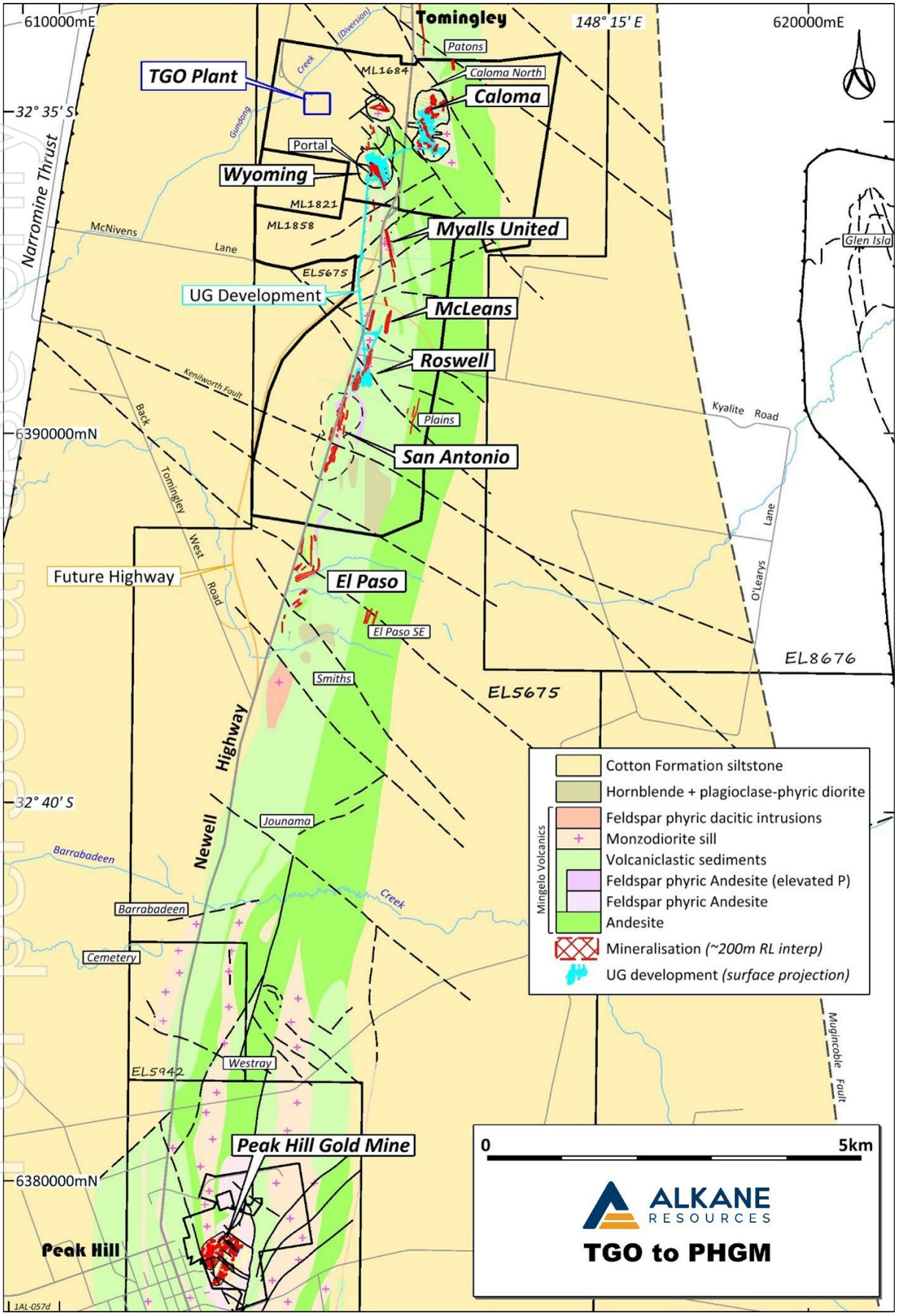

Figure 2. Basement geology from Peak Hill Gold Mine to Tomingley Gold Operations.

Drilling Results

Deep diamond drill hole PHD084 was completed to 1,651 m and terminated approximately 1 km vertically below the base of the Proprietary open cut and 800 m below the existing underground Inferred Resource. The hole was designed to test below up-flow zones (interpreted hydrothermal conduits from a connected porphyry system) in and around the Great Eastern and Parkers pits. These up-flow zones are highlighted by a domain of elevated high-temperature pathfinder elements, including fluorine, identified in the honours research project and follow-up rock chip sampling. This domain is also above an earlier drillhole (PHD083) that was identified to contain a transitional muscovite-pyrophyllite assemblage at its end.

The drilling achieved its primary objective by intersecting interpreted transitional phyllic alteration beneath the up-flow zones mapped between Great Eastern and Parkers pits. Unfortunately, the drilling was not deep enough to transect the phyllic alteration or lithocap to an underlying porphyry intrusion. Phyllic alteration often overlies and overprints a potassic core to a porphyry system but is generally not mineralised (as in PHD084). Other indicators that a magmatic source is proximal to the drill hole was evidenced by common anhydrite-quartz±chalcopyrite veins (Figure 3) and sericite-pyrite veinlets. These veins can be formed from magmatic fluids related to porphyry deposits. Another indicator was the occurrence of pebble dykes that commonly occur above magmatic intrusions (Figure 4).

Although not the primary target, the hole was extended to 1 km vertically below the main Proprietary open cut at Peak Hill. Surprisingly, the hole intersected the continuation of the advanced argillic (pyrophyllite-topaz-silica) alteration pipe that extends from Proprietary for over 1 km vertically (Figures 5 and 6). Significant low grade gold-copper was intercepted:

PHD084	**6.4 metres grading 0.42 g/t Au, 0.01 % Cu from 1,000.6 metres;**
incl	**2 metres grading 1.02 g/t Au, 0.01% Cu from 1,005 metres;**
and	**153 metres grading 0.11 g/t Au, 0.02 % Cu from 1,427 metres;**
incl	**23 metres grading 0.25 g/t Au, 0.03% Cu from 1,476 metres;**
incl	**4.8 metres grading 0.46 g/t Au, 0.06% Cu from 1,477.9 metres.**

Figure 3. White and pink anhydrite ± chalcopyrite veins (magmatic derived fluids) that crosscut the earlier advanced argillic pyrophyllite-silica-pyrite alteration (PHD084 from 1421m).

Figure 4. Pebble dyke with clasts of quartz vein and silica with pyrite ± bornite that are sourced from a deeper level and milled by the hydrothermal brecciation (PHD084 at 1582.7m).

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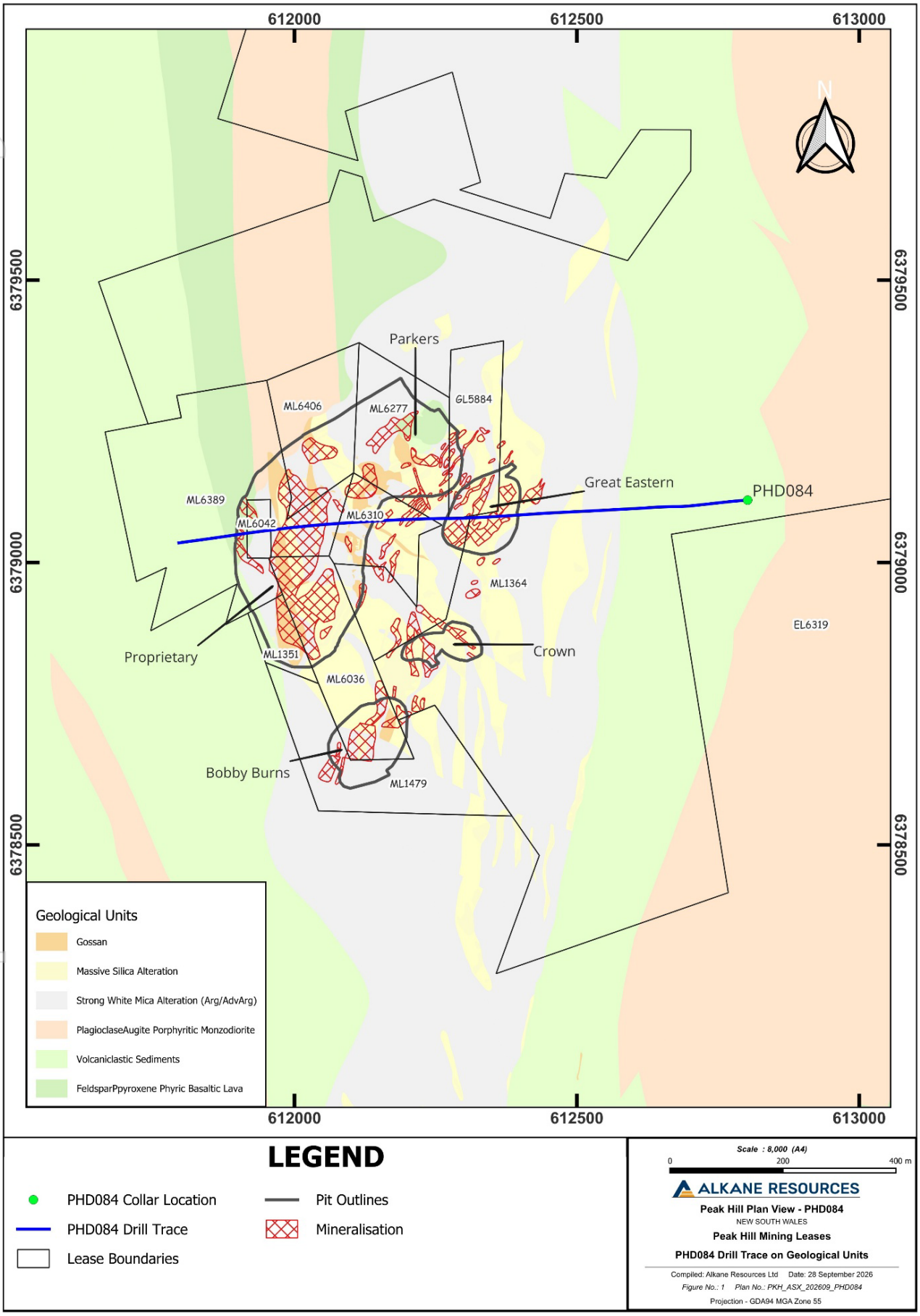

Figure 5 – Local geology and mineralisation of the Peak Hill Gold Mine with drill hole trace PHD084.

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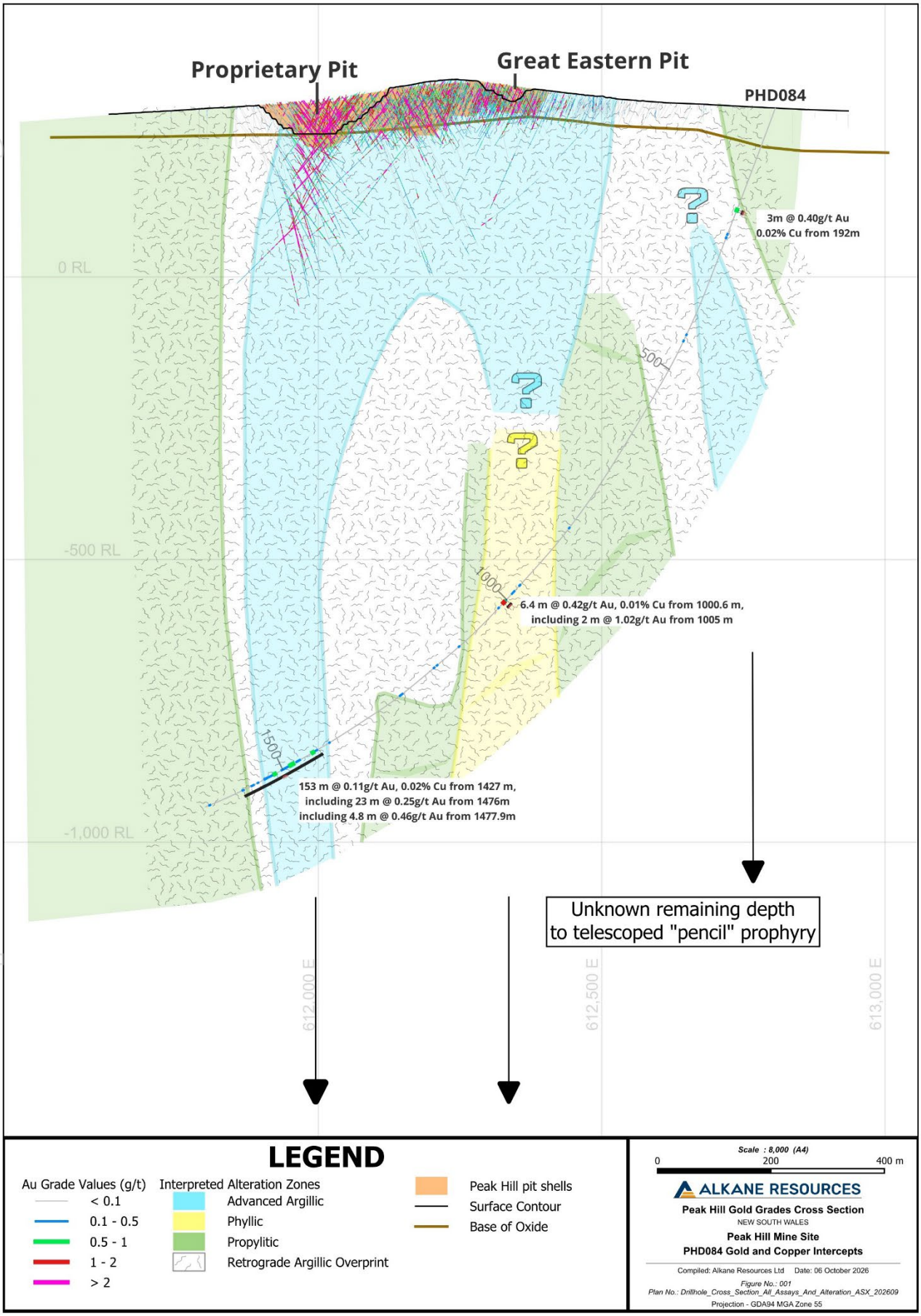

Figure 6 - Section of general alteration assemblages informed by short wave infrared spectral scanning.

The phyllic alteration (identified through the presence of high crystallinity white mica) intersected beneath the Great Eastern-Parkers pits has associated chlorite (propylitic) alteration. The advanced argillic alteration intersected beneath the Proprietary pit suggests a different depth of emplacement and indicates the Peak Hill system may be associated with a cluster of porphyry intrusions that have been telescoped relative to each other. A new, second domain of remnant advanced argillic alteration was also identified to the east, around 300 m downhole. The entire hole has been overprinted with retrograde argillic alteration

Whilst PHD084 only intersected broad low grade gold mineralisation associated with silica-pyrite and advanced argillic alteration, potential remains for the high-grade core to extend at depth to the north or south of this hole. The extension of advanced argillic alteration to at least 1 km below the Proprietary open cut highlights that the potential for additional sulphide mineralisation below Proprietary open cut has not yet been fully evaluated.

Future Work

A surface exploration diamond core drill rig is currently working at the El Paso prospect before mobilising to the Tomingley mine site for a small program. The rig is then planned to mobilise to Peak Hill in November to complete six drill holes totalling 6,600m. Final assay results will be expected in 2027.

The drill rig is then planned to complete geotechnical drilling to provide information for future mining studies evaluating the potential viability of mining the existing underground Mineral Resource.

A new study has been commissioned focussing on PHD084 to evaluate the proximity of possible 'pencil' porphyry intrusives to the various alteration zones intersected by the deep hole. Further drilling is to be planned on the results of the study to test the potential for Peak Hill to host a Cu-Au porphyry deposit at an economic depth.

Peak Hill Gold Project Mineral Resources

PEAK HILL GOLD PROJECT MINERAL RESOURCES as at October 2018						
Deposit	Resource Category	Cut-Off	Tonnes (Mt)	Gold Grade g/t	Gold Metal (koz)	Copper Grade (%)
Proprietary U/G	Inferred	2g/t Au	1.02	3.29	108	0.15
TOTAL			**1.02**	**3.29**	**108**	**0.15**

Notes:

1. Refer to ASX announcement dated 11 September 2026 titled "Tomingley Resources & Reserves Statement FY26", for the original reporting of the Peak Hill Mineral Resource estimate and the applicable Competent Person statements and consents.
2. Mineral Resources are classified and reported in accordance with the guidelines of the JORC Code (2012); the classifications are consistent with Canadian Institute of Mining, Metallurgy and Petroleum (CIM) Definition Standards for Mineral Resources and Mineral Reserves (CIM (2014) definitions).
3. Tonnes are rounded to the nearest ten thousand and contained gold (oz) is rounded to the nearest thousand.
4. Totals may appear different from the sum of their components due to rounding.
5. Underground Mineral Resources is estimated at a cut-off grade of 2 g/t gold.
6. Competent Persons are outlined in the Competent Persons section of this report.

The Company confirms that it is not aware of any new information or data that materially affects the information included in the announcement dated 11 September 2026, and that all material assumptions and technical parameters underpinning the Mineral Resource estimate in that announcement continue to apply and have not materially changed.

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Tabulated Drilling Results

Hole ID	Easting (MGA)	Northing (MGA)	Dip	Azimuth (Grid)	Total Depth	Interval From (m)	Interval To (m)	Intercept (m)	Au (g/t)	Cu (%)	Prospect
PHD084	**612803**	**6379110**	**-70**	**265**	**1651**	192	195	3	0.40	0.02	
and						237	239	2	0.11	0.02	
and						243	245.7	2.7	0.13	0.02	
and						430	431	1	0.28	0.01	
and						442	443.3	1.3	0.20	0.01	
and						944	951	7	0.03	0.06	**Great Eastern**
and						963.7	965.5	1.8	0.12	0.02	
and						983	985	2	0.11	0.02	
and						1000.6	1007	6.4	0.42	0.01	
incl						1005	1007	2	1.02	0.01	
and						1083.8	1086	2.2	0.05	0.12	
and						1103	1104	1	0.01	0.12	
and						1117	1118	1	0.14	0.05	
and						1248	1250	2	0.11	0.02	
and						1252.1	1253.4	1.3	0.2	0.04	
and						1403	1403.5	0.5	0.19	0.13	**Proprietary**
and						1427	1580	153	0.11	0.02	
incl						1476	1499	23	0.25	0.03	
incl						1477.9	1482.7	4.8	0.46	0.06	
and						1587	1591	4	0.04	0.05	
and						1642	1643.3	1.3	0.29	0.06	

Notes:

1. True widths are approximately 70% of intercept width.
2. Reported intercepts (>0.1g/t Au and/or 0.05% Cu) are calculated using a broad lower cut of 0.1g/t Au or 0.05% Cu although grades lower than this may be present internally (internal dilution).

Competent Person

The information in this report is based on, and fairly represents, information compiled and verified by Mr David Meates. Mr Meates is a Member of the Australian Institute of Geoscientists (MAIG).

Mr Meates has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the "Australian Code for Reporting of Exploration Results, Mineral Resources, and Ore Reserves" (JORC Code).

For the purposes of National Instrument 43-101 – Standards of Disclosure for Mineral Projects ('NI 43-101'), the scientific and technical information contained in this announcement has been prepared under the supervision of, and approved by, Mr David Meates, who is a "qualified person" as defined in NI 43-101. Mr Meates is employed by Alkane as Exploration Manager NSW and is not considered independent of Alkane within the meaning of NI 43-101.

Mr Meates consents to the inclusion in this report of the matters based on his information in the form and context in which they appear.

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

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ABOUT ALKANE - alkres.com - ASX:ALK | TSX: ALK | OTCQX: ALKRY
Alkane Resources (ASX:ALK; TSX:ALK; OTCQX:ALKRY) is an Australia-based gold and antimony producer with a portfolio of three operating mines across Australia and Sweden. The Company has a strong balance sheet and is positioned for further growth.

Alkane's wholly owned producing assets are the **Tomingley** open pit and underground gold mine southwest of Dubbo in Central West New South Wales, the **Costerfield** gold and antimony underground mining operation northeast of Heathcote in Central Victoria, and the **Björkdal** underground gold mine northwest of Skellefteå in Sweden (approximately 750km north of Stockholm). Ongoing near-mine regional exploration continues to grow resources at all three operations.

Alkane also owns the very large gold-copper porphyry **Boda-Kaiser Project** in Central West New South Wales and has outlined an economic development pathway in a Scoping Study. The Company has ongoing exploration within the surrounding Northern Molong Porphyry Project and is confident of further enhancing eastern Australia's reputation as a significant gold, copper and antimony production region.

Interactive Analyst Centre™
Comprehensive financial, operational, resource and reserve information for Alkane Resources is available through the Interactive Analyst Centre™ located in the Investors section of our website at alkres.com.

Cautionary Note Regarding Forward-Looking Information and Statements
This announcement contains certain forward-looking information and forward-looking statements within the meaning of applicable securities legislation and may include future-oriented financial information or financial outlook information (collectively "Forward-Looking Information"). Actual results and outcomes may vary materially from the amounts set out in any Forward-Looking Information. As well, Forward-Looking Information may relate to: future outlook and anticipated events; expectations regarding exploration potential; production capabilities and future financial or operating performance, including AISC, investment returns, margins and share price performance; production and cost guidance and the timing thereof; issuing updated resources and reserves estimate and the timing thereof; the potential of the Company to meet industry targets, public profile and expectations; and future plans, projections, objectives, estimates and forecasts and the timing related thereto. Forward-Looking Information is generally identified by the use of words like "will", "create", "enhance", "improve", "potential", "expect", "upside", "growth" and similar expressions and phrases or statements that certain actions, events or results "may", "could", or "should", or the negative connotation of such terms, are intended to identify Forward-Looking Information. Although Alkane believes that the expectations reflected in the Forward-Looking Information are reasonable, undue reliance should not be placed on Forward-Looking Information since no assurance can be provided that such expectations will prove to be correct. Forward-Looking Information is based on information available at the time those statements are made and/or good faith belief of the officers and directors of Alkane as of that time with respect to future events and are subject to risks and uncertainties that could cause actual results to differ materially from those expressed in or suggested by the Forward-Looking Information. Forward-Looking Information involves numerous risks and uncertainties. Such factors include, without limitation: risks relating to changes in the gold and antimony price. Forward-Looking Information is designed to help readers understand Alkane's views as of that time with respect to future events and speak only as of the date they are made. Except as required by applicable law, Alkane assumes no obligation to update or to publicly announce the results of any change to any forward-looking statement contained or incorporated by reference herein to reflect actual results, future events or developments, changes in assumptions or changes in other factors affecting the Forward-looking Information. If Alkane updates any one or more forward-looking statements, no inference should be drawn that the company will make additional updates with respect to those or other Forward-looking Information. All Forward-Looking Information contained in this announcement is expressly qualified in its entirety by this cautionary statement.

Disclaimer
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JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

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.*	Diamond core drilling using PQ3 sized core to 143.6m, then using HQ3 sized core to 1,050.4m and NQ3 to end of hole at 1,651m. The core was sampled as half core. The sample intervals were defined by geologists 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.*	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 that has 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. A multi-element suite was determined using a multi-acid digest with an ICP Mass Spectrometry 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/NQ3 wireline bit producing 83mm diameter (PQ3), 61.1mm diameter (HQ3), and 45.1mm diameter (NQ3) 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. Core loss was negligible with excellent core recovery.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	Sample quality is qualitatively logged. Triple tube coring is used at all times 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.
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.*	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.

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	• *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. General alteration assemblages were informed by short wave infrared spectral scanning using a Terraspec Halo for qualitative measurements. In addition, magnetic susceptibility data (quantitative) was collected as an aid for logging. All drill holes were geologically logged into Geobank Mobile, followed by validation before importing into Alkane's central Geobank database. All drill holes were logged by qualified and experienced geologists.
	• *The total length and percentage of the relevant intersections logged.*	All drill holes were logged in full.
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.*	Core was sawn in half and half core was submitted for analysis.
	• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	Not applicable.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	Samples were delivered 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 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. No duplicate samples were taken.
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	Sample sizes are 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.*	All samples were analysed by ALS Minerals. 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. Other geochemical elements, samples are digested by near-total mixed acid digest with each element determined by ICP Mass Spectrometry.
	• *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.*	Terraspec Halo was used to measure visible, near-infrared, and short-wave infrared (VIS-NIR-SWIR) regions from 350 to 2500 nm to identify pathfinder alteration minerals. A sample was taken approximately every metre. The measurements were further analysed at ALS using their spectra database.
	• *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. No field duplicate samples were used.

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		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 was compiled and collated and reviewed by senior staff. External consultants do not routinely verify data until resource estimation procedures are deemed necessary
	• *The use of twinned holes.*	Twinned holes have not been used for this drilling.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	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. 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 hole was laid out using hand-held GPS (accuracy ±2m) then was DGPS surveyed accurately (± 0.1m) by trained surveyors on completion. Drill holes were surveyed during drilling to maintain drilling direction. The diamond drill hole was surveyed at the end of hole using a Reflex Gyro.
	• *Specification of the grid system used.*	GDA94, MGA (Zone 55).
	• *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.*	One very deep drill hole completed approximately 600m vertically below previous drilling. The exploration stage is early, and data spacing is variable with the focus on identifying new 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 drilling results are at an early exploration stage and is one hole600m below previous drilling.
	• *Whether sample compositing has been applied.*	No sample compositing was used.
Orientation of data in relation	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	The drilling suggests the alteration is pipe shaped and vertical. High grading gold structures (silica-pyrite mineralisation) may exist within the pipe but were not intercepted by this hole.

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to 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.*	It is not thought that drilling direction will bias assay data.
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 courier. Sample 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.

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 Peak Hill Gold Project comprises of Mining Leases (ML1351, ML1364, ML1479, ML6036, ML6042, ML6277, ML6310, ML6389, ML6404 & GL5884) and is owned 100% by 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.*	All mining licences are in good standing. GL5884 (Act 1906) Term ending 2 June 2037 ML6036 (Act 1906) Term ending 2 June 2037 ML6042 (Act 1906) Term ending 2 June 2037 ML6277 (Act 1906) Term ending 2 June 2037 ML6310 (Act 1906) Term ending 2 June 2037 ML6389 (Act 1906) Term ending 2 June 2037 ML6406 (Act 1906) Term ending 13 February 2037 ML1351 (Act 1992) Term ending 24 September 2036 ML1364 (Act 1992) Term ending 25 December 2035 ML1479 (Act 1992) Term ending 17 January 2043
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	The Peak Hill Gold Mine was discovered in 1889. Initially, alluvial gold was worked in drainage channels on the slopes of the prominent hill. This was followed by working of outcropping gold mineralisation on the flanks of the hill. Between 1904 and 1917, open cut and underground mining produced 60,000 oz Au from approximately 500,000t of material mined.

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		The deposit was explored by several companies from 1964 (Mines Exploration, Occidental Mineral, Jododex, Cypress, and GeoPeko) but exploration away from the prominent Peak Hill was difficult due to the thick cover sequences. The Peak Hill deposit was drilled out by Alkane Exploration NL (in association with Associated Goldfields NL) in the early 1990s. In 1993 the decision to mine was made by Alkane. From 1996 to 2005, Alkane mined 150,000 oz Au from the oxide zone.
Geology	• *Deposit type, geological setting and style of mineralisation.*	The Peak Hill deposit represents products of a high sulphidation epithermal gold system with a magmatic fluid source (such as a Cu-Au porphyry). High pyrite concentrations, a Cu sulphide assemblage dominated by enargite and tennatite and extensive advanced argillic alteration characterises the Peak Hill deposit as a high sulphidation porphyry system. The Peak Hill high sulphidation Au-Cu deposit is hosted by strongly deformed and hydrothermally altered volcanoclastic rocks. Predominantly andesitic volcaniclastic breccias, lesser sandstone/siltstone units, minor lava and black mudstones. Oxidation has extended to >90m. The redox boundary between oxidised and unoxidised rock is irregular due to poddy nature of the primary sulphide interface extending into the overlying oxidised material. The primary alteration comprises of Cu sulphides and pyrite associated with extensive advanced argillic alteration and silicification in a steeply plunging lenticular zone (main Proprietary pit). Pyrite content commonly exceed 15% and barite is a prominent accessory mineral. The Au-Cu ore occurs in steeply plunging shoots that broadly coincide with a major shear/fault system and a distinctively zoned alteration system characterised by an acid alteration core of pyrophyllite and vuggy silica, grading out through less acid alteration assemblages (white mica bearing alteration-illite+muscovite to kaolinite) to propylitic chlorite/ epidote margins. Gold grades >1g/t at Peak Hill are coincident with concentrations of Quartz-pyrite-barite veins. These veins are not confined the acidic pyrophyllite core, they also occur in the advanced argillic illite-muscovite zone which is proximal to the pyrophyllite core. The zones of high grade <5g/t generally occur in microcrystalline quartz altered domains in the paragonite-muscovite alteration zones.
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:* o *easting and northing of the drill hole collar* o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar* o *dip and azimuth of the hole* o *down hole length and interception depth* o *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 drill holes have been reported in this announcement.

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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 reported for uncut gold grades, grades 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.*	Reported intercepts for exploration drilling are calculated using a broad lower cut of 0.1g/t Au and/or 0.05% Cu. Although grades lower than these may be present internally (internal dilution). 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.* o *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* o *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').*	Reported results include the drilled width and an estimate of true width. The true width is approximately 70% 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 sections and plans showing drilling with 3D geological modelling are included in the body of this announcement for data rich areas.
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 exploration data is considered meaningful 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. Further drilling is planned.
	• *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.

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