# ASX and MEDIA RELEASE

**6 May 2016**

ALKANE RESOURCES LTD
ABN 35 000 689 216

# *Further Extensive Gold Mineralisation Identified at Bodangora Encouraging Results at Elsienora*

## *Bodangora Project*

- **A small RC drilling program of 1,761 metres recently tested the Kaiser target within the Bodangora Project, confirming the extensive gold and copper mineralisation. Drill intercepts include:**
  - **KSRC013 111 metres grading 0.61g/t gold and 0.08% copper from 42 metres**
  - **including 4 metres grading 9.69g/t gold and 0.06% copper from 110 metres**
  - **KSRC018 311 metres grading 0.28g/t gold and 0.08% copper from 19 metres**
- **The Bodangora Project hosts four discrete monzonite intrusive complexes within a 15 kilometre northwest trending corridor through the northern Molong Volcanic Belt in the central west of New South Wales**
- **Previous drilling had indicated widespread and extensive alteration of the monzonite intrusives and host rocks, with significant gold – copper mineralisation near all the intrusive complexes**
- **Mineralisation at Kaiser and associated targets Duke, Belgium and Boda, has been identified over a 1,500 metre strike length**
- **The large induced polarisation chargeability anomaly at the Driell Creek intrusive complex, 4 kilometres to the northwest of Kaiser, remains largely untested**
- **The monzonite intrusive complexes are similar to those hosting the major gold – copper deposits in the Cadia region to the south of Bodangora**

## *Elsienora Project*

- **A 1,594 metre RC drilling program has been completed at the Elsienora Project testing gold mineralisation along strike within intermediate to mafic volcanics at the Cuddyong Prospect.**
- **Mineralisation now defined over a strike length of about 700 metres:**
  - **ELRC018 8 metres grading 2.78g/t gold from surface**
  - **ELRC024 2 metres grading 2.60g/t gold from 44 metres**
- **New zone of mineralisation identified in the hangingwall, to the east of Cuddyong:**
  - **ELRC021 2 metres grading 2.40g/t gold from 10 metres**


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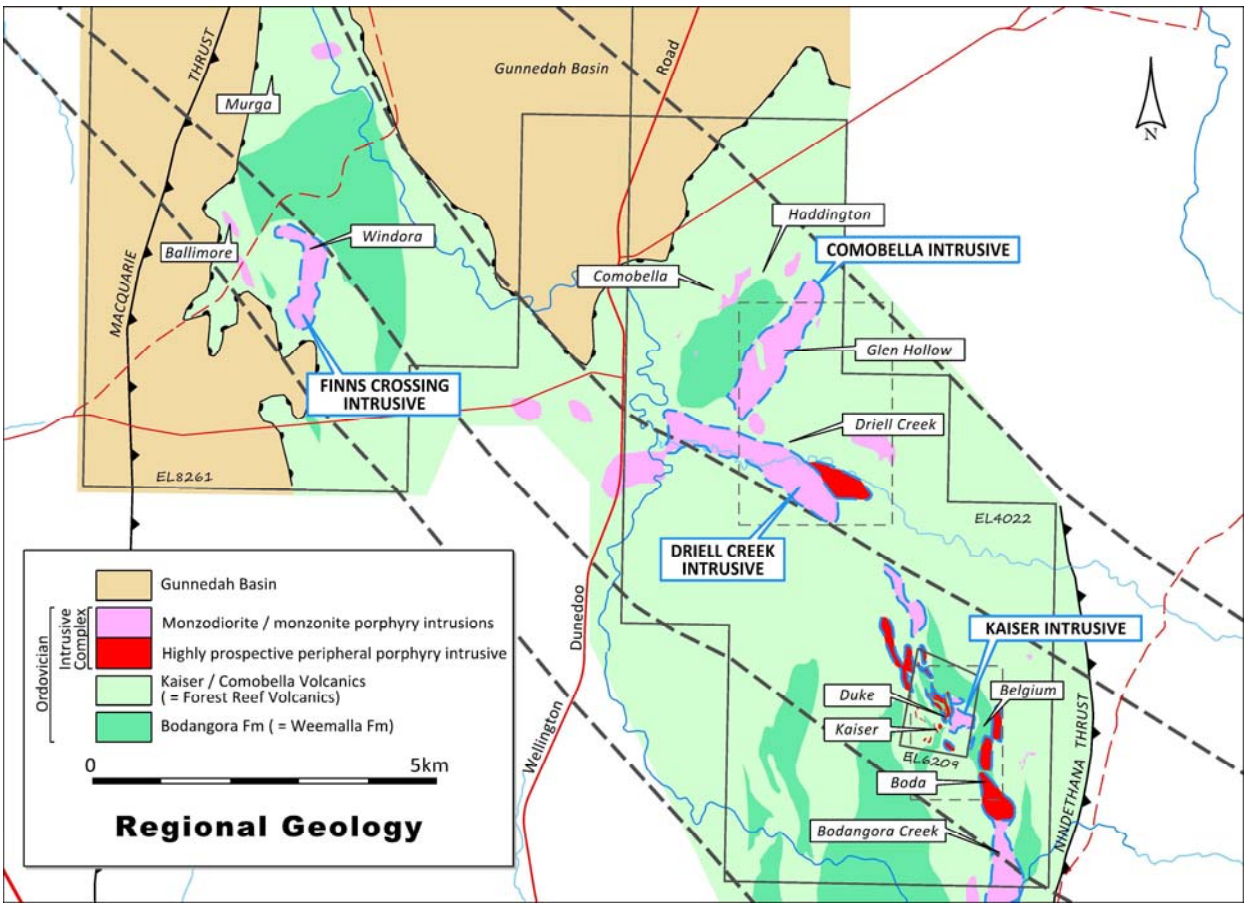
## BODANGORA (copper-gold)

*Alkane Resources Ltd 100% (includes the Kaiser tenement)*

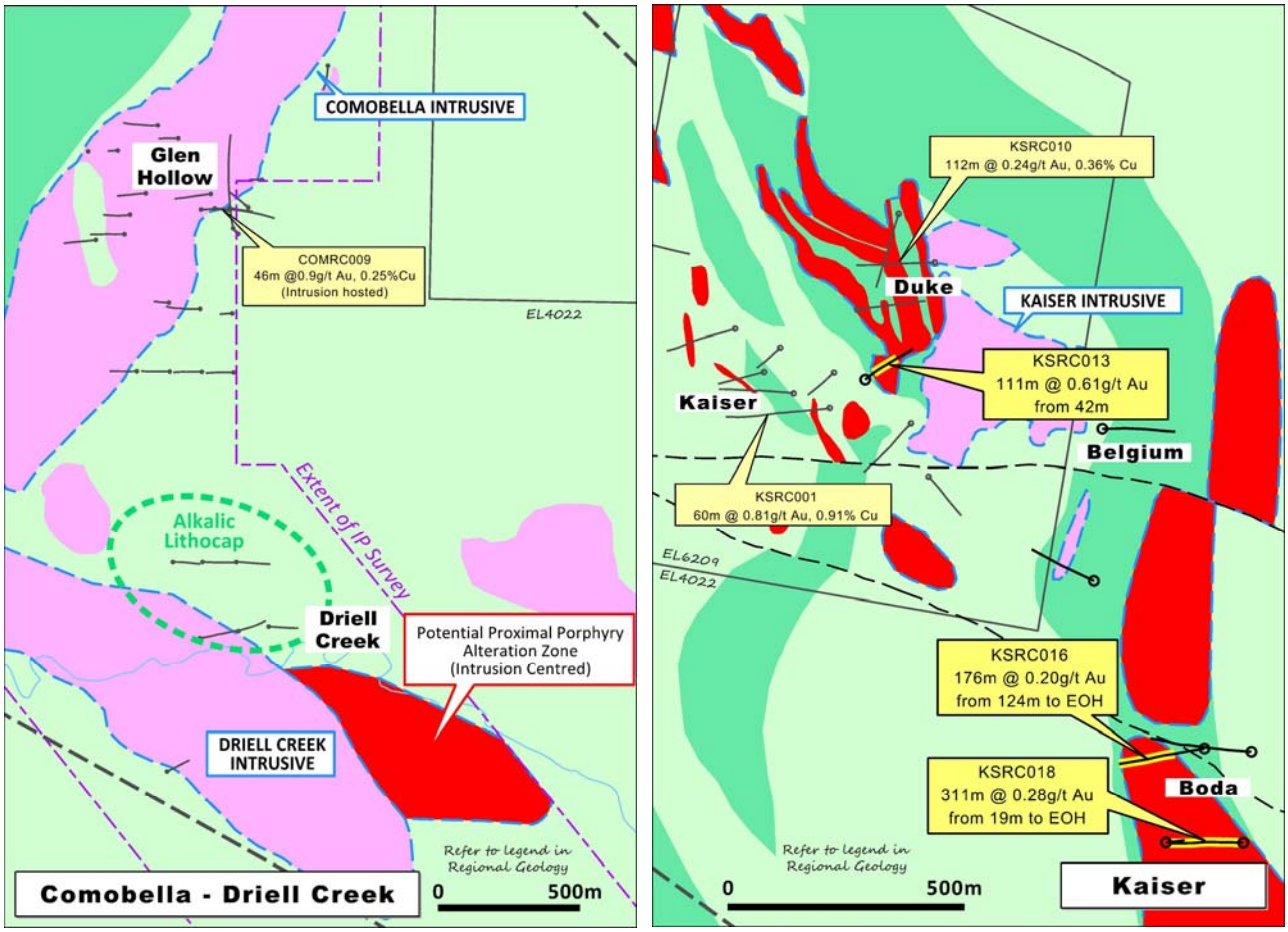
A limited RC drilling program of 7 holes totalling 1761 metres was recently completed within the Kaiser and Bodangora properties. The Bodangora and Kaiser tenements form part of the larger project area in the northern Molong Volcanic Belt (MVB) located approximately 20-25 km north of Wellington in the central west of NSW. The MVB is host to a number of mineral deposits exemplified by the world class alkalic porphyry deposits within the Cadia Valley Operations of Newcrest Mining Limited.

The northern MVB porphyry project covers an area of 110 km$^2$ within three exploration licences; Bodangora, Kaiser and Finns Crossing. Although extensive work had been completed by previous explorers in parts of the project area, Alkane has embarked upon a program to reconstruct the geology in the region using detailed mapping, re-assessment of existing aeromagnetic data, re-logging of existing drill core and systematic but strategic use of detailed lithogeochemical analyses. Although structurally more complex than the Cadia Valley area, results of this work have shown that a stratigraphic sequence very similar to that at Cadia Valley exists within the project area, and that mineralisation is hosted by very similar rock types at very similar stratigraphic positions.




Through this process of detailed geological analysis four discrete intrusive complexes have been identified to date – Kaiser, Comobella, Driell Creek and Finns Crossing – within a 15 km northwest trending corridor. Initial work by Alkane was completed within the Comobella Intrusive Complex where drilling of induced polarisation chargeability anomalies intersected 45m grading 0.90 g/t Au and 0.24% Cu (COMRC0009, ASX Announcement 19 April 2011) within and adjacent to a large monzonitic intrusive stock. At around the same time RC drilling of a partially defined chargeability anomaly adjacent to the

Driell Creek Intrusive Complex intersected a broad sericite+pyrite+albite+K-feldspar alteration zone interpreted as an alkalic lithocap – lithocaps generally occur either above or adjacent to major alkalic porphyry systems. A recently completed survey extending the induced polarisation coverage (31 March 2016 Quarterly Report, ASX 20 April 2016) in the Driell Creek area indicates that this chargeable anomaly is much more extensive, extending southwards from this alkalic lithocap area to an area interpreted from aeromagnetic data to be potentially associated with a more proximal (inner propylitic, calc-potassic) alteration zone. This anomaly has not been drill tested.




The most extensive previous exploration in the project area has been completed at the Kaiser deposit where significant gold and copper mineralisation has been identified within highly altered monzonitic intrusive rocks, along the south-western margin of the Kaiser Intrusive. Drilling in this area by Alkane intersected 60m grading 0.81g/t Au and 0.91% Cu (KSRC001, ASX Announcement 8 April 2014). Structural analysis and re-interpretation of magnetic data indicates that a potential repetition of the Kaiser zone may be present to the north-north east at Duke and again at the Belgium-Boda targets along the south-eastern margin of the Kaiser Complex. Each of these prospects is interpreted to represent an intrusion centred porphyry occurrence similar to the Ridgeway and Cadia East deposits within Cadia Valley. Drilling at the Duke prospect by Alkane in 2014 intersected broad zones of mineralisation eg 112m grading 0.24 g/t Au and 0.36% Cu from 115m (KSRC010; ASX Announcement 21 January 2015) confirming previous exploration results, but more importantly showing an increase in grade at depth compared with the earlier data. A single drill hole (**KSRC013**) completed in April 2016 intersected **111m grading 0.61g/t Au and 0.08% Cu from 42m** and continues to confirm the potential for increasing grades (in particular gold) within this zone, both along strike and down dip.

Initial drilling at the Belgium and Boda targets in April 2016 has continued to expand the area of porphyry mineralisation around the margins of the Kaiser Intrusive Complex with **KSRC018**, one of only 4 holes completed within the Boda target, intersecting **311m grading 0.28g/t Au and 0.06% Cu from 19m** hosted by strongly altered volcanics and monzodioritic intrusive rocks. This mineralisation is associated with a strong magnetic response (determined with downhole magnetic susceptibility measurements) and appears broadly coincident with a discrete strongly magnetic feature in aeromagnetic imagery striking > 1.3km.

The recent drilling and the results from the extended induced polarisation survey continue to confirm the project area as a prime target for large tonnage Au-Cu alkalic porphyry mineralisation. Alteration systems with characteristics of alkalic porphyry systems have been identified at all four intrusive complexes within the project area. Low grade Au-Cu mineralisation, ranking on a par with early drilling by Newcrest at Ridgeway where intercepts such as 102m grading 0.13g/t Au and 0.40% Cu were encountered just 200m from the core of the system (e.g. 296m grading 4.41g/t Au and 1.02% Cu), has now been identified over a strike length of up to 1600m along the margins of the Kaiser Intrusive Complex at Kaiser, Duke and Boda.

| BODANGORA PROJECT RC DRILLING – 6 May 2016 (>0.2g/t Au) | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Hole ID** | **Easting (MGA)** | **Northing (MGA)** | **Dip** | **Azimuth (Grid)** | **Total Depth** | **Interval From (m)** | **Interval To (m)** | **Intercept (m)** | **Au (g/t)** | **Cu (%)** | **Prospect** |
| KSRC013 | 689614.4 | 6412105.4 | -60 | 52.3 | 225 | 42 | 153 | 111 | 0.61 | 0.08 | Duke |
| incl | | | | | | 110 | 114 | 4 | 9.69 | 0.06 | |
| incl | | | | | | 110 | 111 | 1 | 30.1 | 0.06 | |
| KSRC014 | 690115.1 | 6412000.5 | -52 | 90.3 | 210 | 5 | 32 | 27 | 0.20 | 0.15 | Belgium |
| KSRC015 | 690097.3 | 6411679.1 | -53 | 295.3 | 222 | 165 | 175 | 10 | 0.24 | 0.18 | Belgium |
| KSRC016 | 690330.5 | 6411325.3 | -62 | 260.3 | 300 | 124 | 300 | 176 | 0.20 | 0.02 | Boda |
| KSRC017 | 690249.6 | 6411126.6 | -65 | 85.3 | 90 | 70 | 73 | 3 | 0.25 | 0.17 | Boda |
| KSRC018 | 690412.3 | 6411125.9 | -74 | 271.3 | 330 | 19 | 330 | 311 | 0.28 | 0.06 | Boda |
| KSRC019 | 690429.8 | 6411318.5 | -64 | 274.3 | 384 | 335 | 339 | 4 | 0.71 | 0.04 | Boda |
| incl | | | | | | 335 | 336 | 1 | 2.17 | 0.02 | |

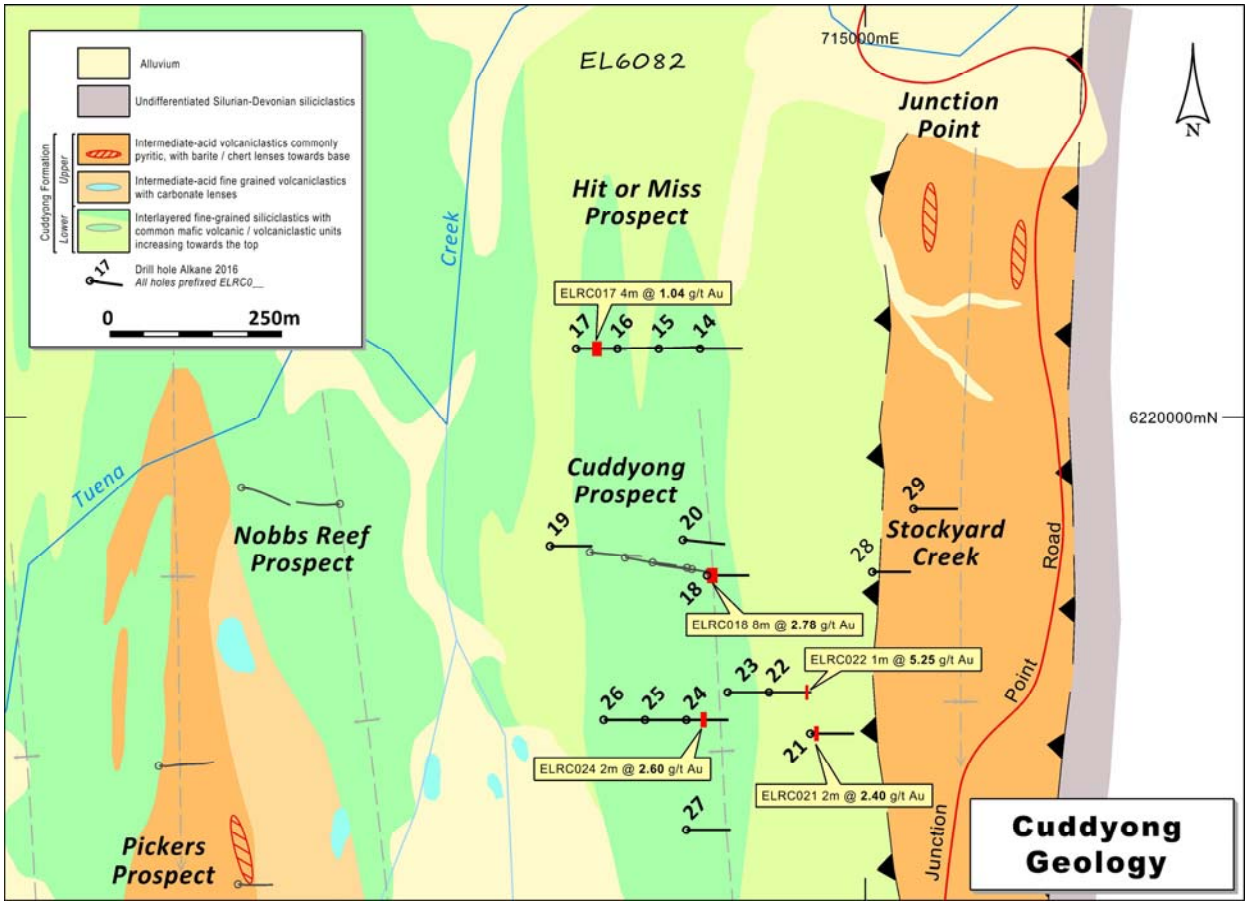
## ELSIENORA (gold)

*Alkane Resources Ltd earning 80%*

The Elsienora Project (EL 6082 and EL 6767) is located approximately 75 kilometres south of Blayney and the McPhillamys gold deposit and is subject to a farm-in agreement between Alkane and Balamara Resources Limited. Under the terms of the agreement, Alkane can acquire an 80% interest in the tenements by spending $500,000 on exploration over three years from September 2013.

Work by Alkane has concentrated on identifying mineralisation away from the historic Elsienora workings where previous exploration has intersected narrow zones of polymetallic mineralisation in an apparent volcanogenic massive sulphide (VHMS) setting (e.g.1.78m grading 7.54% Zn & 3.48% Pb (DDH001) and 2.6m grading 8.54% Zn, 3.16% Pb, 0.66g/t Au & 74g/t Ag (DDH004) (Planet Metals Ltd, 1969-1974)).

The geology of the project area comprises a package of variably pyritic, intermediate to felsic volcaniclastics which hosts several zones of elevated gold geochemistry. Two broad styles of gold mineralisation are recognised, the most common are typically small, sulphide poor quartz veins of probable orogenic origin. A less common style is characterised by sulphide-rich disseminated mineralisation associated with pervasively argillic-altered volcaniclastics possibly related to earlier sub-seafloor processes.




Fourteen drill holes, ELRC014 – 027 totalling 1,594 metres were completed in April 2016 at the Cuddyong Prospect targeting surface geochemistry anomalies along strike from strong gold mineralisation previously intersected at the Cuddyong Prospect (ELRC001 29m @ 1.53g/t Au from surface and ELRC003 8m @ 3.14g/t Au from 30m; ASX announcement 23 March 2015). The drilling successfully delineated a zone of strong sericite-pyrite alteration and quartz veining hosted predominantly in intermediate to mafic volcaniclastic sediments along a strike length of approximately 700 metres (using a >0.5g/t gold cut-off). The better intercepts are:

ELRC018 – 8m grading 2.78g/t Au from surface – up dip from ELRC001
and
ELRC024 – 2m grading 2.60g/t Au from 44m – 200m along strike to the south from ELRC018

Mineralisation intersected in drill hole **ELRC021 (2m grading 2.40g/t Au from 10m)** appears to be a new zone of mineralisation, hangingwall to the main Cuddyong zone.

Two drill holes, ELRC028 and ELRC029 tested the numerous orogenic gold workings at the Stockyard Prospect intersecting a small stope and two minor gold lodes of 1-2 metres thickness grading up to 1.00 g/t gold associated with quartz veining.

| ELSIENORA PROJECT RC DRILLING – 6 May 2016 (>0.5g/t Au) | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Hole ID | Easting (MGA) | Northing (MGA) | Dip | Azimuth (Magnetic) | Total Depth | Interval From (m) | Interval To (m) | Intercept (m) | Au (g/t) | Prospect |
| ELRC014 | 714760 | 6220100 | -52 | 78 | 100 | 7 | 8 | 1 | 1.24 | Cuddyong |
| and | | | | | | 15 | 16 | 1 | 1.23 | |
| ELRC015 | 714700 | 6220100 | -52 | 76 | 100 | 48 | 50 | 2 | 0.93 | Cuddyong |
| ELRC016 | 714640 | 6220100 | -52 | 77 | 100 | No significant results | | | | Cuddyong |
| ELRC017 | 714580 | 6220100 | -52 | 78 | 100 | 52 | 53 | 1 | 0.84 | Cuddyong |
| and | | | | | | 55 | 59 | 4 | 1.04 | |
| ELRC018 | 714770 | 6219770 | -52 | 78 | 100 | 0 | 8 | 8 | 2.78 | Cuddyong |
| ELRC019 | 714542 | 6219813 | -52 | 78 | 100 | 24 | 25 | 1 | 1.19 | Cuddyong |
| ELRC020 | 714735 | 6219822 | -52 | 84 | 100 | No significant results | | | | Cuddyong |
| ELRC021 | 714920 | 6219540 | -52 | 78 | 100 | 10 | 12 | 2 | 2.40 | Cuddyong |
| ELRC022 | 714860 | 6219600 | -52 | 78 | 100 | 92 | 93 | 1 | 5.25 | Cuddyong |
| ELRC023 | 714800 | 6219600 | -52 | 78 | 100 | 7 | 8 | 1 | 0.65 | Cuddyong |
| ELRC024 | 714740 | 6219560 | -52 | 78 | 100 | 44 | 46 | 2 | 2.60 | Cuddyong |
| and | | | | | | 75 | 76 | 1 | 0.76 | |
| ELRC025 | 714680 | 6219560 | -52 | 78 | 100 | No significant results | | | | Cuddyong |
| ELRC026 | 714620 | 6219560 | -50 | 78 | 100 | 93 | 95 | 2 | 0.57 | Cuddyong |
| ELRC027 | 714740 | 6219400 | -50 | 78 | 100 | 75 | 76 | 1 | 2.49 | Cuddyong |
| and | | | | | | 89 | 91 | 2 | 0.90 | |
| ELRC028 | 715010 | 6219775 | -52 | 78 | 91 | 64 | 66 | 2 | 0.72 | Stockyard |
| ELRC029 | 715070 | 6219867 | -50 | 78 | 100 | 28 | 29 | 1 | 1.00 | Stockyard |

## *Competent Person*

***Unless otherwise advised above, the information in this report that relates to exploration results, mineral resources and ore reserves is based on information compiled by Mr D I Chalmers, FAusIMM, FAIG, (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. Mrr Chalmers consents to the inclusion in this report of the matters based on his information in the form and context in which it appears***

## *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.***

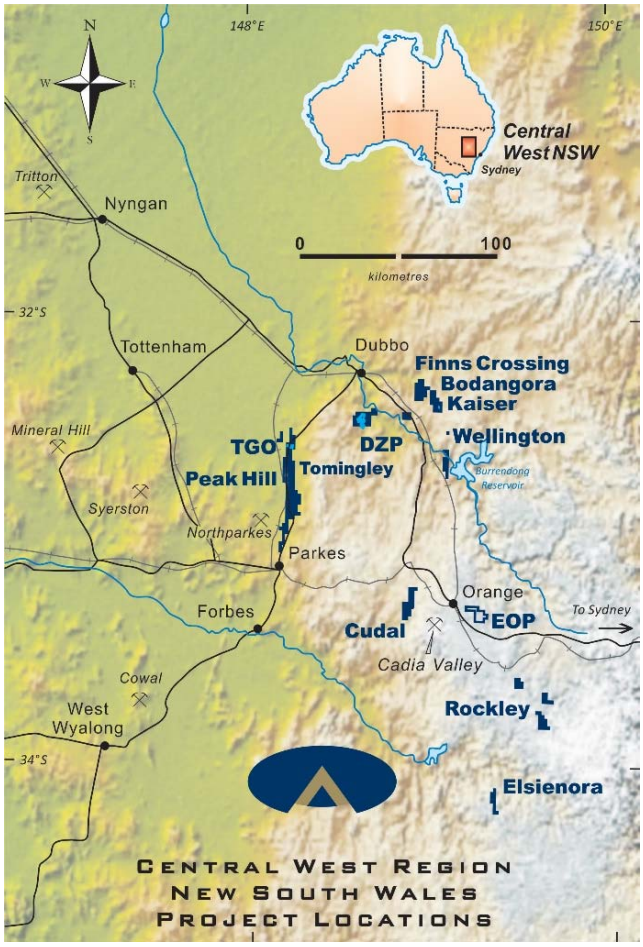
***This document has been prepared in accordance with the requirements of Australian securities laws, which may differ from the requirements of United States and other country securities laws. Unless otherwise indicated, all ore reserve and mineral resource estimates included or incorporated by reference 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.***

**ABOUT ALKANE - www.alkane.com.au - ASX: ALK and OTCQX: ANLKY**

Alkane is a multi-commodity company focused in the Central West region of NSW, Australia. Currently Alkane has two advanced projects - the Tomingley Gold Operations (TGO) and the nearby Dubbo Zirconia Project (DZP). Tomingley commenced production early 2014. Cash flow from the TGO will provide the funding to maintain the project development pipeline and will assist with the pre-construction development of the DZP.

The NSW Planning Assessment Commission granted development approval for the DZP on 28 May 2015 and on 24 August 2015 the Company received notification that the federal Department of the Environment has assessed the mining project and its impacts, and has given its approval for the development. Mining Lease 1724 was granted on 18 December 2015 and the Environment Protection Licence was granted on 14 March 2016. Financing is in progress and this project will make Alkane a strategic and significant world producer of zirconium, hafnium and rare earth products when it commences production in 2018.

Alkane's most advanced gold copper exploration projects are at the 100% Alkane owned Wellington and Bodangora prospects, and Elsienora farm-in. Wellington has a small copper-gold deposit which can be expanded, while at Bodangora a large 12km$^2$ monzonite intrusive complex has been identified with porphyry style gold copper mineralisation. Encouraging gold mineralisation was previously drilled at Elsienora.



*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 BODANGORA

### 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 (e.g. 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.* | Reverse Circulation (RC) samples are collected at one metre intervals via a cyclone and cone splitter onboard the rig. The cyclone and spillter are cleaned regularly to minimise any contamination. |
| | • *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.* | Drilling, sampling and QAQC procedures are carried out to 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.* | RC Drilling - approximately 10% (3kg) of total sample is delivered via cone splitter into a calico bag with the remaining sample delivered into a large plastic bag and retained for future use if required.<br>All samples sent to laboratory are crushed and/or pulverised to produce a ~100g pulp for the assay process.<br>Gold was determined by fire assay fusion of a 50g charge with an AAS analytical finish.<br>A multi-element suite was determined using a four acid digest with a ICP-AES, ICP-MS analytical finish. |
| *Drilling techniques* | • *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).* | Conventional RC drilling using 100mm rods and 144mm face sampling hammer. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.* | RC - Sample quality is 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 intervals. |
| | • *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 a cone splitter. A high air capacity RC rig was used enabling mostly dry samples collected.<br>Various additives are used to condition the RC holes to maximise recoveries and sample quality. Drill cyclone and sample buckets are cleaned between rod changes and after each hole to minimise cross-hole contamination |
| | • *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). |
| | • *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.<br>A representative sample of each one metre interval is retained in chip trays for future reference. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | • *The total length and percentage of the relevant intersections logged.* | All RC chip samples have been geologically logged by qualified geologists. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.* | No core drilling completed. All drilling by RC method.. |
| | • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | RC - for each one metre interval a calico sample bag is collected via an on-board cone splitter, numbered and submitted to the laboratory for analysis. Occasional damp or wet samples are recorded by the sampler.<br>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 sample (±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.* | Field duplicate samples collected at every stage of sampling to control procedures. |
| | • *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.* | Duplicate samples are riffle split from the riffle/conical split calico from the drill rig. Duplicates generally show excellent repeatability. |
| | • *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 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.<br>For other geochemical elements, samples are digested by near-total mixed acid digest with each element determined by ICP Atomic Emission Spectrometry or ICP Mass Spectrometry. Apart from copper, 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.* | No down hole geophysical logging or hand held XRF analyses undertaken. |
| | • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | Commercially prepared Certified Reference Materials (CRM) are inserted at 1 in 50 samples. CRM's are not identifiable to the laboratory.<br>Field duplicate samples are inserted at 1 in 50 samples (alternate to CRM's).<br>Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data is reported for each sample submission.<br>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 staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary. |
| | • *The use of twinned holes.* | No twinned holes have been drilled at this early stage of exploration. |
| | • *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 field data entry spreadsheets for transfer and storage in an industry standard access database with verification protocols in place. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | 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.<br>Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site.<br>Data is also verified on import into various software packages. |
| | • *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 are laid out using hand held GPS (accuracy ± 2m) then DGPS surveyed accurately (± 0.1m) by licenced surveyors on completion.<br>Down hole orientation surveys were completed at a nominal 30m down hole interval using a Reflex Instrument: EZ-Trac multishot survey instrument. |
| | • *Specification of the grid system used.* | MGA (Zone 55), GDA94 |
| | • *Quality and adequacy of topographic control.* | As noted above, all drill holes DGPS surveyed accurately (± 0.1m) by licenced surveyors on completion. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.* | At this early exploration stage, the data spacing is variable as the focus is 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.* | Reconnaissance drilling only, no resource estimations being undertaken. |
| | • *Whether sample compositing has been applied.* | No sample composites were taken – all samples are 1m intervals. |
| *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 is given to attempt to intersect structure at an optimal angle. |
| | • *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 significantly. |
| *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 1 hour to ALS in Orange by Alkane personnel. All sample submissions are documented via ALS tracking system and all assays are reported via email.<br>Sample pulps are returned to site and stored for an appropriate length of time (minimum 3 years).<br>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.* | Drilling completed on exploration licence numbers 4022 and 6209 which are owned 100% by Alkane. Ajax Joinery retain a 2% net smelter return on any products produced from within EL6209. |
| | • *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.* | Both exploration licences are in good standing. EL4022 expires on 13 August 2020 and EL6209 on 11 March 2017. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | Kaiser – Duke Prospects<br>Significant historical drilling activity has been conducted within the bounds of EL6209 and EL4022.<br>Within EL6209 records show 14 AC (170m), 78 RC (7591m) and 45 DD holes (7833m) = 15,594m.<br>~50% of this drilling activity was focussed at the Kaiser, Kaiser East and Kaiser Extended Prospect areas, where there have been a total of 32 DD (4558m), 39 RC drill holes (2939m) for a total of 7497m.<br>The remainder of historical drilling activity was largely focussed within the Kaiser Intrusive Complex (KIC).<br>Under-reporting of historical exploration drill results from the Kaiser Prospect is suggested by preliminary metallurgical test work by previous explorers and is supported by a drill hole (KSRC001) completed by Alkane. This can be partly explained by the partial digests and analogue equipment commonly used in the 1970s.<br>Alkane's reinterpretation of the geometry of the porphyry mineralisation at Kaiser-Duke has important implications on the potential of the area, in that historical drilling probably hasn't adequately tested the down dip extents of the mineralised zones.<br>Boda Prospect<br>CRA Exploration/Rio Tinto completed several reconnaissance RC holes in the Boda Prospect area in 1995. The results identified sporadic, shallow low grade intervals of gold mineralisation hosted within a sequence of monzonites, diorities and intermediate volcanics. Sampling was performed by collecting spear composites from 3m drill runs, assayed by aqua regia digest and fire assay-AAS and ICP finishes. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | The area is located at the northern extent of the Molong Volcanic Belt, a geological region considered highly prospective for and host to several economically important examples of porphyry Au-Cu mineralisation e.g. Cadia Valley alkalic porphyry cluster. In particular, the Ridgeway Deposit mineralisation at Cadia, which is localised along the margin of the Cadia Intrusive Complex shows similarities with the metal tenor and geological setting of the Kaiser mineralisation, located at the margin of the Kaiser Intrusive Complex. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *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:*<br>o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.* | See body of announcement and figures |
| | • *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. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* | Exploration results reported –<br>for uncut gold grades;<br>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.* | Reported intercepts are calculated using a broad lower cut of 0.2g/t Au although grades lower than this may be present internally (internal dilution).<br>No top cut has been used.<br>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 -*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>*If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | Significant efforts have been placed on the understanding, interpretation and, where possible, re-logging of historical diamond drilling in the tenement. This interpretation is constantly changing as new data is gathered and currently shows a variable but generally steeply dipping orientation to stratigraphy. Therefore, at this early exploration stage the drilling directions chosen are deemed appropriate. |
| *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.* | A plan showing geology with drill collars are attached. |
| *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 holes listed in the attached table. |

| 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.* | Other than drilling noted above and minor geophysical data which has been used to assist interpretations, no other material exploration data is available for reporting. |
| *Further work* | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* | It is recommended that further drilling be undertaken within the licences to further define the targets |
| | • *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 attached to the announcement. |

*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 ELSIENORA

### 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 (e.g. 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.* | Reverse Circulation (RC) samples are collected at one metre intervals via a cyclone into a large plastic bag. Three metre composite spear sampling is used as a first pass on the bulk sample. For composite samples with results of greater than 0.2g/t Au, the relevant one metre samples are riffle split and submitted for analysis. |
| | • *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. |
| | • *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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information.* | RC Drilling - total sample is delivered into a large plastic bag. Each one metre interval was spear sampled and composited to 3m with total sample approximating 3kg.<br>All samples sent to laboratory are crushed and/or pulverised to produce a ~100g pulp for assay process.<br>All samples are fire assayed for gold using a 50g charge and analysed for 48 other elements by ICPMS techniques following a four acid digest. |
| *Drilling techniques* | • *Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. 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).* | Conventional RC drilling using 76mm rods and 124mm face sampling hammer. |
| *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 rarely damp or wet. |
| | • *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 a riffle splitter. Some water flows were encountered at the bottom of holes ELRC024 - ELRC026 which were eventually abandoned. |
| | • *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). |
| | • *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.<br>A representative sample of each one metre interval is retained in chip trays for future reference. |
| | • *The total length and percentage of the relevant intersections logged.* | All RC chip samples are geologically logged by qualified geologists. |
| | • *If core, whether cut or sawn and whether quarter, half or all core taken.* | No core drilling completed, all RC drilling. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| *Sub-sampling techniques and sample preparation* | • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.* | RC - each one metre interval is spear sampled and composited over three metres. The calico sample bag was numbered and submitted to the laboratory for analysis.<br>For composite samples returning grades >0.2g/t Au, the individual one metre samples were riffle split, placed in a calico bag, numbered and submitted to the laboratory for analysis. Rare damp or wet samples were recorded by the sampler.<br>Laboratory Preparation – the entire sample (~3kg) forwarded to the laboratory was 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.* | Field duplicate samples collected at every stage of sampling to control procedures. |
| | • *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.* | Duplicate samples are collected at 1:50 as a second composite sample from the same intervals. Duplicates generally show excellent repeatability. |
| | • *Whether sample sizes are appropriate to the grain size of the material being sampled.* | Sample sizes were 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.<br>For other geochemical elements, samples are digested by mixed (four) 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 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.* | No down hole geophysical logging or hand held XRF analyses undertaken. |
| | • *Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.* | Commercially prepared Certified Reference Materials (CRM) are inserted at 1 in 50 samples. CRM's are not identifiable to the laboratory.<br>Field duplicate samples are inserted at 1 in 50 samples (alternate to CRM's).<br>Laboratory QAQC sampling includes insertion of CRM samples, internal duplicates and screen tests. This data is reported for each sample submission.<br>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 staff. External consultants do not routinely verify exploration data until resource estimation procedures are deemed necessary. |
| | • *The use of twinned holes.* | No twinned holes have been drilled at this early stage of exploration. |
| | • *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 field data entry spreadsheets for transfer and storage in an industry standard access database with verification protocols in place.<br>All primary assay data is received from the laboratory as electronic data files which are imported into database with verification procedures in place. QAQC analysis is undertaken for each laboratory report. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Digital copies of Certificates of Analysis (COA) are stored in a central database with regular (daily) backup. Original survey data is stored on site.<br>Data is also verified on importing into various software packages. |
| | • *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 are laid out using hand held GPS (accuracy ± 2m) then DGPS surveyed accurately (± 0.1m) by licenced surveyors on completion. No down hole surveys were completed on these reconnaissance drill holes. |
| | • *Specification of the grid system used.* | MGA (Zone 55), GDA94 |
| | • *Quality and adequacy of topographic control.* | As noted above, all drill holes DGPS surveyed accurately (± 0.1m) by licenced surveyors on completion. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.* | At this early exploration stage, the data spacing is variable as the focus is 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.* | Reconnaissance drilling only, no resource estimations being undertaken. |
| | • *Whether sample compositing has been applied.* | 3m composite samples collected with resampling of intervals assaying >0.2g/t Au. |
| *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 is given to attempt to intersect structure at an optimal angle however as these are reconnaissance drill holes this is not always possible until results received and analysed. |
| | • *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 thought that drilling direction has not resulted in any significant bias to mineralised zones. |
| *Sample security* | • *The measures taken to ensure sample security.* | All samples are bagged in tied and numbered calico bags, grouped into larger tied polyweave bags and transported to ALS in Orange by Alkane personnel. . All sample submissions are documented via ALS tracking system and all assays are reported via email.<br>Sample pulps are returned to site and stored for an appropriate length of time (minimum 3 years).<br>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.* | All drilling undertaken within EL6082 which is held by Isabella Minerals Pty Ltd a wholly owned subsidiary of Balamara Resources Limited. Alkane can acquire a 80% interest in EL6082 and EL6767 by spending $500,000 on exploration over three years from September 2013, with a minimum $250,000 spend over two years. After Alkane have earned the 80% interest, Isabella (Balamara) have the option to pro-rata contribute or dilute according to a standard industry formula. |
| | • *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.* | Expiry date of EL6082 is 18 May 2017 |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | Some historical drilling activity has been conducted within the bounds of EL6082. 75% of this drilling is focused at the northern extent of the Elsinora Prospect. The remainder comprises sporadic drilling of the remaining prospects and comprises 402m DDH (Ironstone Prospect) and 843m RC at Cuddyong and Nobbs Reef Prospects. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | The geology of the project area comprises a package of variably pyritic, intermediate to felsic volcaniclastics which hosts several zones of elevated gold geochemistry. Two broad styles of gold mineralisation are recognised within the area, the most common are typically small, sulphide poor quartz veins, being developed within a late-stage brittle-ductile strain regime. A less common style is characterised by sulphide-rich disseminated mineralisation associated with pervasively argillic-altered volcaniclastics. This second style appears to be related to earlier subseafloor processes, with several similarities to McPhillamys-style mineralisation. |
| *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:*<br>o *easting and northing of the drill hole collar*<br>o *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>o *dip and azimuth of the hole*<br>o *down hole length and interception depth*<br>o *hole length.* | See body of announcement and figures |
| | • *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. |
| *Data aggregation methods* | • *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated.* | Exploration results reported –<br>for uncut gold grades;<br>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.* | Gold intercepts are calculated using a lower cut of 0.5g/t.<br>No top cut has been used. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | Internal waste (i.e. < cut off) is limited to single samples between mineralised samples that exceed either the Au cut-off grade.<br>Short intervals of high grades that have a material impact on overall intersection are highlighted separately (see attached). |
| | • *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 -*<br>*If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.*<br>*If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').* | Significant efforts have been placed on understanding the geometry of mineralised zones. The current results suggest that the mineralised zone at Cuddyong is moderately west dipping. |
| *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.* | A plan showing geology with drill collars are attached. A table detailing intercepts >0.5g/t Au is attached. |
| *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 holes listed in the attached 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.* | There is no other material data for reporting. |
| *Further work* | • *The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).* | Further work will be dependent upon a thorough analysis of all project data. |
| | • *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 Figure 1 attached. |