ASX Announcement
22 December 2020

# Broad Epizonal Gold-Antimony Mineralised System discovered at the South Muckleford Gold Project

## Highlights

- Kalamazoo has identified at its South Muckleford Project, a broad epizonal gold-antimony mineralised system, similar to that seen at the nearby Fosterville and Costerfield deposits in Central Victoria
- Dr Chris Voisey, a leading academic expert in this style of deposit has confirmed that the South Muckleford style of Au-Sb-As mineralisation is closely akin to that observed at the Fosterville and Costerfield mines
- Results from regional Ultrafine+™ soil sampling, rock-chip sampling and field mapping have established that the gold-antimony mineralised system is coincident with significant historic mine workings known as the Fentiman's and Smith's Reefs
- The Fentiman's and Smith's Reefs prospects are favourably located within the hanging-wall position of the major, regional-scale Muckleford Fault, considered to be a key deep-tapping gold mineralising fault conduit
- Rock chip samples collected from mine waste rock dumps over 750m at the Fentiman's Reef line of lode reveal strongly mineralised quartz veins containing abundant styolites and breccias with disseminated stibnite (antimony sulphide), arsenopyrite and pyrite
- Best rock chip assays include 2.9 g/t Au, 117 ppm Sb, 7.6 ppm Bi and 3,140 ppm As
- Historical records of the Fentiman's Reef mine (circa. 1860-1904) report production of up to ~1 oz/t Au associated with high grade antimony lodes containing up to 42% Sb
- The South Muckleford Project area is vastly under-explored, having not been subjected to any systematic modern exploration techniques and only very limited shallow drilling
- Extensive exploration work is underway at the South Muckleford Gold Project to further advance the significant potential of this broad gold-antimony system

**Perth**
16 Douro Place
West Perth WA 6005
1300 782 988

**ASX: KZR**
ACN: 150 026 850
admin@kzr.com.au
**www.kzr.com.au**

**Melbourne**
Unit 3, 328 Reserve Road
Cheltenham VIC 3192
+61 3 9988 7796

Kalamazoo Resources Limited **(ASX: KZR) ("Kalamazoo"** or the **"Company")** is pleased to advise that significant exploration progress has been made at its 100% owned South Muckleford Gold Project, located near Maldon in the Central Victorian Goldfields.

The South Muckleford Gold Project (EL006959 and EL007021) covers approximately 161km$^2$ and is located 10km to the west of Kalamazoo's 100% owned Castlemaine Gold Project (Figure 1). Both projects are situated within the Bendigo Zone in the Central Victorian Goldfields, which has yielded in excess of 60Moz of gold from alluvial and hard rock production[1].

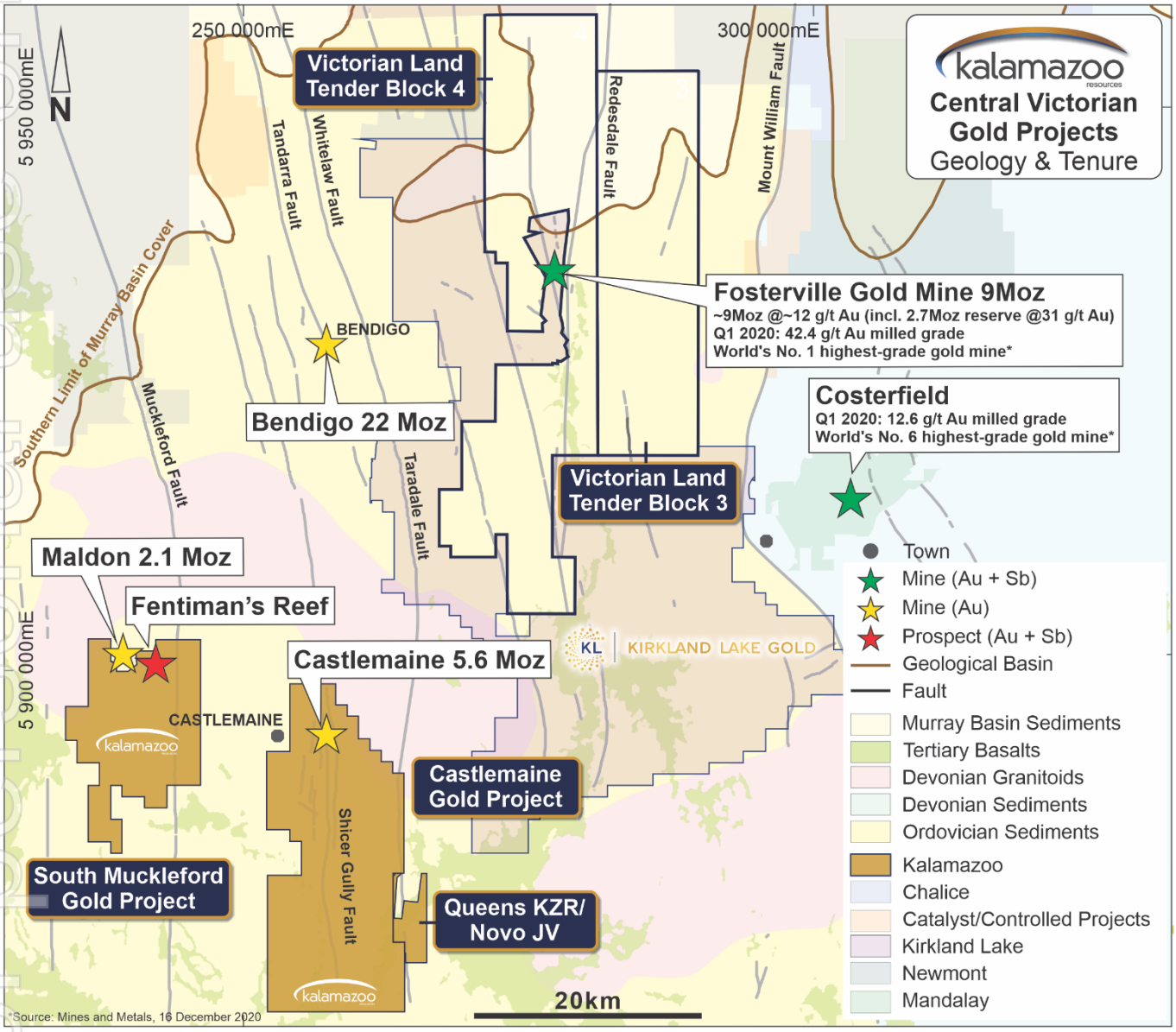


**Figure 1: Map of the Central Victorian Goldfields showing the location of the South Muckleford and Castlemaine Gold Projects, with the Fentiman's Reef Prospect located in the northern end of the South Muckleford Project**

Adjacent to the South Muckleford Gold Project, the Maldon Goldfield is the 7$^{th}$ largest goldfield in Victoria with historical primary production of >1,975,000oz (at an average grade of 28 g/t Au) and alluvial gold of 317,000oz.[2]

1. Ross Cayley, "Gold in Victoria – The Current State of Play"
2. Phillips G N 2010, Geoscience Victoria Special Publication

As the result of a concerted campaign of regional and infill surface geochemistry programs, detailed field mapping and rock chip sampling, Kalamazoo has identified a likely broad epizonal gold-antimony mineralised system at the Fentiman's and Smith's Reefs prospects. Kalamazoo considers this is an important development as this type of high-grade gold-antimony mineralisation is highly sought after as it is closely analogous to the nearby Fosterville and Costerfield mines in Central Victoria. It is reported that the Fosterville and Costerfield mines were the No.1 and No.6 highest milled grade gold mines worldwide in Q1 2020, respectively[3].

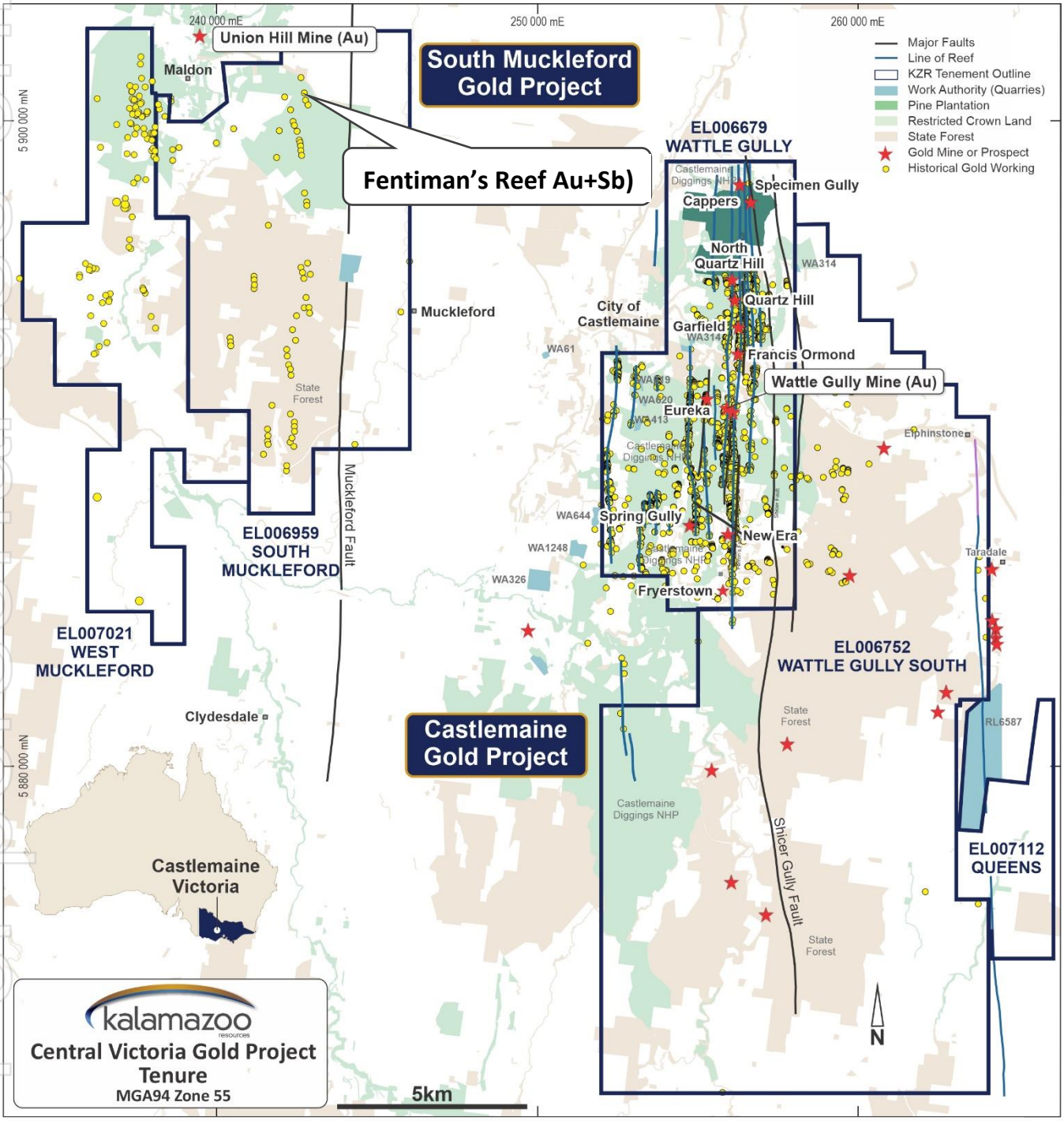


**Figure 2: Location of the Castlemaine and South Muckleford Gold Projects. Note the location of the Fentiman's Reef amongst the extensive line of historical gold workings in the hanging-wall position of the major Muckleford Fault**

3. Mines & Metals, 14 September 2020

The Fentiman's and Smith's Reef Au-Sb prospects are favourably located in the hanging-wall position of the major regional-scale Muckleford Fault which is considered a key deep-tapping conduit for gold mineralising fluids (Figure 2). It is interpreted that these new prospects are located within obliquely NNW oriented 2nd/3rd order splay structures off the Muckleford Fault, a key positive targeting criterion.

## Surface Geochemistry Sampling Programs

In February 2020, Kalamazoo reported the commencement of a major regional-scale soil geochemistry sampling program in collaboration with the CSIRO[4]. Specifically, soil samples have been subjected to Ultrafine+™ multi-element analysis for major and trace elements in a CSIRO-led collaborative leading-edge research project. This program is being undertaken in conjunction with a separate CSIRO Innovations Connections research project that uses the latest advanced technologies to map and detect broad mineral alteration haloes within soil samples. These combined surface geochemistry sampling programs are using the latest advanced technologies and research capabilities to assist Kalamazoo in identifying and prioritising drill targets to be tested at both the Castlemaine and South Muckleford Gold Projects.

Soil sampling programs have been designed on 200m x 100m grids covering a large number of high priority prospective target areas with known gold mineralisation across Kalamazoo's Castlemaine, South Muckleford and Tarnagulla Central Gold Projects. The target areas have been selected utilising a combination of data including the presence of prospective fault/fold structures, gold mineralised reefs, historical workings, low exploration maturity and historical drill hole intersections.

The Ultrafine+™ soil geochemistry analyses over the northern part of the South Muckleford Gold Project (EL006959) revealed significant gold + antimony + arsenic anomalies coincident with the historical mining area at Fentiman's Reef and Smith's Reef (Figures 3 & 4).

The Ultrafine+™ soil assays have revealed distinct NNW-trending features coincident with the historical mine workings and included up to 53 ppb Au, 167 ppm Sb and 1,740 ppm As. These anomalous features have since been further confirmed with a more detailed infill 50m x 50m grid using a portable XRF unit.

4. ASX: KZR 4 February 2020

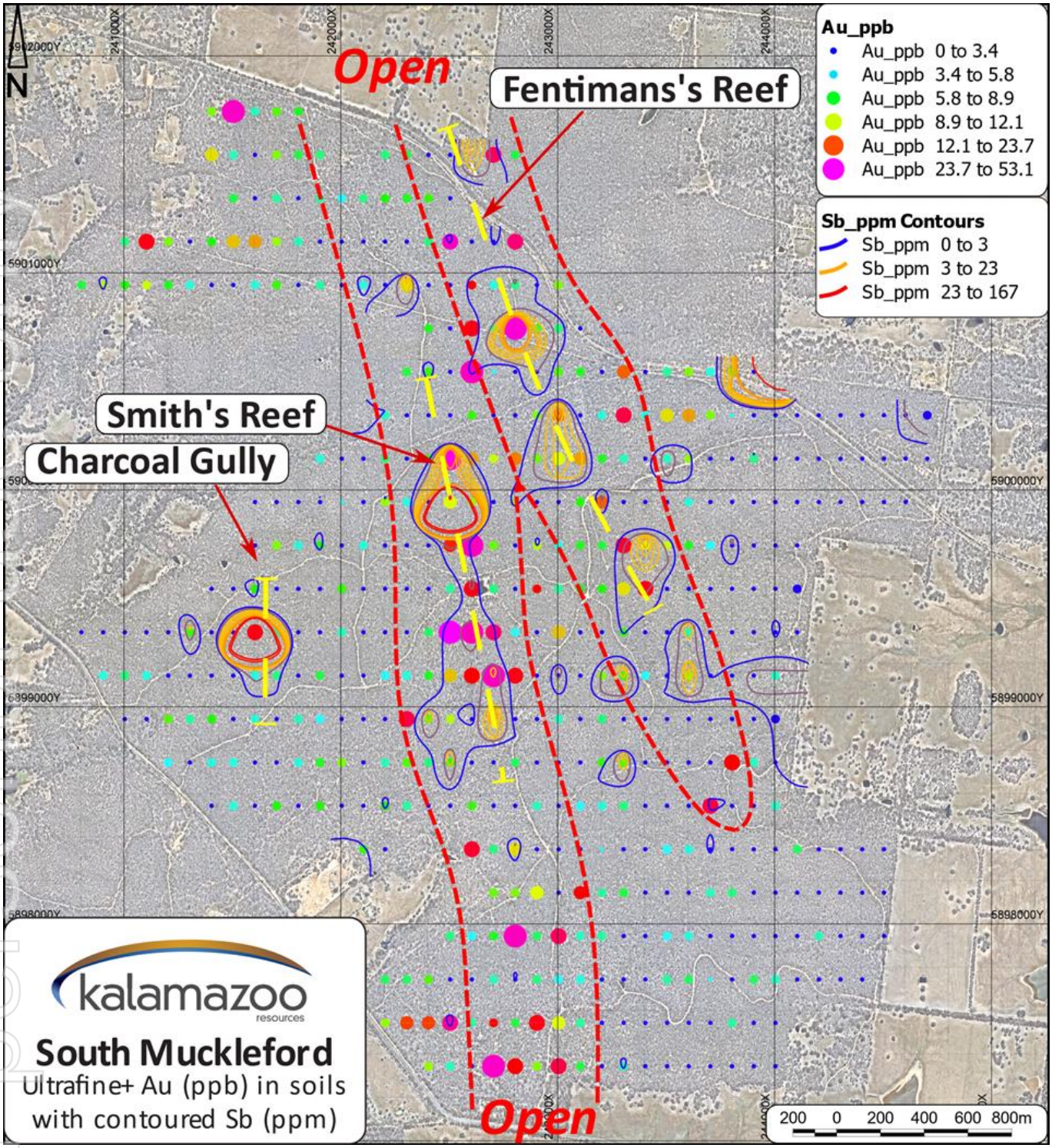


**Figure 3: Ultrafine+™ gold (ppb) with contoured Sb (ppm) in soil assays**

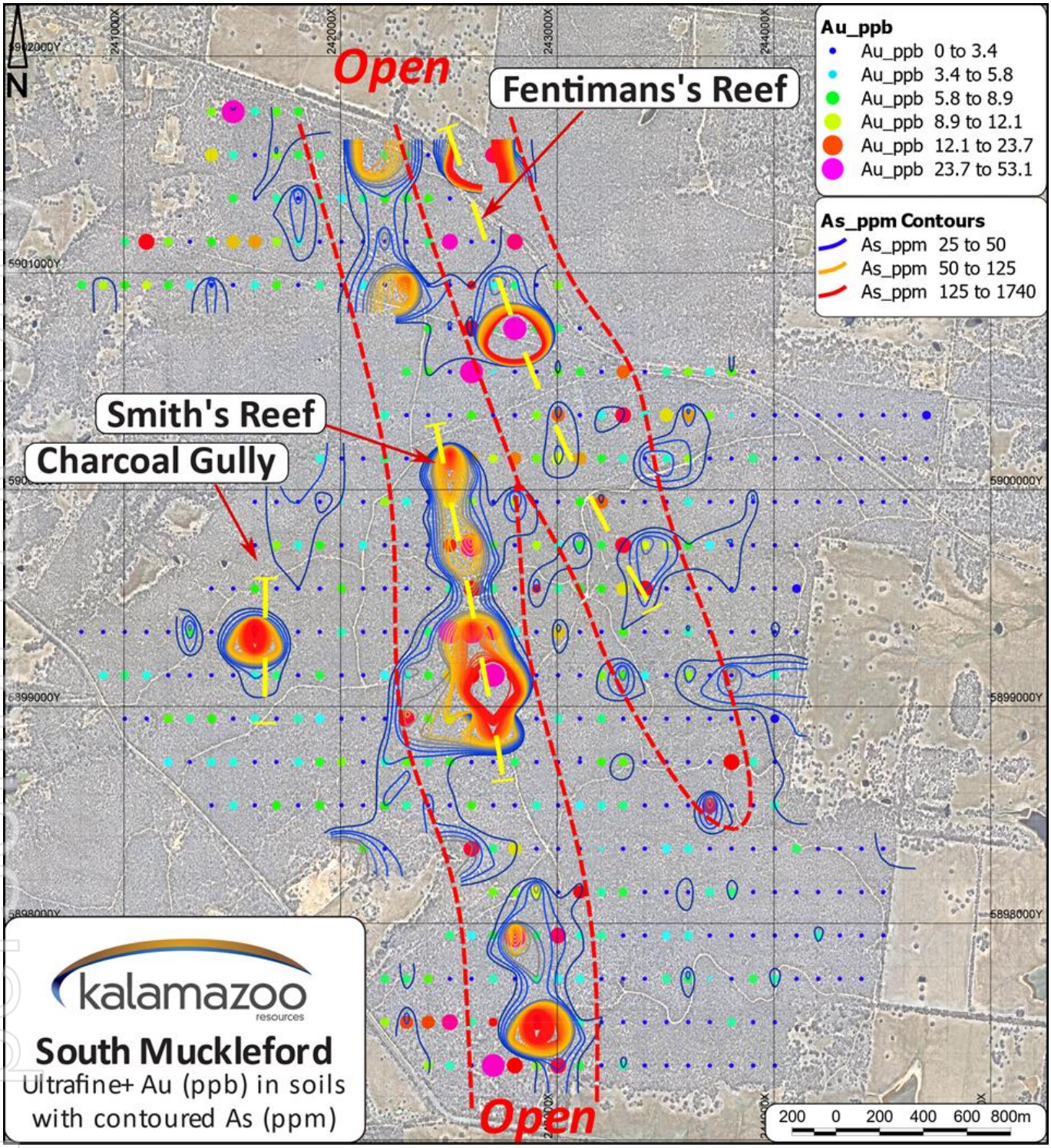


**Figure 4: Ultrafine+™ gold (ppb) with contoured As (ppm) in soil assays**

## Field Mapping and Rock Chip Sampling

At South Muckleford, a program of historical research, field mapping and rock chip sampling has confirmed the existence of a broad epizonal, high grade gold + antimony + arsenic mineralised system over at least two parallel lines of lode with significant strike extents. The largest of these lodes is at Smith's Reef which has historical surface/shaft mine workings extending for ~1.2km consistent with a coincident Au-Sb-As soil anomaly (Figures 3 & 4).

The Fentiman's Reef and the newly identified Fentiman's South prospect are along a semi-continuous line of historical surface/shaft mine workings that extends for at least 750m with the soil geochemistry indicating this mineralised trend extends beyond >1km long (Figures 3 & 4).

A third nearby prospect located to the west of Smith's Reef, referred to as "Charcoal Gully", has also been identified from the Ultrafine+™ soil sampling survey (up to 13.8 ppb Au and 146 ppm Sb) (Figures 3 & 4). Here, there is less rock outcrop with limited historic mine workings and its evaluation is ongoing.

The style of mineralisation observed from rock samples collected from historical mine waste dumps along the Fentiman's Reef/Fentiman's South trend includes quartz veins containing strongly mineralised styolites and breccias with disseminated stibnite, arsenopyrite, pyrite (Figure 5). Furthermore, these veins contain vugs and colloform textures indicative of deposition at shallow ("epizonal") crustal depths.

A preliminary examination of these rock samples by Dr Chris Voisey, a leading academic expert in this style of deposit[5], concluded that this style of Au-Sb-As mineralisation is closely akin to that observed at the nearby Fosterville and Costerfield mines. This mineralisation is distinctly different to the typical "Bendigo-Ballarat" style of gold mineralisation, which is older and forms at deeper "mesozonal" levels.

5. Analysis of a Telescoped Orogenic Gold System: Insights from the Fosterville Deposit, Christopher Voisey, Andrew Tomkins and Yanlu Xing, April 25, 2020, Society of Economic Geologists, Inc.

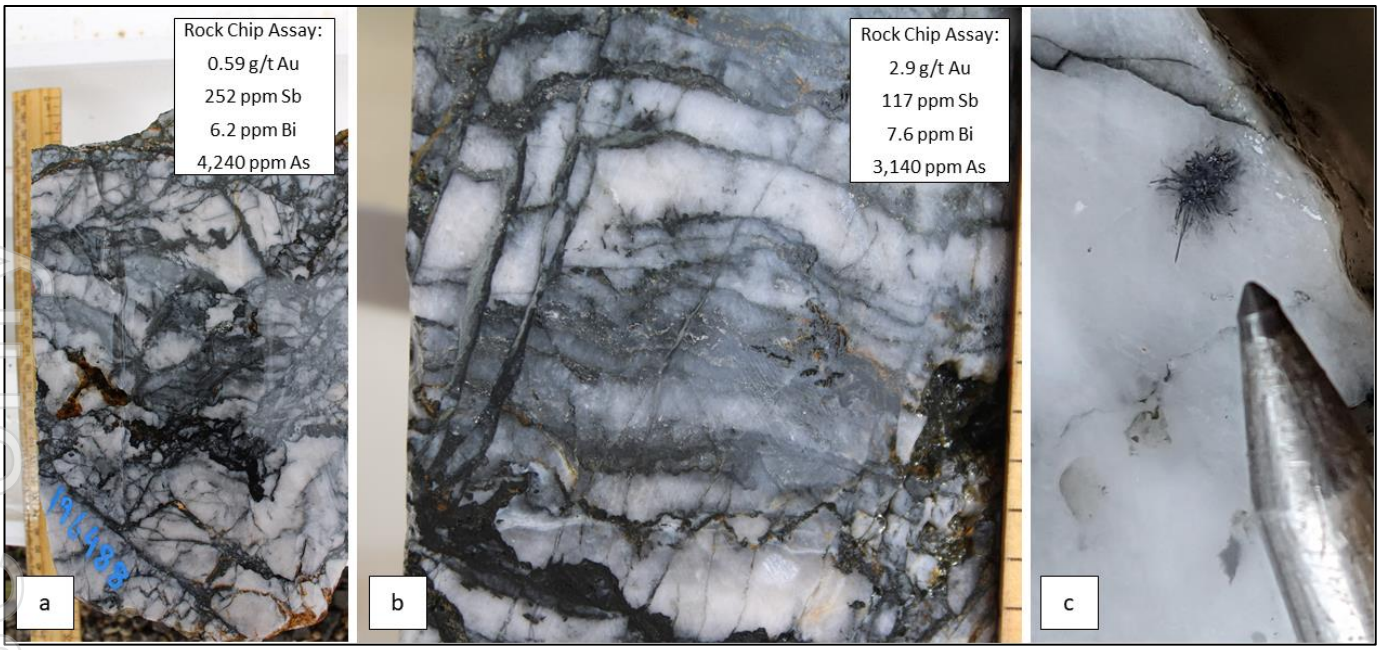


**Figure 5: Rock samples collected from the Fentiman's South historic mine waste dump (scale ruler in cm): (a) mineralised quartz vein with abundant styolite and breccia textures; (b) disseminated sulphides (arsenopyrite, stibnite and pyrite) within a styolitic and brecciated quartz vein; and (c) coarse stibnite ($Sb_2S_3$) crystals and thin styolites within a mineralised quartz vein**

## Historical Mine Records

A detailed investigation into the historical mining activities at the South Muckleford Gold Project has revealed that the Fentiman's Reef mine was in operation from approximately 1860-1904 with high-grade gold production reported to be in the order of ~1 oz/t Au. The mine records available show that mining continued down to a depth of 630 ft (~192m) with high-grade gold associated with "lenticular patches and veins of sulphide of antimony". At the 630 ft level a stibnite lode was reportedly 2 ft 6 in (~0.76m) wide and assayed 13 dwt (~20 g/t) Au and 42.5% Sb[6].

There are little to no historic mine production records for the Smith's Reef mine area despite the presence of numerous large shafts and operations that spanned for many years. Similarly, two small mine shafts have been found in the Charcoal Gully area, yet there are no known associated mine production records.

6. The Bendigo Independent, 4 August 1900, 27 August 1900, 3 December 1900, 6 October 1902, 13 October 1902 and 27 October 1902 and Bendigo Advertiser, 20 October 1902, and 21 October 1902

## Next Steps

- Ongoing field mapping, rock chip sampling and analysis
- Native Title and Mining Heritage Inspections and Management Plans (January-February 2021)
- Detailed ground geophysical (Induced Polarisation or "IP") surveys over the entire Fentiman's and Smith's Reef prospects as well the Charcoal Gully soil geochemical anomaly (January-February 2021)
- Aerial LiDAR survey of the northern portion of EL006959 to assist with the mapping of geological structures and identification of historic mine workings (January-February 2021)
- 3D structural geology modelling and diamond drilling program designs (January-February 2021)
- All ground activities are being conducted in accordance with the Company's COVID-19 policies and procedures with the commencement of drilling activities dependent upon State and Federal COVID-19 health guidelines and ERR permitting

This announcement has been approved for release to the ASX by Luke Reinehr, Chairman and CEO, Kalamazoo Resources Limited.

## For further information, please contact:


**Luke Reinehr**
Chairman/CEO
luke.reinehr@kzr.com.au

**Tom Whiting**
Taylor Collison
twhiting@taylorcollison.com.au

Media & Investor Relations (Australia)
**Victoria Humphries**
victoria@nwrcommunications.com.au

Media & Investor Relations (Canada)
**Leo Karabelas:** leo@fcr.ca
**Tom Panoulias:** tom@fcr.ca


**Previously Released ASX Material References**

For further details relating to information in this announcement please refer to the following ASX announcements:

ASX: KZR 4 February 2020
ASX: KZR 19 October 2020

## Response to COVID-19

Kalamazoo has been proactively managing the potential impact of COVID-19 and has developed systems and policies to ensure the health and safety of its employees and contractors, and of limiting risk to its operations. These systems and policies have been developed in line with the formal guidance of State and Federal health authorities and with the assistance of its contractors and will be updated should the formal guidance change. Kalamazoo's first and foremost priority is the health and wellbeing of its employees and contractors.

To ensure the health and wellbeing of its employees and contractors, Kalamazoo has implemented a range of measures to minimise the risk of infection and rate of transmission to COVID-19 whilst continuing to operate. All operations and activities have been minimised only to what is deemed essential. Implemented measures include employees and contractors completing COVID-19 risk monitoring, increased hygiene practices, the banning of non-essential travel for the foreseeable future, establishing strong infection control systems and protocols across the business and facilitating remote working arrangements, where practicable and requested. Kalamazoo will continue to monitor the formal requirements and guidance of State and Federal health authorities and act accordingly.

## Competent Persons Statement

The information for the Victorian Projects is based on information compiled by Dr Luke Mortimer, a competent person who is a Member of The Australian Institute of Geoscientists. Dr Mortimer is an employee engaged as the Exploration Manager Eastern Australia for the Company and 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'. Dr Mortimer consents to the inclusion in this document of the matters based on his information in the form and context in which it appears.

## Forward Looking Statements

Statements regarding Kalamazoo's plans with respect to its mineral properties and programs are forward-looking statements. There can be no assurance that Kalamazoo's plans for development of its mineral properties will proceed as currently expected. There can also be no assurance that Kalamazoo will be able to confirm the presence of additional mineral resources/reserves, that any mineralisation will prove to be economic or that a mine will successfully be developed on any of Kalamazoo's mineral properties. The performance of Kalamazoo may be influenced by a number of factors which are outside the control of the Company and its Directors, staff and contractors.

**Table 1. JORC Code, 2012 Edition**

## Section 1 Sampling Techniques and Data

| 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.*<br>• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*<br>• *Aspects of the determination of mineralisation that are Material to the Public Report.*<br>• *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.* | • Soil samples referred to in this report are obtained from in situ soil samples overlying Palaeozoic sedimentary basement rocks of the Castlemaine Group.<br>• Soil sampling was conducted along 200m spaced E-W lines with a sample station every 100m i.e. a 200m x 100m grid pattern.<br>• The soil sampling interval was selected based upon previous studies which ascertained the alteration signature footprint associated with gold mineralisation in this region is >100m.<br>• At some prospects infill 50m x 50m grid soil sampling was completed utilising a portable hand-held XRF. The XRF data was used as a guide only to help position any future proposed drill sites.<br>• Soil sampling practice is appropriate to the generally residual soil profile of the area sampled and complies with industry best practice.<br>• Rock chip samples were collected ad-hoc either in-situ or from mine waste ("mullock") dumps.<br>• Rock chip samples collected from mine waste dumps are presumed sourced from the adjacent mine workings, but this cannot be confirmed. |
| *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).* | • Not applicable. |
| *Drill sample recovery* | • *Method of recording and assessing core and chip sample recoveries and results assessed.*<br>• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*<br>• *Whether a relationship exists between sample recovery and grade* | • Not applicable. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.* | |
| *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.*<br>• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*<br>• *The total length and percentage of the relevant intersections logged.* | • Not applicable. |
| *Sub-sampling techniques and sample preparation* | • *If core, whether cut or sawn and whether quarter, half or all core taken.*<br>• *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*<br>• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*<br>• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*<br>• *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.*<br>• *Whether sample sizes are appropriate to the grain size of the material being sampled.* | <u>SOIL SAMPLES</u><br>• Soil samples were collected in dry conditions and placed in numbered calico bags and grouped in poly-weave bags for dispatch to the laboratory.<br>• Soil sample size was generally 0.3-0.4 kg.<br>• Soil samples were directly delivered to the laboratory via tracked TOLL freight consignment.<br>• Soil sample preparation was conducted at the LabWest Laboratory, Perth, including sample sorting, drying, crushing and milling.<br>• Sample sorting: samples are weighed, and respective weights recorded. Any reconciliation (extra samples, insufficient sample, missing samples) is noted at this stage.<br>• Sample Drying: Samples are dried in calico bags in ovens at 105 deg C.<br>• Field duplicate soil samples were collected at a rate of 1:50. Duplicate results show an acceptable level of variability for the material sampled and style of mineralisation.<br>• Sample weights are recorded and provided by the laboratory.<br><br><u>ROCK CHIP SAMPLES</u><br>• Rock chip samples were placed in numbered calico bags and grouped in poly-weave bags for dispatch to the laboratory.<br>• Samples were directly delivered to the laboratory by Kalamazoo personnel or via tracked TOLL freight consignment. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | • Sample preparation was conducted at Bureau Veritas Laboratory, Adelaide including sample sorting, drying, crushing and milling.<br>• Sample sorting: samples are weighed, and respective weights recorded in LIMs. Any reconciliation (extra samples, insufficient sample, missing samples) is noted at this stage.<br>• Sample Drying: Samples are dried in calico bags in ovens at 105 deg C.<br>• Sample Crushing: Samples are jaw crushed to -6mm before being submitted for milling.<br>• Sample Milling: Charges of up to 3kg are milled to 90% passing 75um in an LM5 mill.<br>• No duplicate samples were collected.<br>• Sample weights are recorded and provided by the laboratory. |
| *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.*<br>• *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.*<br>• *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.* | <u>SOIL SAMPLES</u><br>• Assaying of the soil samples were conducted by LabWest, Perth.<br>• The Ultrafine+™ methodology utilises a <2µm size fraction. LabWest use a propriety hydraulic settlement procedure to collect the <2µm size fraction.<br>• A sub-sample of <2um material is taken for analysis.<br>• All samples were assayed for Au plus 44 elements using a microwave aqua regia digestion followed by ICPMS/OES determination.<br>• Sampling and assaying quality control procedures consisted of the inclusion of Certified Reference Materials (CRMs) at a rate of 1:30.<br>• Analysis of the available QC sample assay results for gold indicates that an acceptable level of accuracy and precision has been achieved and the database contains no analytical data that has been numerically manipulated.<br>• QC of the remaining multi-element data is ongoing.<br>• The assaying techniques and quality control protocols used are considered appropriate for the data to be used for reporting exploration soil geochemistry results. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | ROCK CHIP SAMPLES<br>• Assaying of the rock chip samples were conducted by Bureau Veritas Laboratory, Adelaide.<br>• Gold analyses (ppm) were initially determined by 40g fire assay with AAS finish.<br>• The high-grade Au assay results reported were subsequently confirmed via re-assays utilising repeated (triplicate) 50g fire assay with gravimetric finish.<br>• All samples were assayed for a further 37 elements using a 4-acid digestion followed by ICP-AES/ICP-MS determination.<br>• Sampling and assaying quality control procedures consisted of the laboratory inclusion of Certified Reference Materials (CRMs), coarse 'blanks and sample duplicates.<br>• Assays of quality control samples were compared with reference samples for gold and verified as acceptable prior to use of data from analysed batches. QC of the remaining multi-element data is ongoing.<br>• Analysis of the available QC sample assay results for gold indicates that an acceptable level of accuracy and precision has been achieved and the database contains no analytical data that has been numerically manipulated. The assaying techniques and quality control protocols used are considered appropriate for the data to be used for reporting exploration drilling results. |
| *Verification of sampling and assaying* | • *The verification of significant intersections by either independent or alternative company personnel.*<br>• *The use of twinned holes.*<br>• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*<br>• *Discuss any adjustment to assay data.* | • All sampling and assay information were stored in a secure database with restricted access.<br>• Digital sample submission forms provided the sample identification numbers accompanying each submission to the laboratory.<br>• All sampling and assaying documentation are validated and stored off-site with an independent third party.<br>• Assay results from the laboratory with corresponding sample |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | | identification are loaded directly into the database.<br>• No assay adjustments have been applied.<br>• Verification of the soil and rock chip sample assay results has been completed by company personnel and the Competent Person. |
| *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.*<br>• *Specification of the grid system used.*<br>• *Quality and adequacy of topographic control.* | • All sample locations (x-y) have been recorded with a 64s Garmin Handheld GPS with 3-5m accuracy and height (z) relative to AHD.<br>• All sample location coordinates are provided in the Geocentric Datum of Australia (GDA94 Zone 55S).<br>• RL data is verified utilising publicly available SRTM-derived (~30m pixel) Digital Elevation Model. |
| *Data spacing and distribution* | • *Data spacing for reporting of Exploration Results.*<br>• *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.*<br>• *Whether sample compositing has been applied.* | • Sample spacing: 100m along east west lines; lines spaced 200m north-south (MGA94).<br>• Location of rock chip samples is ad-hoc.<br>• No sample compositing is applied to samples. |
| *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.*<br>• *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.* | • The strike of the geology is approximately north-south with slight variation dependent upon the location within the exploration licence.<br>• Sample spacing and orientation is reconnaissance in nature and not targeted at specific structures or known trends of mineralisation. |
| *Sample security* | • *The measures taken to ensure sample security.* | • Samples were secured in closed polyweave sacks and stored at company premises.<br>• All samples have been delivered direct to the laboratory via tracked TOLL freight consignment. |
| *Audits or reviews* | • *The results of any audits or reviews of sampling techniques and data.* | • Due to the limited duration of the program, no external audits or reviews have been undertaken. |

## Section 2 Reporting of Exploration Results

| 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.*<br>• *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.* | • EL006959 is 100% owned by Kalamazoo Resources Ltd and is in good standing with no known impediments.<br>• A proportion of EL006959 consists of the Muckleford Conservation Reserve and Maldon Historic Reserve which are both classified as Restricted Crown Land although that does not prohibit gold exploration and mining. |
| *Exploration done by other parties* | • *Acknowledgment and appraisal of exploration by other parties.* | • The project area has been explored and mined for both alluvial and quartz-vein gold mineralisation by numerous previous parties since the mid-1800s.<br>• The results of this work including past production is described in numerous publicly available Geological Survey of Victoria publications.<br>• Appraisal of the substantial volume of historical exploration and mine production records occurred during the due diligence period and is ongoing. |
| *Geology* | • *Deposit type, geological setting and style of mineralisation.* | • The Castlemaine and South Muckleford Gold Projects contain known gold deposits/occurrences typical of the Bendigo Zone of Central Victoria.<br>• Primary gold mineralisation is described as orogenic in nature, structurally controlled, and associated with quartz-veining and lesser sulphide 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>○ *easting and northing of the drill hole collar*<br>○ *elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar*<br>○ *dip and azimuth of the hole* | • Not applicable. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | ○ *down hole length and interception depth*<br>○ *hole length.*<br>• *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.* | |
| *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.*<br>• *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.*<br>• *The assumptions used for any reporting of metal equivalent values should be clearly stated.* | • Significant soil sample anomalies >12 ppb Au 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').* | • The exact relationship of results reported to any mineralisation present is unknown at the time of reporting although as described some soil gold anomalies are coincident with known historic gold mine workings. This relationship is still to be fully evaluated. |
| *Diagrams* | • *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should* | • As provided. |

| Criteria | JORC Code explanation | Commentary |
|---|---|---|
| | *include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.* | |
| *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.* | • Only significant soil sample assay results (>12 ppb Au) have been reported. |
| *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 to report. |
| *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).*<br>• *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.* | • Field validation of significant soil geochemistry anomalies is ongoing. This practice involves physically observing each gold anomalous soil sample site to verify its validity and to ascertain whether it is in-situ material, alluvial deposit, or otherwise contaminated site. |