

April 1<sup>st</sup>, 2021 Market Release

# EXPLORATION ON AUSMEX (15 SQKLM) OWNED EPM, ADJOINING THE WESTERN BOUNDARY OF GOLDEN MILE GOLD PROJECT & INCLUDES THE KING BROWN MANGANESE AND COBALT PROSPECT. MANGANESE/COBALT NEAR SURFACE AND BELOW THE 5KLMS LONG SUB AUDIO MAGNETIC (SAM) N/S STRIKING GEOPHYSICAL ANOMALY.

# Sample 1 Manganese 25.25%, Cobalt 3,870ppm, Iron 28.21% Sample 2 Manganese 24.76%, Cobalt 7,200ppm, Iron 24.99% Sample 3 Manganese 21.70%, Cobalt 8,520ppm, Iron 31.49%

The Company has followed up the drilling of diamond core holes previously announced (ASX: AMG 21<sup>st</sup> Nov 2019) that intersected mineralization of the King Brown outcrop, located just west of the Golden Mile Gold project. The King Brown consists of a prominent 6-kilometre North-South striking outcrop of Ironstone/Manganese and recorded in the Sub Audio Magnetic (SAM) geophysical survey and up to 700m wide (see Fig 4). The outcrop was described in a Government Report as "Ironstone Cobalt Bearing" (see Fig 1). The outcrop above ground is up to 4 metres high and dips approx. 80 deg to the West (See fig 2 & 3). A costean was excavated at the base of the hill to intersect the target, approx. 30m below the outcrop. Random samples were taken from the costean (see Fig 5 & 6) assayed by XRF, 21.70% Mn and 8,520ppm Co, 24.76% Mn and 7,200ppm Co, 25.25% Mn and 3,870ppm Co. Additional costeaning is also underway for the excavation of visual outcropping quartz breccia striking NW/SE with Copper (Malachite)/Cobalt (Erythrite), minerals located 150m to the West.

**Manganese**, an industrial metal once primarily used for the manufacturing of steel, with all steel requiring 1-2% of Manganese. However, increasingly, beneficiated high-grade Manganese is being consumed more and more into the energy sector as one of the key ingredients, as well as being used as a substitute for Nickel in certain applications. **Cobalt** is a key ingredient for Lithium batteries and is the prime material for playing a crucial role in stabilizing the battery and boosting their energy density. LME Cobalt Price: Today: \$US51,865 tonne.



Fig 1. Historical Gov map - Cobalt bearing Ironstone.



Fig 2. One section of Cobalt bearing Ironstone outcrop.





Fig 3. Prominent outcrop of Cobalt bearing ironstone.



Fig 4. +5klms North-South SAM anomaly over K. Brown.



**Fig 5.** BIF sample containing Manganese and Cobalt.



Fig 6. BIF sample containing Manganese and Cobalt.

# 230 M NAV	lining Cu/Zn Tools	
Ele	8 ±2σ	
Bal	45.76 2.20	
Ti	0.091 0.051	
Mn 2	25.25 1.01	
Fe <sup>2</sup>	28.21 1.18	
Co	0.387 0.084	
Ni	0.060 0.030	
Cu	0.069 0.017	
As	0.007 0.004	
Sr	0.089 0.008	

Fig 7. Sample 1 XRF assay result.



# 247 Mining Cu/Zn NAV Tools Ele 8 ±2σ Bal 45.75 2.58 Mn 21.70 1.01 Fe 31.49 1.54 Co 0.852 0.118 Ni 0.064 0.039 Sr 0.101 0.010

Fig 8. Sample 2 XRF assay result.

Fig 9. Sample 3 XRF assay result.



The Company is completing follow up exploration from previous drilling as well above average grade results from mineral sampling and geophysical survey data. Exploration and follow up underway whilst waiting for the granting of the Golden Mile Mining Lease expected shortly. The primary focus for Ausmex is Gold Production from Mt Freda and the Golden Mile projects currently, undergoing feasibility and development costing and regulatory requirements. The approvals for the Golden Mile were held up due to the compensation agreement with the local grazier who leases the area for grazing cattle. The Land Court has received submissions and we are advised that the compensation value is being determined finally.

**Demand for Cobalt:** Cobalt is considered one of the most "high demand" metals in the world with the ever-increasing demand for electric vehicle batteries and industrial and domestic battery storage. However, the Cobalt demand for the electric motor vehicle batteries is being challenged by 5G technology. The need for larger rechargeable batteries and more energy storage for 5G technology is expected to significantly boost demand for Cobalt and potentially pit the sector against electric vehicle makers. 5G demand for portable devices will see Cobalt rise in 2025, with consumption for batteries for portable uses estimated to increase from 45,000 tonnes to 73,000 tonnes (Reuters). The Lithium battery without Cobalt is unstable so without Cobalt the Lithium battery cannot be considered stable. The Cobalt also adds more efficiency and energy density, thus making the battery hold more electricity for longer use. Hence the cost of Cobalt is 5 times greater than Lithium \$US11,500 tonne. Cobalt \$US51,865 tonne (LME 30<sup>TH</sup> March 2021) with expected consumption to way outstrip supply. The King Brown.

The results from this latest exploration program, together with historical exploration results from previous exploration (ASX: AMG 7<sup>th</sup> August 2017), over this heavily mineralized area have made the effort more than worthwhile. The exploration has now be expanded as a result of these encouraging results and further rewards the company for its effort to increase value for our shareholders. The excavation of the trenching (costeaning) has now moved further to the North West where high grade Cobalt, Gold and Copper were detected in the first sampling of project. With the aid of the mobile XRF assaying, the Company can now assay and report base metal assays more readily to shareholders, however, assaying for Gold requires assaying at the Townsville mineral assay laboratories.

#### **Previously Reported Information**

The information in this report that references previously reported Exploration Results and Mineral Resources is extracted from the Company's ASX market announcements released on the date noted in the body of the text where that reference appears. The previous market announcements are available to view on the Company's website or on the ASX website (www.asx.com.au). The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcements.



#### **Forward Looking Statements**

The materials may include forward looking statements. Forward looking statements inherently involve subjective judgement, and analysis and are subject to significant uncertainties, risks, and contingencies, many of which are outside the control of, and may be unknown to, the company.

Actual results and developments may vary materially from that expressed in these materials. The types of uncertainties which are relevant to the company may include, but are not limited to, commodity prices, political uncertainty, changes to the regulatory framework which applies to the business of the company and general economic conditions. Given these uncertainties, readers are cautioned not to place undue reliance on forward looking statements.

Any forward-looking statements in these materials speak only at the date of issue. Subject to any continuing obligations under applicable law or relevant stock exchange listing rules, the company does not undertake any obligation to publicly update or revise any of the forward-looking statements, changes in events, conditions or circumstances on which any statement is based.

#### **Competent Persons Statement**

Information in this Announcement is compiled and reviewed by Mr Aaron Day, Managing Director of Ausmex Mining Group Ltd. Mr Day is a Member of the Australasian Institute of Mining and Metallurgy (336610). Mr Day has sufficient experience that is relevant to the style of mineralisation and the type of deposit under consideration and to the activity he has undertaken to qualify as a Competent Person as defined in the 2012 edition of the 'Australian Code for the Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Day consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

#### Authorised by Aaron Day, Managing Director.

For Further Information, please contact

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#### Table 1. Sample location details

PROJECT	SAMPLE	EASTING (MGA94)	NORTHING (MGA94)
King Brown	Sample 1	471314	7681849
King Brown	Sample 2	471342	7681872
King Brown	Sample 3	471318	7681866



## JORC Code, 2012 Edition – Table 1 report

## Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<ul> <li>Random rock chip samples taken by G pick</li> <li>Samples were ~2-3kg in weight</li> <li>Samples were selected from outcropping mineralisisation within EPM 14163 and mineralised zone samples from costeans also within EPM 14163.</li> </ul>
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).	• No drilling, logging or sampling was conducted as part of this release.



Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	•	No drilling, logging or sampling was conducted as part of this release.
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	•	No drilling, logging or sampling was conducted as part of this release.
Sub-sampling techniques and sample preparation	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	•	No drilling, logging or sampling was conducted as part of this release.
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis</li> </ul>	•	Thermo Scientific Niton XL2 950 GOLDD Hand Held XRF was used. XRF Sampling time is 60 seconds for heavy elements and 90 seconds for light elements.



	<ul> <li>including instrument make and model, reading times, calibrations factors applied and their derivation, etc.</li> <li>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.</li> </ul>	•	Calibration standards are used.
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	•	No drilling, logging or sampling was conducted as part of this release.
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	•	Rock chip sample locations were collected from within EPM 14163. The sample location was recorded by Hand Held GPS (accuracy +/- 3m) and recorded in MGA94, Zone 54 Datum
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	•	Data spacing, and distribution is NOT sufficient for Mineral Resource estimation. No sample compositing has been applied. Rock chip samples were taken randomly along strike of the mineralisation and within costean walls.
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>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.</li> </ul>	•	The orientation of samples is not likely to bias the assay results.



Sample security	• The measures taken to ensure sample security.	<ul> <li>Samples were taken to Cloncurry by company personnel and despatched by courier to the SGS Laboratory in Townsyille</li> </ul>
Audits or reviews	• The results of any audits or reviews of sampling techniques and data.	<ul> <li>No audits or reviews have been undertaken at this stage.</li> </ul>

## 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	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>ML2718, ML2709, ML2713, ML2719, ML2741 &amp; EPM14163 are owned 100% by Spinifex Mines Pty Ltd. Ausmex Mining Group Limited owns 80% of Spinifex Mines Pty Ltd. Queensland Mining Corporation Limited own 20% of Spinifex Mines. Exploration is completed under an incorporated Joint Venture.</li> <li>80% beneficial interest in sub blocks CLON825U &amp; CLON825P from EPM15923 &amp; 80/20 JV with CopperChem.</li> <li>EPM14475, EPM15858, &amp; EPM18286 are held by QMC Exploration Pty Limited. Ausmex Mining Group Limited owns 80% of QMC Exploration Pty Limited. Queensland Mining Corporation Limited own 20% of Spinifex Mines. Exploration is completed under an incorporated Joint Venture.</li> <li>ML2549, ML2541, ML2517 are 100% owned by Ausmex.</li> </ul>



Exploration • done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul><li>All exploration programs conducted by Ausmex Mining Group Limited.</li><li>Reference to historical mining</li></ul>
Geology •	Deposit type, geological setting and style of mineralisation.	<ul> <li>ML2718, ML2709, ML2713, ML2719 hosts the Gilded Rose sheer hosted quartz reef. There are several golds mineralised hydrothermal quartz reefs within the deposit.</li> <li>ML2741 hosts the shear hosted quartz rich Mt Freda Gold deposit containing Au, Cu, &amp; Co.</li> <li>ML2549, ML2541, ML2517 host copper mineralisation associated with carbonate intrusions into altered mafic host rocks.</li> <li>EPM14163 &amp; EPM 15858 contain There are several gold mineralised hydrothermal quartz reefs within the deposit containing Au, Cu, &amp; Co.</li> </ul>
Drill hole Information	<ul> <li>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:</li> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> <li>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.</li> </ul>	<ul> <li>No drilling, logging or sampling was conducted as part of this release.</li> </ul>



Data aggregation methods	<ul> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul> <li>No drilling, logging or sampling was conducted as part of this release.</li> <li>No material information is excluded.</li> <li>No intersections have been reported as part of this release</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul> <li>No material information is excluded.</li> <li>No drilling, logging or sampling was conducted as part of this release.</li> <li>No intersections have been reported as part of this release.</li> </ul>
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.	<ul> <li>Maps showing the location of the EPMs and MLs are presented in the announcement.</li> <li>Appropriate relevant and labelled X sections attached.</li> </ul>
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	• All comprehensive assay results have been reported to the ASX.



	practiced to avoid misleading	
	reporting of Exploration Results.	
Other substantive exploration data	<ul> <li>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.</li> </ul>	
Further work	<ul> <li>The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Additional mapping, costeans, geophysical surveys, RC and Core drilling.</li> </ul>