ASX Announcement



31 October 2019

Quarterly Activities and 5B Cashflow Report for Period Ended 30 September 2019

Highlights:

Updated Mineral Resource Estimate

- Inferred Mineral Resource of 9.0Mt @ 9.5% Zn+Pb at a 5.5% ZnEq cut off
 - o Increase to 860,000 tonnes of contained Zn + Pb

Drilling Intersects Significant Zinc Outside of Updated Resource Boundary

- Drilling in Fault Compartment 3 ("FC-3") confirms significant Resource growth potential
 - o Potentially connects McGregor and Shamrock Resources
- Drill hole HZDD004 returned multiple thick, high-grade intercepts 200m from Resource including:
 - o 6m @ 12.5% Zn + Pb (11.7% Zn, 0.8% Pb) from 401m to 407m; and
 - o 10m @ 9.1% Zn + Pb (8.2% Zn, 0.9% Pb) from 418 to 428m.

within a larger zone of 37m @ 6.0% Zn + Pb (5.5% Zn + 0.5% Pb) from 391m.

- Drill hole HZDD005 intersected multiple zones of high-grade zinc mineralisation as follows:
 - o 5m @ 15.1% Zn + Pb (13.7% Zn, 1.4% Pb) from 391m to 396m; and
 - o 2m @ 23.1% Zn + Pb (17.6% Zn, 5.5%Pb) from 400m to 402m;

within a larger zone of 20m @ 7.9% Zn + Pb (6.9% Zn, 1.0% Pb) from 385m to 405m.

- o An additional zone of 3m @ 9.85% Zn + Pb (7.95% Zn, 1.9% Pb) from 440m to 443m.
- Each of the Company's reported FC-3 drill holes (HZDD002, HZDD004, HZDD005) have also intersected broad zones of upper level mineralisation
- FC-3 drilling continues, and more results expected in the current Quarter
- Approximately \$2.6 million cash and liquid asset position at end of Quarter



European base metals explorer Zinc of Ireland NL (ASX: ZMI) ("ZMI" or "Company") had a very productive quarter, where activities ramped up at its 100%-owned Kildare Zinc Project in Ireland.

The key technical achievements were the updated independent mineral resource estimate for the Kildare Project which now stands at **9.0Mt** @ **9.5% Zn+Pb**, and the drilling outside of the Resource in FC-3 which has continually intersected significant zinc-lead mineralisation and presents an immediate opportunity for resource growth.

Updated Mineral Resource Estimate

As per the Company's announcement dated 31 July 2019, during the Quarter the Company reported an updated independent resource estimate for the Kildare Project which now stands at **9.0Mt @ 9.5% Zn+Pb**. Full details of the mineral resource estimate are available in the ASX release dated 31 July 2019.

Details of the Inferred Mineral Resource for the McGregor and Shamrock Zones of the Kildare Zinc Project is summarised in Table 1. The preferred ZnEq cut off grade is 5.5%.

Table⊡ McGregorखnd®hamrock Inferred®Mineral®Resource							
Deposit	ZnEqICutIOffI(%)	∄Mt	Zn%	Pb%	Pb%+Zn%	Zn₫(kt)	Pb∄kt)
McGregor	5.0	6.9	8.1	1.4	9.5	558	93
Shamrock	5.0	3.7	7.0	1.0	7.9	261	36
Total	5.0	10.6	7.7	1.2	8.9	819	129
McGregor	5.5	5.8	8.7	1.5	10.2	505	85
Shamrock	5.5	3.3	7.3	1.0	8.3	238	31
Total	5.5	9.0	8.2	1.3	9.5	743	116
McGregor	6.0	4.9	9.3	1.6	10.9	460	77
Shamrock							
Total	6.0	7.6	8.8	1.4	10.1	665	104

- Due to rounding, numbers presented throughout this document may not add up precisely to the totals provided
- The ratio between Pb and Zn (0.8) is based on long term average price assumptions of \$2,500 per tonne for zinc (Zn) and \$2,000 per tonne for lead (Pb)
- ZnEq = (Zn% * Zn recovery) + (0.8* (Pb% * Pb recovery)).
- ZnEq = (Zn% * 0.9639) + (0.8 * Pb% * 0.8644)



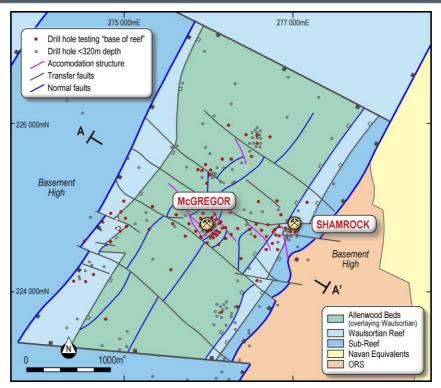


Figure 1: Schematic geological and structural map of the Allenwood Graben

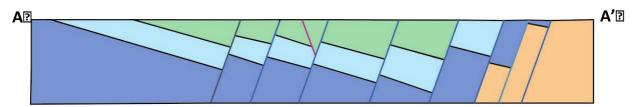


Figure 2: Schematic cross-section through the Allenwood Graben

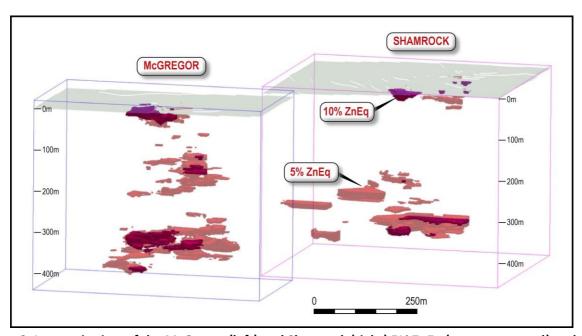


Figure 3: Isometric view of the McGregor (left) and Shamrock (right) 5% ZnEq (transparent red) and 10% ZnEq (solid pink) grade shells (note scale bar = 100m, vertical = horizontal scale). Other structures and lithostratigraphic boundaries omitted for clarity.



Figure 4 summarises the tonnage distribution, by 10m RL increment, based on a 5% ZnEq cut off, subdivided for McGregor (blue) and Shamrock (red). The graph clearly shows that the system is mineralised at multiple levels, in both McGregor and Shamrock. The 'Upper', 'Above Waulsortian', Waulsortian and 'base of reef' or 'Below Waulsortian' mineralisation are evident, with Pb-Zn mineralisation being intersected over 500m of vertical extent.

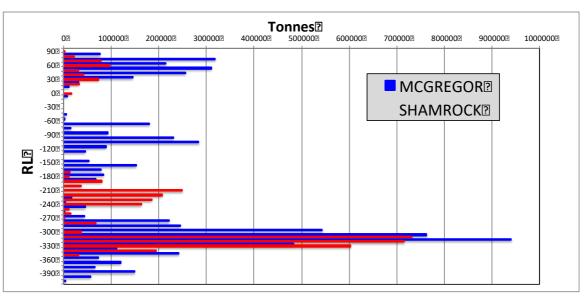


Figure 4: Resource distribution graph subdivided by 10m RL increment for McGregor and Shamrock, based on a 5% ZnEq cut off grade

Fault Compartment 3 Drilling - Significant Zinc Intersected Outside of Updated Resource Boundary

HZDD004 (reported to ASX on 29 August 2019): Diamond drill hole HZDD004 intersected **6m @ 12.5% Zn+Pb** (11.7% Zn, 0.8% Pb) from 401m downhole depth and **10m @ 9.1% Zn+Pb** (8.2% Zn, 0.9% Pb) from 418m downhole depth at the base of Waulsortian Reef position (using a 5.5% ZnEq cut-off, 4m minimum intersection width and 4m maximum internal dilution).

The higher grade intersections in HZDD004 were contained within a larger mineralised zone of **37m** @ **6% Zn+Pb** (5.5% Zn, 0.5% Pb) from 391m, and using a 4% ZnEq cut-off, 4m minimum intersection width and 6m maximum internal dilution.

HZDD004 intersected the base of reef position approximately in the centre of FC-3.

It is of note that HZDD004 also intersected zinc mineralisation higher in the stratigraphic sequence between 219m and 237m (diluted overall intersection of 18m at 1.8% zinc, including 4m at 4.4% zinc from 227m to 231m). In addition, the reported larger mineralised zone (from 391m to 428m down hole) is surrounded by a wide zone of lower grade zinc and lead mineralisation (from 365m to 468m down hole), which suggests that a volumetrically significant mineralised system has been intersected.

HZDD005 (reported to ASX on 26 September 2019): Diamond drill hole HZDD005 has intersected high-grade zinc mineralisation, returning **5m @ 15.1% Zn + Pb** (13.7% Zn, 1.4% Pb) from 391m to 396m and **2m @ 23.1% Zn + Pb** (17.6% Zn, 5.5%Pb) from 400m to 402m (based on a strict 5.5% ZnEq cut-off), at the base of Waulsortian Reef position.



As was also the case in the previous drill hole HZDD004, these two high grade intersections lie within a broader interval of **20m @ 7.9% Zn + Pb** (6.9% Zn, 1.0% Pb) between 385m and 405m (based on the current standard intersection cut off algorithm of 5.5% ZnEq, 4m minimum intersection width and 4m maximum continuous internal dilution), which continues to confirm that a volumetrically significant mineralised system has been intersected.

It is of note that HZDD005 also intersected lower grade zinc mineralisation higher in the stratigraphic sequence from 205m to 245m (diluted overall intersection of 40m at 0.8% zinc). In addition, the reported broader mineralised zone (from 385m to 405m down hole) is surrounded by a wide zone of lower grade zinc and lead mineralisation (from 360m to 410m down hole), which reinforces the inference that a volumetrically significant mineralised system has been intersected within FC-3.

In addition, the intersection of zinc mineralisation within the upper part of the Waulsortian Reef in HZDD005 is consistent with ZMI's other upper zone drilling results from elsewhere in FC-3 (refer to Figure 5). HZDD004 intersected zinc mineralisation between 219m and 237m (diluted overall intersection of 18m at 1.8% zinc, including 4m at 4.4% zinc from 227m to 231m), and HZDD002, on the eastern boundary of FC-3 intersected upper zone mineralisation of 25.5m @ 2.1% Zn + Pb (1.8% Zn, 0.3% Pb) from 327m-352, despite the key target zone at the base of the Waulsortian Reef being faulted out. This upper Waulsortian Reef zinc mineralisation represents an additional exploration target, as significant zinc-lead mineralisation occurs in this stratigraphic position at McGregor and Shamrock.

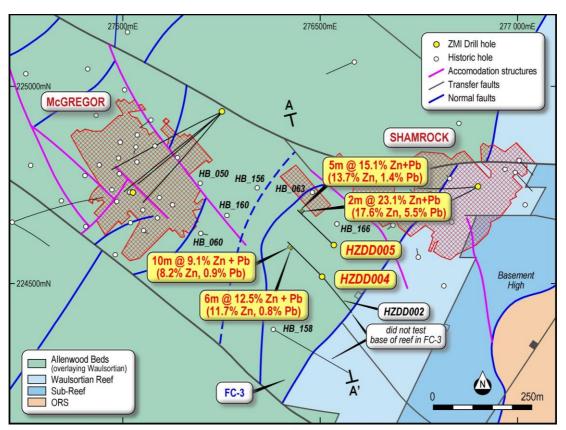


Figure 5: Plan view of Fault Compartment 3 (FC-3) location on local geology (1:5,000) and only showing drill collars and traces from all drill holes that have intersected the Waulsortian base of reef position as at the end of the Quarter; blue lines are extensional



normal faults (blue dashed line is the base of reef projection of the normal fault within FC-3), black lines are transfer faults and magenta lines are accommodation structures; red meshes are Zn grade shells/resource outline projected to surface.

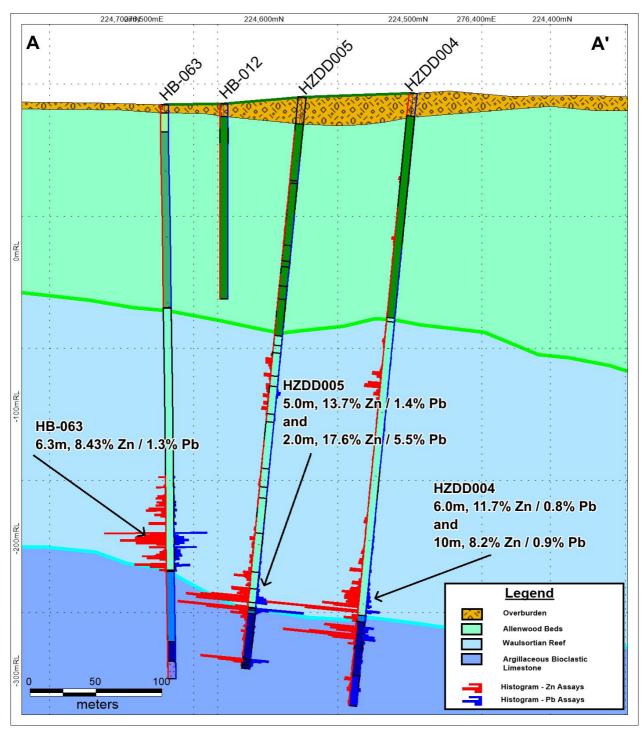


Figure 6: N-S cross section, looking E, through historical hole HB_063 and ZMI holes HZDD004 and HZDD005.

The only historical drilling in FC-3 that intersected the primary base of reef position was in drill holes HB_063 and HB_166. These two holes were both drilled in the northern portion of FC-3, and both of which encountered zinc mineralisation including:

HB_063: 11.3m @ **6.2% Zn, 1.3% Pb** (from 323.7m)

HB_166: 1m @ **5% Zn, 1.2% Pb** (from 297m)

1m @ 13.8% Zn, 2.4% Pb (from 347.6m)

1m @ 30.8% Zn, 2.2% Pb (from 430.8m)



Only 10 samples were taken from drill hole HB_166, as such, it was severely selectively sampled (the remaining 7 samples had Zn values <5% Zn).

Notably, despite having only been selectively sampled, both HB_063 and HB_166 intersected Zn-Pb mineralisation over 50m and 130m down hole respectively. This provides further encouragement as to the potential of FC-3 to host a volumetrically significant mineralised system.

During the Quarter the Company also drill tested other areas within the Allenwood Graben in line with the exploration model initially outlined in the presentation released to ASX on 6 May 2019. The focus of this drilling was on fault compartments proximal to the Kildare inlier fault, and upon the success of HZDD004 the Company shifted the focus of the drilling exclusively to FC-3. Upon completion of the current drilling program, the Company will revisit the exploration model for the greater Allenwood Graben with a view to prioritising the additional fault compartments to be drill tested.

Other Matters - Corporate

In addition to the Quarter end cash position of approximately \$2.25 million, the Company has also received VAT refunds of approximately \$140,000 and holds 1 million Kingwest Resources Limited (ASX:KWR) shares which (based on the latest price) are valued at \$270,000.

On this basis, the adjusted cash equivalent position (including marketable securities) at the end of the Quarter was approximately \$2.6 million.

Looking Forward

FC-3 drilling is ongoing and is targeting extensions of the mineralisation seen in HZDD004 and HZDD005. Results will be announced once received and fully compiled.

The overarching focus of the FC-3 drilling is to determine the lateral extent, and continuity, of the FC-3 mineralisation, such that it can be incorporated into any future resource upgrade.

Following any future resource upgrade, parallel activities (such as environmental, ESIA, additional metallurgy etc.) will also be undertaken with a view to further de-risking the Kildare Zinc Project, such that any formal economic and development studies to be undertaken in the future can be expedited.

Yours faithfully,

Patrick Corr

Executive Director Zinc of Ireland NL



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Competent Person Statement

The information in this report that relates to exploration results is based on information compiled by Mr. David Blaney, a Competent Person who is a Professional Geologist (P.Geo) with the Institute of Geologists of Ireland (IGI). Mr. Blaney is a principal of BRG Ltd. Mr. Blaney has sufficient experience, which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken 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 (JORC Code). Mr. Blaney consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The information in this report that relates to the Mineral Resources is based on information compiled by Brian Wolfe, Senior Resource Consultant of International Resource Solutions Pty Ltd. Mr. Wolfe is a Member of the Australian Institute of Geoscientists and has sufficient experience which is relevant to the style of mineralisation and types of deposits under consideration and to the activity which has been undertaken 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 (JORC Code). Mr. Wolfe consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

The information in this document that relates to mineral resource estimates is extracted from the ASX announcement entitled "Updated Mineral Resource at Kildare Zinc Project" dated 30 July 2019 and is available to view on www.zincofireland.com. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcement and, in the case estimates of Mineral Resources, that all material assumptions and technical parameters underpinning the estimates in the relevant market announcement continue to apply and have not materially changed. The Company confirms that the form and context in which Competent Person's findings are presented here have not been materially modified from the original market announcement.

Disclaimer

Certain statements contained in this announcement, including information as to the future financial or operating performance of ZMI and its projects, are forward-looking statements that:

- may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;
- are necessarily based upon a number of estimates and assumptions that, while considered reasonable by ZMI, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies; and,
- involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.



ADDITIONAL INFORMTION JORC CODE, 2012 EDITION – TABLE 1

The following sections are provided for compliance with requirements for the reporting of exploration results under the JORC Code, 2012 Edition.

Section 1 Sampling Techniques and Data

(Criteria listed in the preceding section also apply to this section.)

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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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. 	 The Company is focused on exploring the Allenwood Graben Zn Project which is part of the larger Kildare group of prospecting licences. Given the distinct lack of surface rock outcrop and the prevalent glacial till cover the Company specifically relies on exploration diamond drilling to determine the 3D geological, structural and mineralisation context of the Allenwood Graben. As such the Company endeavours at all times to extract the maximum amount of geological information from its drill core. The Company's current set of procedures for processing diamond drill core would be considered 'industry best practice'.
Drilling techniques	Drill type (e.g. core, reverse circulation, openhole 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).	 Commonly tri-coning occurs through the overburden (glacial till) to depths of approximately 20m or when solid rock is encountered. Diamond drill core diameter may be PQ3/HQ3/NQ3. Hex or full hole locking couplings are used on an as needs basis to promote hole stabilisation and reduce hole deviation as appropriate. The core was orientated at the drill site using a Reflex ACT III tool.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. Whether a relationship exists between sample recovery and grade and whether sample bias 	 Drill core has been logged for recovery by length of run, RQD and recovery per sample interval. Triple tube coring is now standard operating procedure. There does not appear to be a relationship between core recovery and grade and assessment remains ongoing on a regular basis.



Criteria	JORC Code explanation	Commentary
	may have occurred due to preferential loss/gain of fine/coarse material.	Sample recovery is maximised by drilling shorter length runs within zones of poor rock quality.
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 Drill holes have been logged by a competent geologist in Ireland. The current logging procedures would be sufficient to meet the requirements for a mineral resource estimate. Mineralisation/alteration/brecciation types, intensities, amounts and interpreted lithologies have been completed using a standardised logging template and ZMI's stratigraphic coding and nomenclature that has been defined so as to be relevant to the local geology and the styles of alteration, structure and mineralisation encountered. Core photography (wet & dry) is routine.
Sub- sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	Sampling has occurred within lithological/mineralised domains as and where appropriate. The Company marks up the core in regular sample intervals i.e. 2m intervals NQ and 1.5m intervals HQ3 (maximum sample size) and uses industry standard core cutting machines to cut the core into two halves with the right-hand side of the core downhole being sampled consistently. The remaining half-core is retained for reference and the selection of bulk density samples. The Company's sample preparation process would be considered "industry best practise" for this mineralisation style.
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. 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. 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. 	 Samples are prepared by ALS Loughrea, Co Galway by jaw crushing to a nominal 70% passing 2mm with a representative 250g sample then split using a rotary splitter. The split sample is pulverised to 85% passing 75um in a LM-2. (ALS Code: ME-ICPORE) Ore grade analysis for base metals and associated elements by ICP-AES, following a strong oxidizing acid digestion. Elements (low reporting limit/upper limit) –units are % unless indicated otherwise: Ag (1/1500 ppm (µg/g)), As (0.005/30.0), Bi (0.005/30.00), Ca (0.01/50.0), Cd (0.001/10.0), Co (0.001/20.0), Cu (0.001/40.0), Fe (0.01/100.0), Hg (8/10000 ppm (µg/g)), Mg (0.01/50.0), Mn (0.005/50.0), Mo (0.001/10.0), Ni (0.001/30.0), P (0.01/20.0), Pb (0.005/30.0), S (0.05/50.0), Sb (0.005/100.0), TI (0.005/1.0), Zn (0.002/100.0). The Company inserts appropriate certified reference material on a 1/20 basis following the crushing stage and pulp replicates are taken on a 1/13 basis from the LM-2 bowl. The laboratory (ALS Loughrea) also carries out its own comprehensive internal QAQC on all jobs submitted by the Company. The Company QAQC data is reviewed by the responsible Geologist on a reported job basis and only after approval of said report is the data given the appropriate priority ranking within the acQuire database.

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Criteria	JORC Code explanation	Commentary
		Nominal 30cm billets of half core are selected for bulk density determination either by standard weight in air/weight in water (non-porous rock) or by the wax coating method depending on the quality of the sample. Sample spacing is on a nominal 10m downhole basis for non-mineralised intervals and on a nominal 3m downhole basis within mineralised zones. At present, approximately 17% of total analyses are related to the Company's QAQC program.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 All Company drill hole data is regularly validated upon its introduction into the acQuire database. The database Manager will report any potential sample overlaps, non-valid coding etc. to the responsible Geologist for appraisal. Until such a time as the responsible Geologist provides the correct information, said data resides within the database but is given a different 'priority level' and cannot be used as part of the final, validated database that would be used for a mineral resource estimate. The Company has not specifically 'twinned' any historic (i.e. pre-ZMI) RC drill holes. The Company has not specifically 'twinned' any historic (i.e. pre-ZMI) diamond drill holes and has not 'twinned' any of its own diamond drill holes. There may be some ZMI drill holes that would be considered as having been drilled 'near' to some historic drill holes. The Company has on site a written set of procedures dealing with all aspects of the 'Exploration Program' e.g. dealing with zones of core loss in drill core through to data flow 'sign off' requirements, all of which have been specifically designed to be used with the acQuire database management system.
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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Proposed drill hole collar surveys are determined by hand-held GPS in Irish Grid 65. Final drill hole collars have been surveyed either by handheld GPS or by a differential GPS: Trimble GPS6000 (RTK GPS accurate to 5mm) Downhole surveys are determined by Reflex EZTRAC. The principal area of exploration drilling would be considered relatively flat with no significant topographic constraints.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	Drill spacing is currently appropriate to the level of exploration being conducted by the Company and have been designed to provide the maximum amount of geological, grade continuity and structural information.
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. If the relationship between the drilling orientation and the orientation of key 	Base metal mineralisation at the 'base of reef' i.e. Waulsortian Limestone lower contact is known to be sub-horizontal based on the results of historic drilling.



Criteria	JORC Code explanation	Commentary
	mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Samples are prepared and stored at the Company's secure Grangeclare West core shed facility until such a time as they are transported to the ALS Loughrea facility by Company representatives.
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No material audits or reviews to date.



Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	 Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings. The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	 The Kildare Project is comprised of 7 Prospecting Licenses, namely PL890, PL3846, PL3866, PL4069, PL4070, PL4072 and PL4073 all of which are in 'good standing'. All tenements are 100% owned by Raptor Resources, a 100% owned subsidiary of Zinc of Ireland NL. No historical, wilderness or national parks are known to infringe significantly on the tenure.
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 Historical exploration is outlined in GXN Announcement dated 17th March 2016 and associated annexes. Also, please see asx.com.au, under 'ZMI'.
Geology	Deposit type, geological setting and style of mineralisation.	The Kildare Project is situated approximately 2km NW of the Lower Palaeozoic Kildare Inlier on a northeast-southwest trending fault. Local geology consists of calcareous sediments conformably overlying Carboniferous Waulsortian Mudbank. This mudbank overlies a thick succession of carbonates and limestones above Palaeozoic basement rocks. The area is considered prospective for brecciahosted Fe-Zn-Pb deposits similar to Irish-Type 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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 	 For a detailed list of all drill holes related to the McGregor-Shamrock MRE, please see ZMI press release dated 31.07.19, specifically Appendix A. HZDD004: 276505mE, 224520mN, 91mRL, -75 dip, 315 azimuth, total depth 480m. HZDD005: 276534mE, 224599mN, 90mRL, -75 dip, 315 azimuth, total depth 482.5.
Data aggregation methods	why this is the case. 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. 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	Future reporting of mineralised intervals will incorporate the appropriate information.

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Criteria	JORC Code explanation	Commentary
	examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated.	
Relationship between mineralisation widths and intercept lengths	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known'). 	The Company will endeavour to provide the requisite information on intercept lengths and mineralisation lengths relationships on an as required basis as exploration drilling results are returned.
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.	The Company regularly observes this requirement.
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.	The Company regularly observes this requirement.
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.	The Company regularly observes this requirement.
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). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	The Company regularly observes this requirement and acknowledges that it will inform the market to the best of its abilities providing that the information is not commercially sensitive.



TENEMENT DETAILS

Location	Project Name	Tenement #	Ownership	Titleholder#
				Beal Na Blath
Ireland	Meath	1450	100%	Resources Ltd
In a land	NA+-	2026		Beal Na Blath
Ireland	Meath	2836	100%	Resources Ltd
Ireland	Monaghan	3027		Beal Na Blath
li Cialiu	ivioriagnan	3027	100%	Resources Ltd
Ireland	Kildare	3846		Raptor
ii ciaria	Middle	3010	100%	Resources Ltd
Ireland	Kildare	3866		Raptor
			100%	Resources Ltd
Ireland	Kildare	4069	1000/	Raptor
			100%	Resources Ltd
Ireland	Kildare	4070	1000/	Raptor
			100%	Resources Ltd
Ireland	Kildare	4072	100%	Raptor Resources Ltd
			100%	Raptor
Ireland	Kildare	4073	100%	Resources Ltd
			10070	Raptor
Ireland	Kildare	890	100%	Resources Ltd
	0.00	2722		Beal Na Blath
Ireland	Offaly	2702	100%	Resources Ltd
111	Na	2240		Beal Na Blath
Ireland	Navan	3219	100%	Resources Ltd
Ireland	Navan	3220		Beal Na Blath
neianu	Ivavaii	3220	100%	Resources Ltd
Ireland	Roscommon	2981		Beal Na Blath
irciana	Noscommon	2501	100%	Resources Ltd
Ireland	Roscommon	2982		Beal Na Blath
			100%	Resources Ltd
Ireland	Roscommon	2523	4000/	Beal Na Blath
			100%	Resources Ltd
Ireland	Mayo	1022	100%	Beal Na Blath Resources Ltd
			100%	Beal Na Blath
Ireland	Mayo	1562	100%	Resources Ltd
			10070	Beal Na Blath
Ireland	Mayo	3771	100%	Resources Ltd
				Beal Na Blath
Ireland	Mayo	3772	100%	Resources Ltd
Irolond	Maye	2774		Beal Na Blath
Ireland	Mayo	3774	100%	Resources Ltd
Ireland	Mayo	2887		Beal Na Blath
ireiaiiu	iviayo	2007	100%	Resources Ltd
Ireland	Mayo	3929		Beal Na Blath
	,0	0323	100%	Resources Ltd
Ireland	Mayo	3930	10001	Beal Na Blath
	- / -		100%	Resources Ltd



Australia	Leonora	M37/1202	*25%	Messina Resources Ltd
Australia	Leonora	E37/893	*25%	Messina Resources Ltd

[#] Beal na Blath Resources Ltd and Raptor Resources Ltd are wholly-owned subsidiaries of Zinc Mines of Ireland Limited. Zinc Mines of Ireland Limited is a wholly-owned subsidiary of Zinc of Ireland NL (ZMI).

^{#*} Messina Resources Ltd is a wholly owned subsidiary of ZMI. The Leonora Project is subject to a 'farm-in' Agreement with Roman Kings Ltd.



Appendix 5B

Mining exploration entity and oil and gas exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10, 01/05/13, 01/09/16

Name of entity

ABN Quarter ended ("current quarter") 23 124 140 889 30 September 2019

Con	solidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
1.	Cash flows from operating activities		
1.1	Receipts from customers	-	-
1.2	Payments for		
	(a) exploration & evaluation	(561)	(561)
	(b) development	-	-
	(c) production	-	-
	(d) staff costs	(77)	(77)
	(e) administration and corporate costs	(127)	(127)
1.3	Dividends received (see note 3)	-	-
1.4	Interest received	1	1
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Research and development refunds	-	-
1.8	Other (provide details if material)	-	-
1.9	Net cash from / (used in) operating activities	(764)	(764)

2.	Cash flows from investing activities
2.1	Payments to acquire:
	(a) property, plant and equipment
	(b) tenements (see item 10)
	(c) investments
	(d) other non-current assets



Cons	olidated statement of cash flows	Current quarter \$A'000	Year to date (3 months) \$A'000
2.2	Proceeds from the disposal of:		
	(a) property, plant and equipment	-	-
	(b) tenements (see item 10)	-	-
	(c) investments	-	-
	(d) other non-current assets	-	-
2.3	Cash flows from loans to other entities	-	-
2.4	Dividends received (see note 3)	-	-
2.5	Other (provide details if material)	-	-
2.6	Net cash from / (used in) investing activities	-	-
<u></u>			
3.	Cash flows from financing activities		
3.1	Proceeds from issues of shares	-	-
3.2	Proceeds from issue of convertible notes	-	-
3.3	Proceeds from exercise of share options	-	-
3.4	Transaction costs related to issues of shares, convertible notes or options	-	-
3.5	Proceeds from borrowings	-	-
3.6	Repayment of borrowings	-	-
3.7	Transaction costs related to loans and borrowings	-	-
3.8	Dividends paid	-	-
3.9	Other (provide details if material)	-	-
3.10	Net cash from / (used in) financing activities	-	-
<u></u>			
4.	Net increase / (decrease) in cash and cash equivalents for the period		
4.1	Cash and cash equivalents at beginning of period	3,012	3,012
4.2	Net cash from / (used in) operating activities (item 1.9 above)	(764)	(764)
4.3	Net cash from / (used in) investing activities (item 2.6 above)	-	-
4.4	Net cash from / (used in) financing activities (item 3.10 above)	-	-
4.5	Effect of movement in exchange rates on cash held	(1)	(1)
4.6	Cash and cash equivalents at end of period	2,247	2,247



5.	Reconciliation of cash and cash equivalents at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts	Current quarter \$A'000	Previous quarter \$A'000
5.1	Bank balances	2,227	2,992
5.2	Call deposits	20	20
5.3	Bank overdrafts	-	-
5.4	Other (provide details)	-	-
5.5	Cash and cash equivalents at end of quarter (should equal item 4.6 above)	2,247	3,012

6.	Payments to directors of the entity and their associates	Current quarter \$A'000
6.1	Aggregate amount of payments to these parties included in item 1.2	77
6.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

6.3 Include below any explanation necessary to understand the transactions included in items 6.1 and 6.2

Director's fees, wages and superannuation – all payments are on normal commercial terms.

7.	Payments to related entities of the entity and their associates	Current quarter \$A'000
7.1	Aggregate amount of payments to these parties included in item 1.2	-
7.2	Aggregate amount of cash flow from loans to these parties included in item 2.3	-

7.3 Include below any explanation necessary to understand the transactions included in items 7.1 and 7.2

N/A

8.	Financing facilities available Add notes as necessary for an understanding of the position	Total facility amount at quarter end \$A'000	Amount drawn at quarter end \$A'000
8.1	Loan facilities	-	-
8.2	Credit standby arrangements	-	-
8.3	Other (please specify)	-	-

8.4 Include below a description of each facility above, including the lender, interest rate and whether it is secured or unsecured. If any additional facilities have been entered into or are proposed to be entered into after quarter end, include details of those facilities as well.

N/A



9.	Estimated cash outflows for next quarter	\$A'000
9.1	Exploration and evaluation	(600)
9.2	Development	-
9.3	Production	-
9.4	Staff costs	(90)
9.5	Administration and corporate costs	(60)
9.6	Other (provide details if material)	-
9.7	Total estimated cash outflows	(750)

10.	Changes in tenements (items 2.1(b) and 2.2(b) above)	Tenement reference and location	Nature of interest	Interest at beginning of quarter	Interest at end of quarter
10.1	Interests in mining tenements and petroleum tenements lapsed, relinquished or reduced	-	No Changes for Quarter	-	-
10.2	Interests in mining tenements and petroleum tenements acquired or increased	-		-	-

Compliance statement

- This statement has been prepared in accordance with accounting standards and policies which comply with Listing Rule 19.11A.
- 2 This statement gives a true and fair view of the matters disclosed.

Sign here:

Executive Director

Print name: Patrick Corr

Notes

- 1. The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity that wishes to disclose additional information is encouraged to do so, in a note or notes included in or attached to this report.
- 2. If this quarterly report has been prepared in accordance with Australian Accounting Standards, the definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report. If this quarterly report has been prepared in accordance with other accounting standards agreed by ASX pursuant to Listing Rule 19.11A, the corresponding equivalent standards apply to this report.
- 3. Dividends received may be classified either as cash flows from operating activities or cash flows from investing activities, depending on the accounting policy of the entity.

Date: 31/October/2019