



17 October 2016

ZMI EXPLORATION & DRILLING UPDATE

- ◆ **Samples from first four diamond drill holes (ZB16-001 to ZB16-004) are with ALS in Ballinasloe; results expected late October.**
- ◆ **Phase 1 complete; 6 holes drilled for a total of 2,252m.**
- ◆ **Historical drill core acquired.**
- ◆ **Historical geophysics, soil geochem and drilling being reevaluated.**
- ◆ **Planning underway for Phase 2 drilling.**

Zinc of Ireland NL ("**ZMI**" or "**the Company**") is pleased to update the market on the Phase 1 drilling and ongoing activities at its 100% owned Kildare project. ZMI's drilling commenced in mid-August, and six holes have been completed for a total of 2,252m. Overall, drilling conditions were good.

Samples for the first four holes are currently being processed at ALS in Ballinasloe, with results expected at the end of October.

Several zones of sulfide breccia are in the first sample batch, including a new zone of mineralisation ~30m below the target Waulsortian Reef, as well as mineralised breccias from the base-of-Reef and top-of-Reef target zones.

Phase One drilling has concluded and the rig is being demobilised. The last two holes are currently being processed before being sent for assay as soon as practicable. Planning is underway for the second phase of drilling.

To assist in this planning, ZMI is undertaking a data capture of all drill holes within the Kildare MVT District, which due to the disparate nature of prior ownership has not been done before. To further assist, ZMI has acquired thousands of metres of historical Kildare drill core which will initially be used to confirm logging codes and enable better correlation of geology and mineralisation between holes.

ZMI is also re-evaluating extensive historical geophysical and geochemical datasets to use in conjunction with the drill hole data to identify walk up drill targets.

Drilling results for the first four holes, ZB16-001 to ZB16-004 comprising 404 samples are expected in late October. ZMI will update the market as the results come to hand.

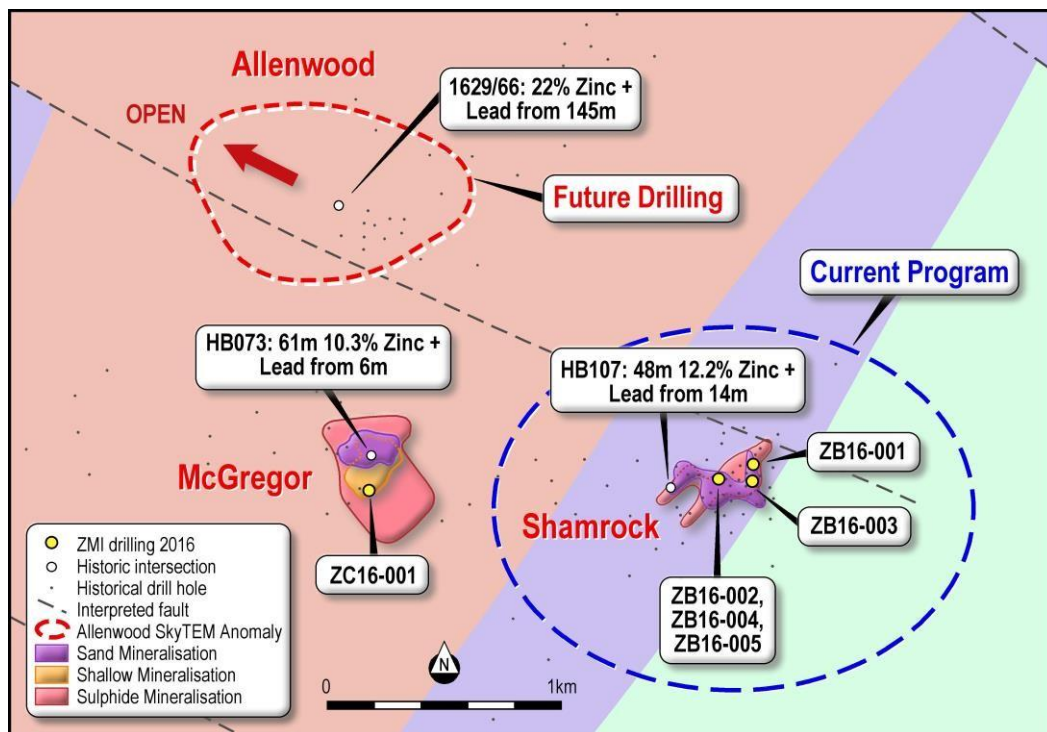


Figure 1: Drill hole locations from ZMI Phase 1 program.




Figure 2: Massive colloform sphalerite (ZnS) breccia in drill core at Kildare (ZC16-001). Actual length 15cm.

Hole ID	mE	mN	Elevation	Dip	Azimuth	Total Depth
ZB16-001	276990	224788	95	-90	0	183.00
ZB16-002	276899	224749	97	-90	0	491.00
ZB16-003	276990	224749	95	-90	0	106.00
ZB16-004	276900	224749	97	-70	260	471.30
ZB16-005	276900	224750	97	-71	247	491.35
ZC16-001	276024	224733	81	-90	0	510.05

Table 1: Drill collars and details for diamond drill holes from Phase 1 program.

Yours faithfully,



Patrick Corr

Non-Executive Chairman
Zinc of Ireland NL

Competent Person Statement

The information in this document that relates to exploration results is based on information compiled by Mr Benjamin Sharp BSc MAIG, a Competent Person who is a Member of the Australian Institute of Geoscientists (Membership No.4289). Mr Sharp is a director and shareholder of Zinc of Ireland NL. Mr Sharp 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 Sharp consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

Disclaimer

Certain statements contained in this announcement, including information as to the future financial or operating performance of the Company 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 INFORMATION

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	<ul style="list-style-type: none"> 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. 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 (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. 	<ul style="list-style-type: none"> Historical intercepts refer to drilling by Billiton Exploration Limited and Irish Base Metals in the 1980s and as such not all data is available. All data is open file obtained from DCENR and GSI and does not represent new exploration information. Visual intersection is from ZC16-001 from 2016 drill program which is to be submitted for assay.
Drilling techniques	<ul style="list-style-type: none"> 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). 	<ul style="list-style-type: none"> Historic drilling is diamond drilling. ZB series holes are diamond core of PQ, HQ and NQ size. Top portion of hole is triple tubed to ensure hole stability.
Drill sample recovery	<ul style="list-style-type: none"> 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 may have occurred due to preferential loss/gain of fine/coarse material. 	<ul style="list-style-type: none"> The methods of measuring and recording sample recoveries for historic holes are unknown. ZB series holes have RQD measured. Sample loss and correlation to assays are as yet unknown.
Logging	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Historic drillholes were logged but to an unknown standard. ZB series holes are summary logged at the rig and comprehensively logged once hole is completed. These holes are logged by professional registered geologists and are logged to a level to support

Criteria	JORC Code explanation	Commentary
	<ul style="list-style-type: none"> Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	<ul style="list-style-type: none"> Mineral Resource estimation etc if required. Core is yet to be completely photographed, zones of interest including mineralisation mentioned have been selectively photographed.
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> For historic holes mineralised core (normally NQ size) was halved and submitted for assay. The procedure for sample preparation is unknown. ZB series holes are yet to be sampled.
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> 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 (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	<ul style="list-style-type: none"> For historic holes analytical methods are unknown but are assumed to be by conventional acid digest with atomic absorption spectrometry for Fe, Zn & Pb. ZB series holes are yet to be assayed.
Verification of sampling and assaying	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The Robertson Group PLC (Report No. 4376) ran limited check assays on historic holes whereby the assays were within "an acceptable range of accuracy".
Location of data points	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Accuracy and quality of historic collar location surveys are unknown. Accuracy and quality of historic downhole surveys are unknown. Accuracy and quality of ZB series collar location surveys are by handheld GPS.
Data spacing and distribution	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> Data spacing and sample compositing for historic holes is unknown. Data spacing for ZB series is shown on slide 10 No mineral resource is estimated or implied using this data. No sample compositing has been applied.

Criteria	JORC Code explanation	Commentary
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> 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 mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material. 	<ul style="list-style-type: none"> Relationship of historic drilling orientation (mostly vertical) and mineralisation is unknown. Sampling bias in historic data is unknown.
Sample security	<ul style="list-style-type: none"> The measures taken to ensure sample security. 	<ul style="list-style-type: none"> Details of sample security for historic data are unknown. ZB series data is under the custody of ZMI and its representatives.
Audits or reviews	<ul style="list-style-type: none"> The results of any audits or reviews of sampling techniques and data. 	<ul style="list-style-type: none"> The Robertson Group PLC completed a review of the project in March 1990 (Report No. 4376). They concluded that when the data is reviewed against standard working methods and check assays... "as an overall judgment the quality of the available data is deemed to be good, though some specific points of detail are lacking." Check lab assays are yet to be undertaken for ZB series data.

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 style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> All tenements are either 100% owned or under application by Raptor Resources or Beal Na Blath Resources, both subsidiaries of Zinc of Ireland NL. No historical, wilderness or national parks are known to infringe significantly on the tenure. A comprehensive list of all Irish tenure owned by Zinc of Ireland NL is included.
Exploration done by other parties	<ul style="list-style-type: none"> Acknowledgment and appraisal of exploration by other parties. 	<ul style="list-style-type: none"> The historic intercepts stated in this ASX release were carried out by Irish Base Metals/Billion Exploration Ireland Limited JV in 1980s/1990s.
Geology	<ul style="list-style-type: none"> Deposit type, geological setting and style of mineralisation. 	<ul style="list-style-type: none"> The Kildare Project is situated approximately 2km NW of the Lower Palaeozoic Kildare Inlier on a northeast-southwest trending reverse fault. Local geology consists of sediments conformably overlying Carboniferous Waulsortian Mudbank. This mudbank overlies a thick succession of carbonates and limestones atop basement volcanics. The area is considered prospective for breccia-hosted Fe-Zn-Pb deposits (a Mississippi Valley-type mineralisation style).
Drill hole Information	<ul style="list-style-type: none"> 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: <ul style="list-style-type: none"> 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 why this is the case. 	<p>KILDARE PROJECT</p> <ul style="list-style-type: none"> Historic drill holes: HB73 (276010mE, 224800mN Irish National Grid) dip is 90° at azimuth 0°, RL is 80.03 and total depth is 69m. HB107 (276790mE, 224730mN Irish National Grid) drilled in 1983 dip is 90° at azimuth 0°, RL is 97.01 and total depth is 452.9m. HB106 (274621mE, 224315mN Irish National Grid) dip is 90° at azimuth 0°, RL is 78.45 and total depth is 230.2m. HB133 (274934mE, 224872mN Irish National Grid) dip is 90° at azimuth 0°, RL is unknown and total depth is 100m. 1629/66 (275919mE, 225433mN Irish National Grid) dip is 0° at azimuth 90°, RL is unknown and total depth is 155m. 1630/30 (267650mE, 228720mN Irish National Grid) dip is 60° at azimuth of 221°, RL is unknown and total depth is 277m. ZB series: ZB16-001: 276,990mE, 224,788mN, 95.01mAOD, -90° dip, 0° azimuth, total depth 183m, no intercept depth reported. 1630/30 (I) ZB16-002: 276,899mE, 224,749mN, 96.97mAOD, -90° dip, 0° azimuth, total depth 491m, intercept depth reported 417 – 437m. ZB16-003: 276,989mE, 224749mN, 95.01mAOD, -90° dip, 0° azimuth, total depth 106m, intercept depth reported 16-36m. ZB16-004: 276,899mE, 224,749mN, 95.01mAOD, -70° dip, 260° azimuth, total depth 471.3m, no intercept depth reported. ZB16-005: 276,899mE, 224,749mN, 95.01mAOD, -70° dip, 247° azimuth, total depth 471.3m, no intercept depth reported ZC16-001: 276024mE, 224733mN, RL not yet measured, -90° dip, 0° azimuth, current depth 452.5m. This hole is
Data aggregation methods	<ul style="list-style-type: none"> 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. Where aggregate intercepts incorporate short lengths of high grade results and 	<ul style="list-style-type: none"> Methods for weighting and averaging of historical data are unknown. Estimations for current drilling are visual only and as such no aggregate assay intercepts exist.

Criteria	JORC Code explanation	Commentary
	<p>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.</p> <ul style="list-style-type: none"> The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> 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 (eg 'down hole length, true width not known'). 	<ul style="list-style-type: none"> Relationship between true mineralisation width and reported intercepts of historic data and ZB series data is as yet unknown.
Diagrams	<ul style="list-style-type: none"> 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 style="list-style-type: none"> Plan view maps have been supplied incorporating drill hole positions. Sections will be provided once drilling is complete.
Balanced reporting	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> The reported historical intersections are the maximum width & grade intercepts to demonstrate potential grade. ZB series drilling has only stated visual occurrence of sulphide/oxide mineralisation. All drilling results will be reported once assays are complete.
Other substantive exploration data	<ul style="list-style-type: none"> 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. 	<ul style="list-style-type: none"> A review of the project was completed by the Robertson Group PLC in March 1990 (Report No. 4376) however access to historical information is incomplete. Geophysical data for the Kildare Project has been reported. This data is unverified by a third party geophysics contractor. This process is underway.
Further work	<ul style="list-style-type: none"> The nature and scale of planned further work (eg 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. 	<ul style="list-style-type: none"> Awaiting assays.