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#### ADVENTUS IDENTIFIES DRILL-READY TARGETS AT RATHKEALE AND LISMORE ON IRISH LAND TENURE

<u>Toronto, May 17, 2018</u> – Adventus Zinc Corporation ("Adventus") (TSX-V: ADZN) is pleased to provide an update from its Phase I exploration activities in Ireland that included a 26.5 km seismic survey at Rathkeale Block in Limerick County in southwest Ireland and a detailed target generation initiative ("TGI") at Lismore Block in Waterford County, also in southwest Ireland. A follow-up Phase II work program is currently being formulated based upon these positive results that will include diamond drilling focused on newly identified targets, principally on the Rathkeale and Lismore blocks. Maps showing the referenced locations can be viewed on Adventus' website at www.adventuszinc.com.

# **Highlights:**

- A new structural interpretation of the Lower Carboniferous basin development at Rathkeale Block from the seismic survey has brought about a paradigm shift in the understanding of the area's mineral potential, and resulted in the identification of six drill-ready targets, lying on the western extensions of structures related to the neighbouring Pallas Green project Tobermalug deposit 44.2 Mt @ 7.2% zinc & 1.2% lead (Glencore 2017 Resources and Reserves Report) and the Stonepark project 5.3 Mt @ 8.6% zinc & 2.6% lead (Group Eleven Resources Corp. & Connemara Mining Company plc.);
- Mis-interpretation of younger Viséan cover rocks as the host Waulsortian Mudbank Limestone by previous operators on the Lismore Block has resulted in two drill-ready targets below a Viséan cover, proximal to extensional structures and therefore, not tested by previous drilling. Specifically, at Ballinanchor, the targets lie immediately adjacent to low-grade zinc-sulphide bearing rock matrix Waulsortian breccias (such as 39 metre grading 1.75% Zn in historical drill hole 1556/5);
- Resulting observations from the new interpretations at both Rathkeale and Lismore, as well as basement terrane studies, have resulted in a shift of explorational focus to the south-west of the Irish Orefield. In January 2018, Adventus lodged applications to acquire two new blocks of ground (Charleville and Millstreet) totalling twenty-one (21) licences for approximately 630 km². On April 30 and May 16, 2018, the Exploration and Mining Division ("EMD") of the Department of Communications, Climate Action and Environment ("DCCAE") issued letters of offer in relation to all licences for these two blocks. Adventus has accepted the offers as of May 16, 2018 and currently anticipate that the licences will be issued during the second or third quarter of 2018; and
- With the addition of the Charleville and Millstreet blocks, Adventus will hold exploration rights over a total of 62 prospecting licences areas for 1,950 km² in Ireland.

# Key outcomes on the Rathkeale Block

- A total of six drill-ready targets have been identified on the Rathkeale Block (Figure 1).
- Rathkeale Block lies in a structurally complex zone adjacent to a large basin margin in which tectonic forces were capable of driving hydrothermal fluids and developing zinc-lead deposits.
- The key structural observation from the interpretation of the seismic survey is that the area is dominated by a series of south-dipping faults, defining several half-grabens. This radical departure from the traditionally accepted understanding of the area meant prior operators would have targeted the northern side of structures believing the rocks to represent hangingwall strata (Figures 3 & 4).

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- The Limerick Fault, along which the Pallas Green and Stonepark projects are located, is seen to extend the Garranroe Honeypound ("GH") fault westward onto Adventus' ground, where it relays to the north and west, along the Garranroe Ballyfookoon ("GB") and North ("N") faults. New, highly prospective, and under-explored areas present along this fault system on the Rathkeale Block.
- Thick breccia units are developed at various locations along the northern margin of the Rathkeale Syncline and are interpreted to be debris flow deposits associated with a fault scarp active during the Chadian/Arundian, a time considered critical to formation of mineralization in the Irish Orefield. This is considered consistent with uplift and erosion of the footwall area of the N Fault complex and presents a footwall degradation model structurally analogous to the Navan deposit.
- Analysis of surficial lithogeochemical samples has delineated pyrite and barite anomalies, on or proximal
  to the GH, GB and N-Fault systems; which are considered to represent potential hydrothermal exhaust
  from a mineralizing system and are coincident with or lie to the south of, base-metal anomalies. Such a
  configuration may indicate barite formation from a hydrothermal fluid in the footwall of a synsedimentary fault in an oxidizing environment, and base metal enrichment in a reducing environment
  on the hangingwall of a syn-sedimentary fault (Figure 2).
- The N Fault system, newly identified by interpretation of the seismic data, is a previously unrecognized structure which occurs within an area of Viséan cover on Line 17-ADV-01 (Figure 1); exploration in this region was avoided by historical operators. The N Fault extends across both seismic lines and is represented as a series of structures in the west of the block to townland of Kilcool and beyond.
- The size and orientation of the Limerick/GH, GB and N-Fault systems (Figure 1) and their relationships are considered consistent with a bifurcated rift scenario in which the sense of relay is west-northwest (i.e. from the Pallas Green and Stonepark areas onto the Rathkeale property).

## **Key outcomes on the Lismore Block**

- Work has identified two drill-ready target areas with untested mineral potential that may exist beneath Viséan strata mis-identified by previous operators as the Waulsortian host stratigraphy.
- Compiled structural, stratigraphic, geophysical and historical micro palaeontological age dating at Ballyduff-Glenbeg and Ballinanchor supports the presence of a series of south-stepping extensional faults within a relay zone, which are interpreted to have controlled the development of a previously unrecognized Viséan sag facies proximal to encouraging low-grade breccia-hosted zinc mineralization (Figure 5).
- Intersection of zinc-bearing breccia units such as 39 metre grading 1.75% zinc in historical drill hole 1556/5 at Ballinanchor; and 12.8 metres grading 2.95% zinc from 162.5 metres in historical drill hole DDC3-4 at Ballyduff-Glenbeg that includes 1.5 metre grading 8.47% zinc from 165.5 metres; when placed in context of the new interpretation for Lismore Block, indicates that these historical intercepts are now considered to be on the footwall of these structures.
- Previous exploration and historical drilling was focused on shallow soil zinc anomalies on the west and north of the Lismore Block that is interpreted to represent peripheral hydrothermal alteration and low-grade zinc mineralization around larger hydrothermal systems at Ballinanchor and Ballyduff-Glenbeg.
- A new drill program will target untested deeper mineral potential that is down-dip from historical shallow, low-grade discoveries at Ballinanchor (Figure 7) and Glenbeg (Figure 6).

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## **Rathkeale Block**

In the third quarter of 2016, Adventus acquired the eight licence Rathkeale Block located in south-west Limerick County covering 256.6 km<sup>2</sup>. Since its acquisition, Adventus has adopted a longer-term exploration strategy for the Rathkeale Block based on detailed structural-stratigraphic interpretation (under-pinned by 2D high-resolution seismic surveying) and supported by advanced geochemical techniques on historical records as an initial foundation to define areas of elevated mineral potential.

Reviews of reports and data from prior operators suggested an attractive structural setting with thick breccias developed at various locations on the northern margin of the Rathkeale Syncline. These were interpreted to be debris flow deposits on a fault scarp marking a complex half-graben which was active during the Chadian/Arundian, a time considered critical to mineralization in the Irish Orefield. Attendant alteration, including dolomitization and Black Matrix Breccias in historical drilling, as well as mineralization on the Pallas Green project and Stonepark project to the east of the block, indicated the development of a large hydrothermal system within the area (Figure 1).

Historical geophysical data over the Rathkeale Block was reprocessed to strengthen the geological interpretation of the Shannon Basin and serve as support for a detailed remote sensing analysis. Initial reviews suggested that the Rathkeale Formation has an elevated magnetic response relative to the surrounding Waulsortian and extends further than previously interpreted.

The remote sensing analysis demonstrated an area more structurally complex than believed, and that key structures like the Clare Fault that is associated with both the Stonepark and Pallas Green projects, can be traced into the Rathkeale Block. A total of 21 initial target areas were identified with seven designated as a high priority. Additional structural interpretation identified key features to allow for the subdivision of structural panels by referencing an assumed margin to the Shannon Basin within the Rathkeale Block. It ultimately provided support for the pursuit of seismic as an exploration technique in the area.

A total of 642 line-km of ground magnetic survey was completed early in the first quarter of 2017, firstly, to identify areas adjacent to the Rathkeale/Waulsortian contact where a distinct contrast would be expected, secondly, to aid mapping the extent of Rathkeale Formation, and thirdly, to identify other potential structures. Cultural contamination made the interpretation of results difficult; however, several broad anomalies were identified, most notably at Croom, Ballingarrane and Cappagh. The source of these anomalies remains unclear.

During the second quarter of 2017, 154 surficial geochemistry samples were collected that involved taking paired rock (77) and soil B-horizon (77) samples along a series of traverses to provide representative coverage over favourable strata. A detailed review of the data focused on elemental pattern analysis typical of the Irish Orefields that is consistent with barite, base metal and general hydrothermal signatures. Several interesting anomalies were defined.

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A key component of Adventus' methodical exploration strategy in 2017 was the implementation of a 2D seismic survey (Figure 1). This geophysical work greatly assisted definition of the principal structural features. IMC Geophysical Services successfully completed a 25.6-kilometre survey using public roads along two north-south transects. The raw data was processed in advance of detailed interpretation by Adventus personnel and its independent consultants.

It was originally thought the structures of the Rathkeale Block were north-dipping with the prospective Waulsortian strata on a northern hangingwall, but results from Adventus' seismic survey revealed two half-grabens controlled by large, south-dipping fault complexes (Figures 3 & 4). This radical departure from the traditionally accepted structural interpretation of the area means that prior operators would have mistakenly been targeting host rocks on the northern side of fault structures, believing the rocks represented hangingwall strata. The revised interpretation represents an important advance in the understanding of the geology of the area, opening untested target areas proximal to known mineralization.

An additional key observation is that under a south-dipping structural regime, the potential relay(s) between structures within a bifurcating rift, as represented by the GH, GB and N faults, would be to the north. As a northward relay would be expected, this structural orientation suggests that the key area of interest is along strike from Pallas Green to the west and north, where inferred relays would place permissive structural zones along the GB Fault and N Fault respectively.

To assist further with the interpretation of the seismic survey results, drill core was relogged at both GSI and Boliden core storage facilities. A total of nine historical drill holes were studied including the collection of magnetic susceptibility measurements to link ground magnetic survey data to geology. The review of drill core was highly successful in defining links between seismic reflectors and the favourable strata typically known for zinc-lead mineral potential. In certain cases, subtle features within the seismic data could be traced back to variation in the drill core such as weak lithological contrasts.

Successful results from a pilot surficial geochemistry orientation survey justified a larger-scale survey that combined the use of ionic leach and pH analytes from the A-Horizon, as well as a more standard multi-element analysis from the B-Horizon. The objective of this larger-scale survey was to delineate geochemical anomalies adjacent to the newly interpreted structures from the seismic survey that could indicate potential leakage from concealed massive sulphide source.

#### **Lismore Block**

The Lismore Block consists of six, non-surveyed prospecting licences that cover an area of approximately 163.7 km² within County Waterford in the Republic of Ireland. The project covers prospective Waulsortian strata with a recently discovered discrete zone of younger Viséan limestone, shale and sedimentary breccias (Dr. M. Philcox. 1976 & 2017) that was previously mis-identified as Waulsortian. These strata are being interpreted by Adventus as a structurally-controlled sag facies that display elevated zinc values. Historical drilling proximal to these sag zones have encountered shallow, near surface low-grade mineralization and clay alteration at Ballyduff-Glenbeg and Ballinanchor (Figure 5).

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Adventus' field work has identified two broad target areas where preserved zinc-lead sulphide mineralization may exist beneath Viséan cover rocks previously mis-identified as Waulsortian, lithologies proximal to an extensional structure, down-dip from anomalous soils and sub-cropping hydrothermal dolomite breccias. The new interpretation for the Lismore block means that Adventus is targeting deeper mineral potential that is downdip from the historical low-grade discoveries near surface at Ballinanchor and Ballyduff-Glenbeg that has never been tested.

The Ballinanchor breccia (Figure 5) is a 500 metre by 250 metre zone of sub-cropping, sphalerite-bearing, hydrothermal dolomite breccia units near the base of Waulsortian that was drilled by Navan Resources in 1994-1995. Adventus' recent field work has shown the mineralization is juxtaposed against a section of Viséan strata (Figure 7). Chip sampling of historical drill holes into the Viséan strata reported intersections of up to 3.0 metre grading 2.3% zinc and 8.5 metres grading 1.4% zinc in historical drill hole DDC3-17. An east-west southerly bounding faults juxtaposes the Viséan against the sub-Waulsortian, Ballysteen Limestone (ABL) with a thrown of at least 350 metre northwards.

Adventus now interprets these mineralized breccia units as sub-cropping on a structural high across a south-stepping, structural relay zone and that the younger Viséan package lies above a structurally controlled sag at a relay. Although there are indications that other historical operators such as Billiton-Central Mining Finance knew the Viséan strata at Ballinanchor was being mis-interpreted as Waulsortian, it is clear that historical drilling failed to test the target horizon, thereby supporting the need for deeper drilling at Ballinanchor.

The Ballyduff breccia (Figure 5) is a 1,500 metre by 300 metre zone drilled on three north-south fences, from west to east, at Bawnbrack, Ballyduff and Glenbeg. Adventus' relogging of historical drill hole LS-81-45, when placed in context of micro-palaeontological dating, revealed that Viséan strata are definitely overlying and therefore juxtaposed against the Waulsortian across an inferred fault. Historical drill hole LS-81-45 at Glenbeg collared in and terminated within Viséan strata at 176.8 metres without intersecting the Waulsortian or any associated breccia. This fact suggests a possible downthrow southwards on the order of 200 metres across the inferred fault (Figure 6).

Historical drilling by previous operators at Glenbeg intersected sphalerite-bearing hydrothermal breccias with historical intersections recording up to 12.8 metres grading 2.95% zinc from 162.5 metre in historical drill hole DDC3-4; including 1.5 metre grading 8.47% zinc from 165.5 metres. Within this latter intersection is a 15-centimetre zone of 14.7% zinc demonstrating the potential of the system to generate ore-grade mineral. The Glenbeg breccias may represent up dip mineralization, meaning that there is an untested southward area, down-dip area across the fault. As such, Adventus believes that drilling is also appropriate at Glenbeg (Figure 6).

# Re-organization of Adventus' Irish Mineral Blocks

Adventus' new structural and tectonic interpretations for the Rathkeale and Lismore Blocks has not only led to the identification of drill-ready targets, but it has led to a realignment of priorities for its land tenure. This means that Adventus is shifting its focus to the southern and south-western end of the Irish Orefield. Adventus is in

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process of relinquishing its Shrule, Moyvore and Gaine River Blocks and it has lodged applications for two new Blocks of ground at Charleville (10 licences, approximately 300 km²) and Millstreet (11 licences, approximately 330 km² hectares). On April 30 and May 16, 2018, the EMD of DCCAE issued letters of offer in relation to all licences for these two new Blocks. Adventus has accepted the offers on May 16, 2018 and anticipate that the licences will be issued in the latter part of the second quarter or early in the third quarter of 2018.

#### **Qualified Person**

The technical information of this news release has been reviewed and verified as accurate by Mr. Jason Dunning, M.Sc., P.Geo., Vice President Exploration for Adventus, a non-Independent Qualified Person, as defined by NI 43-101.

#### **About Adventus**

Adventus is a well-financed and unique company focused on zinc-related exploration and project development globally. Its strategic shareholders include Altius Minerals Corporation, Greenstone Resources LP, and Resource Capital Funds; as well as other highly respected investors in the mining business. Adventus currently has large prospective land packages in both Ireland and Newfoundland and Labrador, Canada, and is earning a 75% ownership interest in the Curipamba copper-gold-zinc project in Ecuador. In addition, Adventus has a country-wide exploration alliance with its partners in Ecuador, incorporating one project to date. Adventus is based in Toronto, Canada, and is listed on the TSX-V under the symbol ADZN.

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