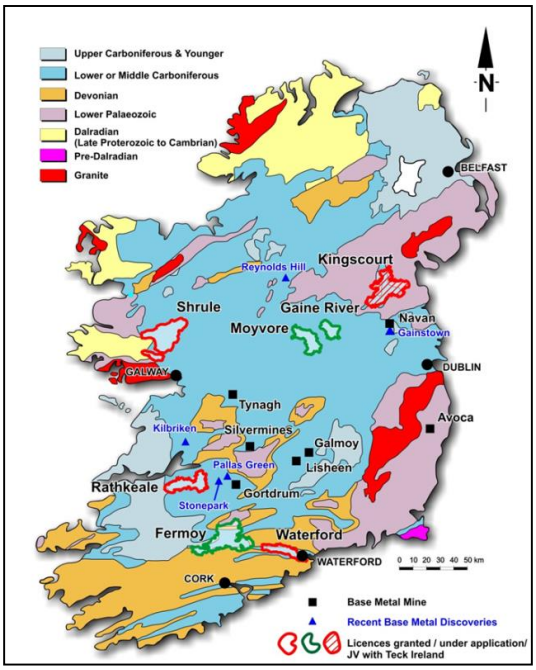
# Rathkeale Carbonate-Hosted Zn-Pb Project

***Targeting New High Grade Discoveries in Ireland***

Adventus Zinc holds a 100% interest in eight contiguous Irish licences (257 km²) over an area prospective for carbonate-hosted Irish Type Zn-Pb mineralization at the target horizon (Waulsortian Mudbank limestone). Historical drilling on Adventus's Rathkeale block has intersected significant alteration as well as mineralization including **5.8m grading 3.5% Zn** at Garranroe (DDH 3368/8) and **6m @ 5.7% Pb, 2.8% Zn and 0.7% Cu** at Kilcool Bridge (DDH 3488/10).

The block lies immediately west of Glencore's Tobermalug deposit (**44 Mt @ 8% Zn + Pb**) and significant mineralization has been intersected in drilling at Stonepark by Teck. Group Eleven's Monaster Block where

High resolution 2D seismics, detailed geochemical surveys and associated interpretative studies have identified drill ready exploration targets. The company is seeking to advance the properties to discovery during 2018 via an independent or co-operative funding strategy.




The Irish orefield has the greatest concentration of zinc per square kilometer on the planet and boasts the largest zinc mine in Europe - the Pale Beds-hosted Navan deposit in County Meath. Other notable economic deposits within the orefield have included; Lisheen, Galmoy, Silvermines, and Tynagh which hosted mineralization within the Lower Carboniferous Waulsortian Mudbank ("Reef") limestone.

The Rathkeale project area is open to year round exploration and is accessible via the national primary, secondary and local road networks. Mining and exploration activity benefits from Ireland's stable fiscal and regulatory regime with excellent, and cost-effective exploration service infrastructure.

The rocks underlying the Rathkeale Block are primarily Lower Carboniferous in age. The geological history of the area progressively records the early Carboniferous marine transgression across the Old Red Sandstone continent, development of Viséan basin and shelf palaeoenvironments and later deposition of the late Namurian strata of the Newcastle West area.

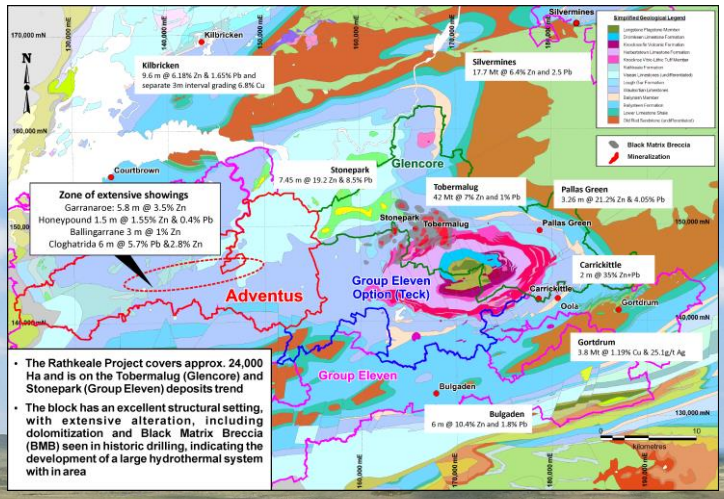
**Adventus Seismic Survey, Rathkeale, 2017**

Historical drilling and geological interpretation suggests that the Rathkeale syncline is a complex of half graben structures associated with a series of ENE trending, Early Carboniferous extensional faults.

Thick breccias and conglomerates along with associated alteration including dolomitization and black matrix breccia have been intersected in historical drilling on this zone.

This polymict sequence of Rathkeale Limestone and Waulsortian Mudbank clasts indicates large scale faulting following the initial deposition of the Waulsortian.

Regional extension was accompanied by gravitational collapse and excavation of footwall scarps during Chadian to Arundian; a similar age to that recognized in the north Dublin Basin and more significantly coeval with development of the Boulder Conglomerate at Navan.



# Rathkeale Carbonate-Hosted Zn-Pb Project

*Targeting New High Grade Discoveries in Ireland*

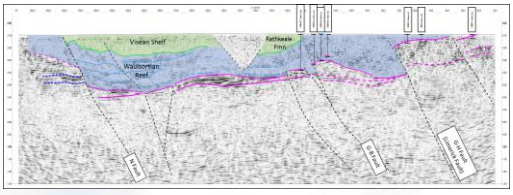
ADVENTUS ZINC CORPORATION

**Key Elements to Prospectivity of the Rathkeale Block**

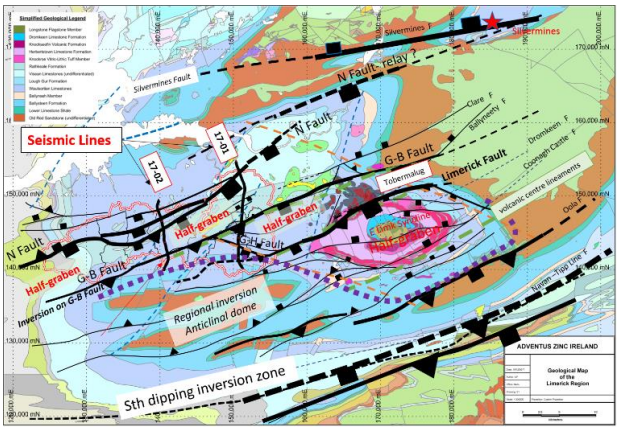
- Along strike from highly significant mineralization at Tobermalug (Glencore) and Stonepark (Group Eleven, former Teck)
- Complex geology with well developed host lithologies
- Several prospects at which mineralization has been detected (Ballyfookoon, Honeypound, Hollywood House, Ballingarrane, Kilcool Bridge and Cooltomin)
- Excellent structural setting with thick breccias developed at various locations at the margins of the Rathkeale Syncline.
- These are 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.
- Extensive alteration, including dolomitisation and Black Matrix Breccias in historical drilling, indicates the development of a large hydrothermal system within the area.
- Deeply excavating structures marked by conglomerates and breccia flows capable of tapping deep seated basement fluids and also act as draw down conduits for connate fluids
- Main focus of recent exploration by previous holders was on the norther margin of the Rathkeale Syncline – other areas the licence block remain relatively underexplored.
- A large number of targets identified and work programmes underway.

**Seismic Survey:**

Adventus completed a 25.6km high resolution 2D seismic survey, on two lines, during Q2 2017. The interpretation of the seismic shows that the area is dominated by a series of extensional faults which define several half grabens. Key observations have led to a major revision of geological understanding of the area and which have had major implications for the exploration strategy of the prospect and wider area.




The seismic data demonstrates that faults associated with the Stonepark and Tobermalug deposits continue along strike into the Rathkeale Block. In addition, a previously unrecognised fault system, the N Fault, has been identified which is linked to debris flow development in the west, and has Early Carboniferous displacement. The size and orientation of the faults interpreted from the seismic are consistent with a bifurcated rift in which the sense of relay is to the WNW from Stonepark onto the Rathkeale property.




The Rathkeale block has strong potential for the discovery of economic, Irish Type Zn-Pb mineralization and based on initial reviews a two-stage work programme is being pursued with the first phase now completed:

**Phase One (2017)**

Work programmes focussed around a high resolution 2D seismic survey; including reprocessing and interpretation of historical geological, geophysical and geochemical data for the block. Detailed remote sensing and tecto-stratigraphic studies have also been undertaken to identify key structures. Fieldwork has included;

1. Detailed ground magnetics surveying, historical core logging /geochemical & petrophysical sampling/ and geological mapping/prospecting
2. Rock and soil geochemical characterization studies
3. Lithogeochemical and shallow soil sampling

**Phase Two (2018)**

Phase one activity is considered to have demonstrated the prospectivity of, and identified targets on, the Rathkeale Block.

A radically new structural understanding of the area has been developed through the seismic survey. This revised interpretation has resulted in the identification of several targets in addition to a re-assessment of historical targets. These are being refined through innovative geochemistry surveys to identify zones of potential upfault leakage from concealed massive sulphide.

The seismic has provided a clear targeting strategy, a number of near drill-ready targets and an approach to advance secondary targets towards a drill decision

Diamond drilling is warranted to test the emergent targets.

**The Rathkeale block has a series of features consistent with the development of large scale hydrothermal system(s) and is considered to be highly prospective for Irish Type Zn-Pb deposits.**


**Wilson Robb**
**Exploration Manager**
**Adventus Zinc Ireland Ltd.**
**wilson@adventuszinc.com**
**+353 91 866646**


**To Request More Information**


**Jason K. Dunning**
**Vice President Exploration,**
**Adventus Zinc Corporation**
**jason@adventuszinc.com**
**+1 416 317 4566**