

# Hannanmetals

TSXV:HAN  
OTCPINK:HANMF

## *Ireland Overview March 2020*



@hannanmetals

[www.hannanmetals.com](http://www.hannanmetals.com)

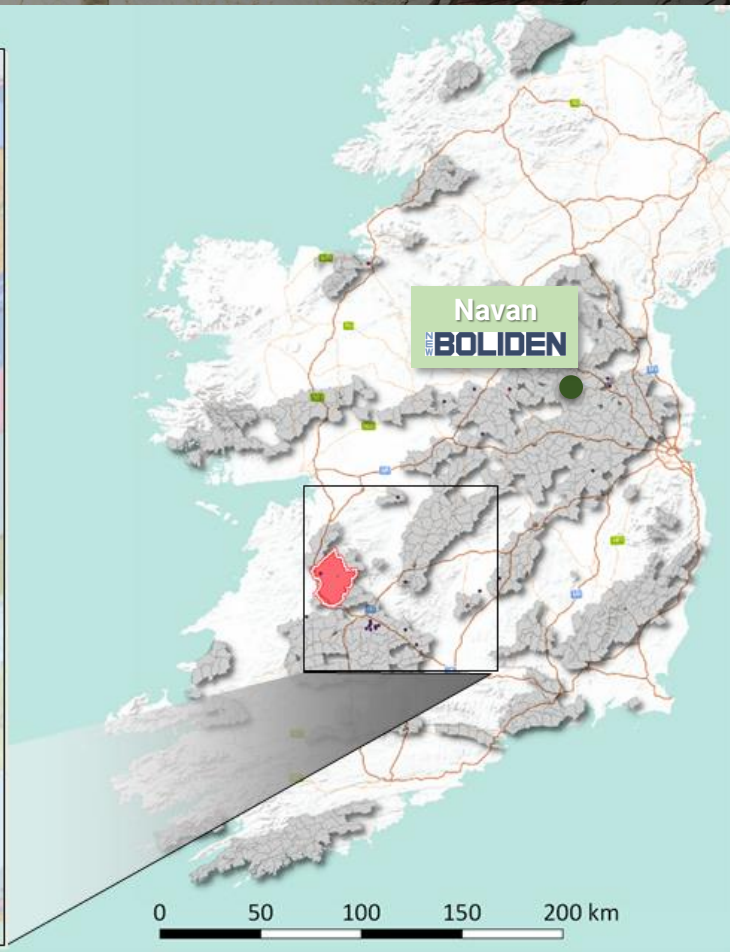
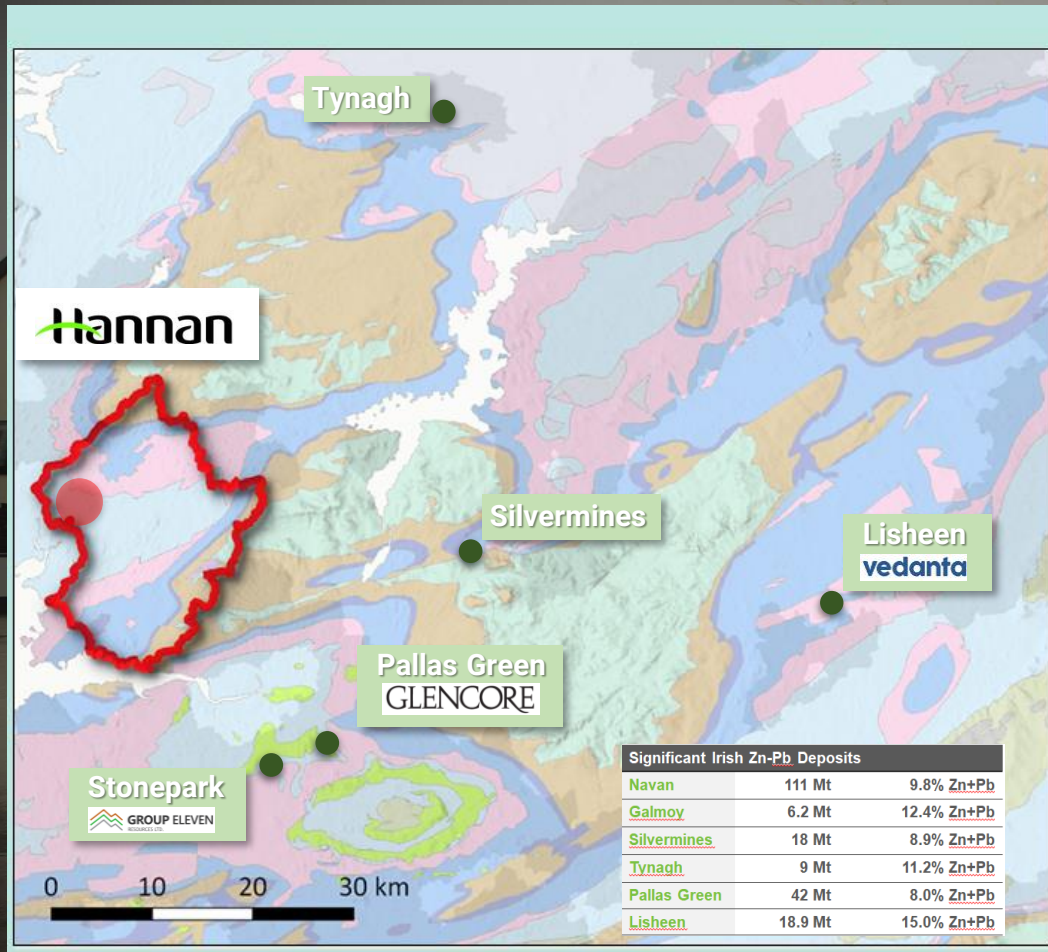
**Accuracy of Information:** Readers are directed to the public disclosure of Hannan Metals Limited (“Hannan”) available under Hannan’s profile on the System for Electronic Document Analysis and Retrieval (“SEDAR”) at [www.sedar.com](http://www.sedar.com). Information contained in this presentation was believed to be accurate at the time it was posted, but may be superseded by more recent public disclosure of Hannan. Hannan makes no representations or warranties as to the accuracy, reliability, completeness or timeliness of the information in this presentation.

**Forward-Looking Information:** Some of the statements contained in this presentation may be forward-looking statements or forward-looking information within the meaning of applicable securities laws (collectively, “forward-looking statements”). All statements herein, other than statements of historical fact, are forward-looking statements. Although Hannan believes that such statements are reasonable, it can give no assurance that such expectations will prove to be correct. Forward-looking statements are typically identified by words such as: believe, expect, anticipate, intend, estimate, postulate, and similar expressions, or are those, which, by their nature, refer to future events. Hannan cautions investors that any forward-looking statements are not guarantees of future results or performance, and that actual results may differ materially from those in forward-looking statements as a result of various factors, including, but not limited to, capital and other costs varying significantly from estimates, changes in world metal markets, changes in equity markets, planned drill programs and results varying from expectations, delays in obtaining results, equipment failure, unexpected geological conditions, local community relations, dealings with non-governmental organizations, delays in operations due to permit grants, environmental and safety risks, and other risks and uncertainties disclosed under the heading “Risk Factors” in Hannan’s most recent Annual Information Form filed on [www.sedar.com](http://www.sedar.com). Any forward-looking statement speaks only as of the date on which it is made and, except as may be required by applicable securities laws, Hannan does not assume the obligation to revise or update forward-looking statements or information that may be contained in this presentation or to revise them to reflect the occurrence of future unanticipated events.

**Qualified Person:** The qualified person for Hannan’s projects, Michael Hudson, CEO for Hannan, and a Fellow of the Australasian Institute of Mining and Metallurgy, has reviewed and verified the contents of this presentation.

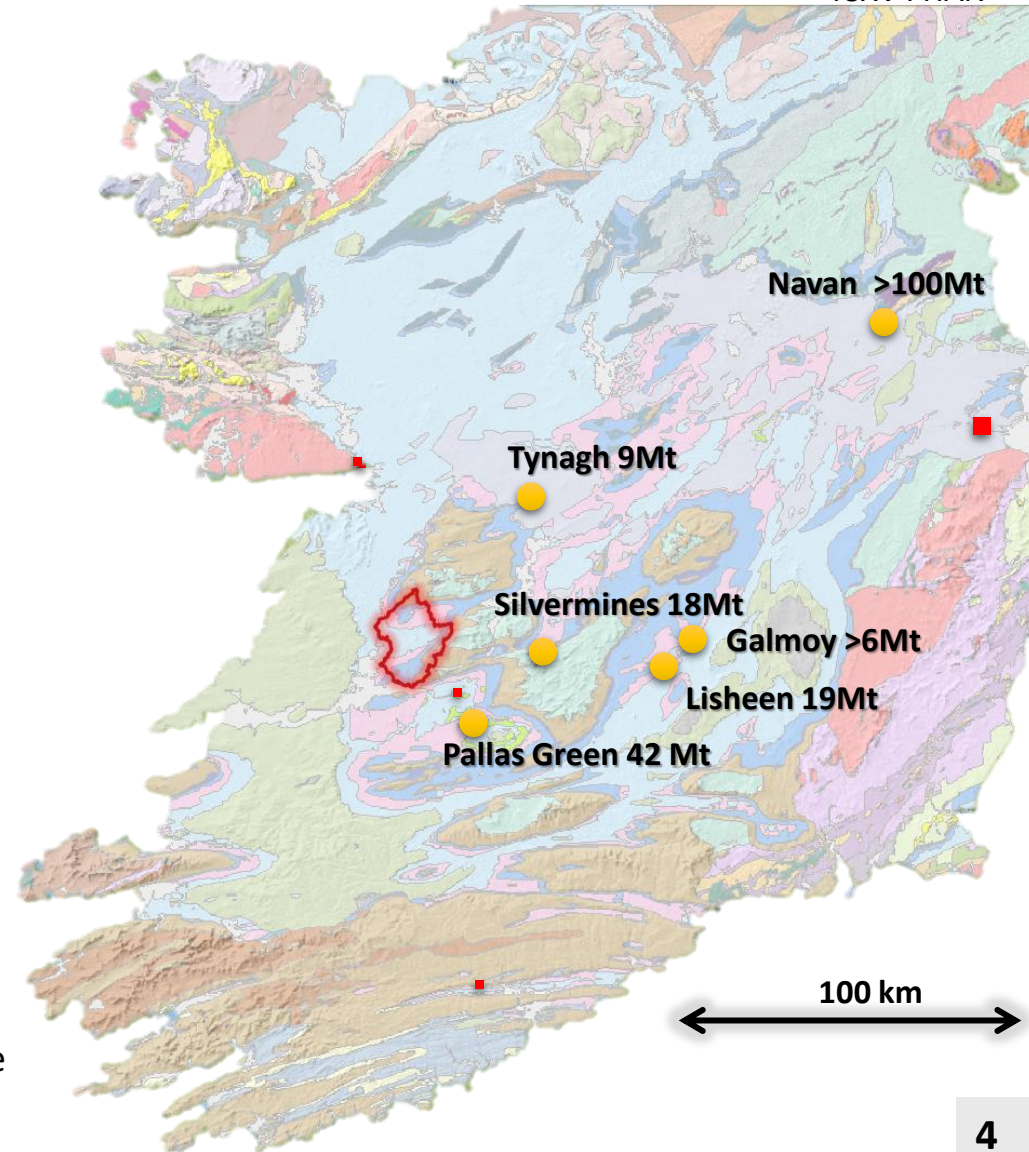
*March 2020*

# Clare Project – Carbonate Hosted Zn-Pb-Ag

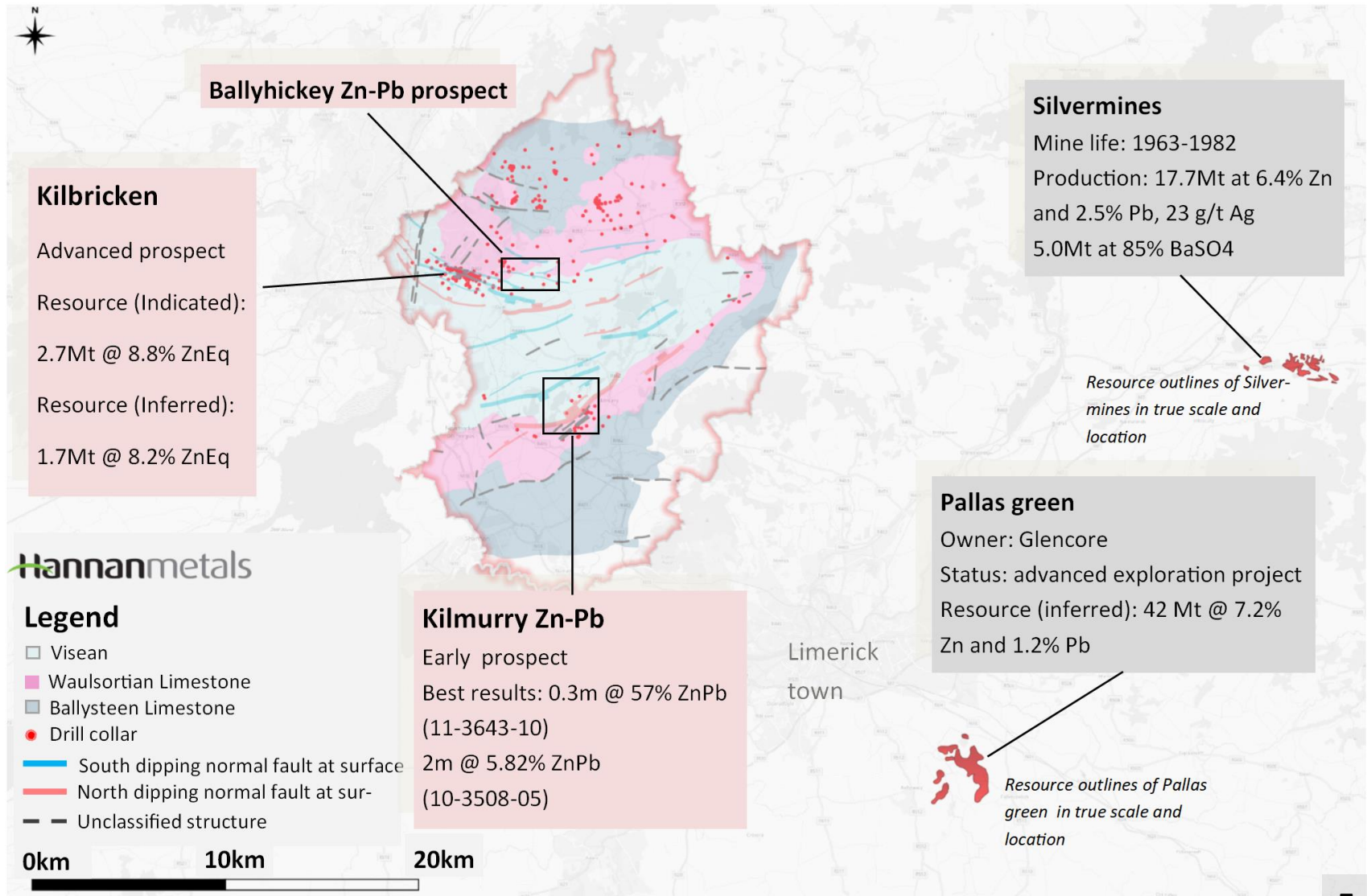


Within 80km diameter SW Ireland contains >100Mt >10% Zn+Pb

- Ireland – the home of zinc mining
- 350 km<sup>2</sup> exploration block
- One of the most mineralized blocks of ground in Ireland and has been assembled since the late 1980's
- Seen close to US\$30M of investment from Hannan and earlier exploration companies.
- Targeting Waulsortian hosted Zn-Pb-Ag carbonate replacement deposits
- Kilmurry ramp-relay system – the big one?
- Kilbricken Zn-Pb-Ag maiden resource
  - 2.7 million tonnes at 8.8% ZnEq indicated
  - 1.7 million tonnes at 8.2% ZnEq inferred
- > 85 km<sup>2</sup> Waulsortian subcropping in license block and >100km<sup>2</sup> blind target.

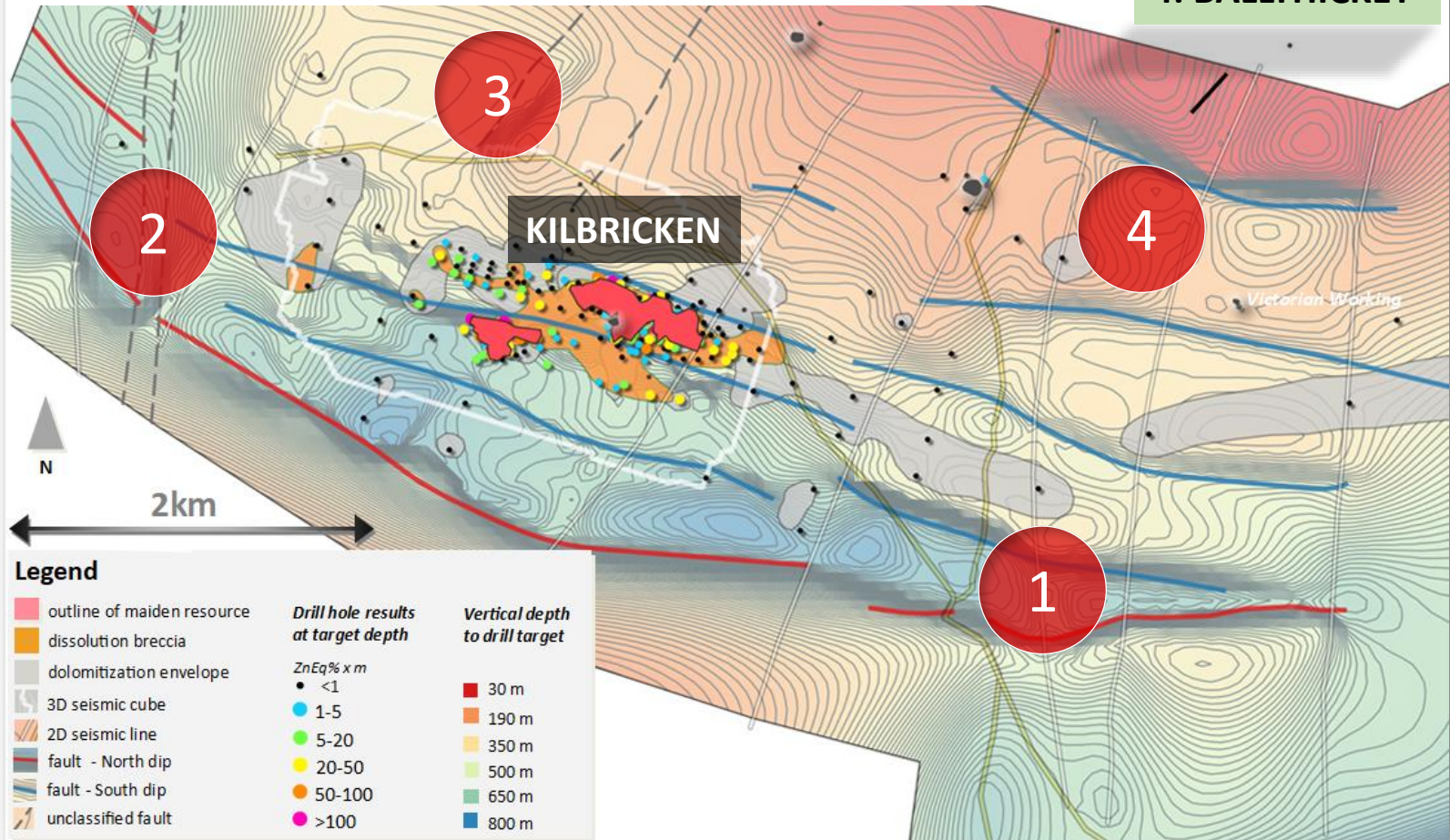


# Clare Project– carbonate hosted Zn-Pb-Ag

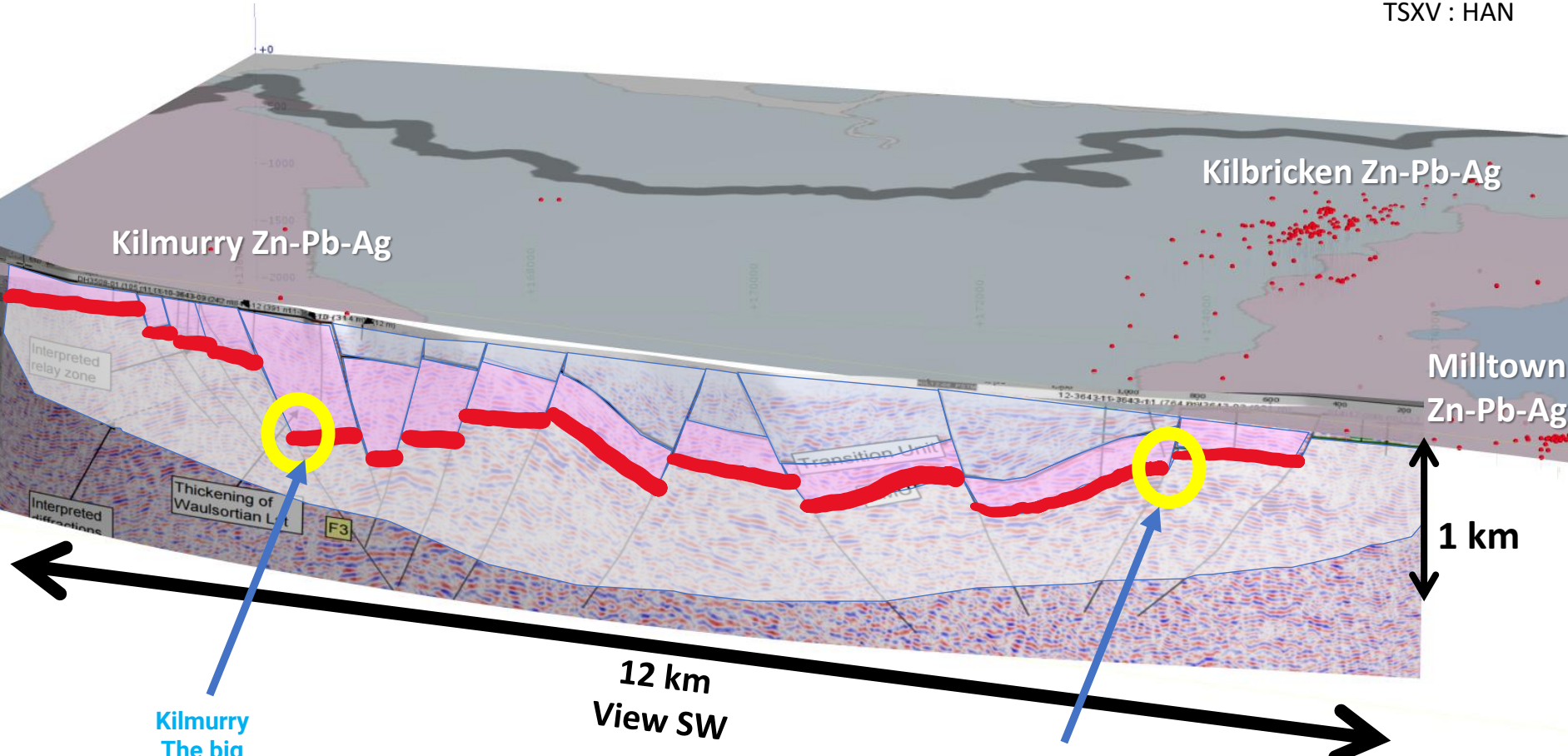


# Kilbricken Resource Expansion Targets

- 1:QUIN
- 2:DOORA
- 3:FINNANAGH
- 4: BALLYHICKEY



# Clare Project – carbonate hosted Zn-Pb-Ag-Cu



Kilmurry  
The big one?

Kilbricken  
2.7 million tonnes at 8.8% ZnEq indicated  
1.7 million tonnes at 8.2% ZnEq inferred



> 85 km<sup>2</sup> Base of Waulsortian reef subcropping in license block and >100km<sup>2</sup> blind target

# The Kilmurry Zn-Pb-Ag Ramp-Relay target

- Drilling confirmed seismic interpretations of the north-dipping Kilmurry syn-sedimentary relay fault system which exceeds **15 kilometres in length** and is up to 2 kilometres wide demonstrates **one of the largest basin-scale displacements (>600 metres) mapped in Ireland**
- Drilling and detailed gravimetric measurements have constrained the Kilmurry Zn-Pb-Ag target and defined drill targets for 6 km of strike of the syn-sedimentary fault system. The target depth is also shallower than previously interpreted with a maximum depth of 800m;
- Significant footwall base metal mineralization “smoke” drilled;
- Only one drill hole tested hanging wall position: Drill hole 11-3643-10
  - Originally collared by Lundin Mining in 2011, the upper parts of the hole intersected dissolution textures, alteration and mineralization in the upper sequence of the hanging wall, including 0.3m @ 56% zinc and lead at 166m depth. Extensive fault scarp debris material was encountered suggesting the Kilmurry fault was active during sedimentation. The drill hole ended (before extension) in 3 to 4 times background levels of zinc (>60 ppm) in highly altered limestone;
  - The hole was extended in 2019 by Hannan and intersected more than 60 metres of strongly calcite-dolomite altered limestone with sporadic gossanous patches after pyrite and calcite textures suggesting replacement of barite between 747.6m and 798m depth. The alteration terminates at the base of the Waulsortian Reef limestone. The top of the "ABL" (argillaceous bioclastic limestone), immediately below the Waulsortian Reef, was strongly hematite altered for over 4 metres width. This hydrothermal alteration type is important as it is interpreted to be proximal alteration to mineralization at Waulsortian hosted deposits such as Tynagh and Lisheen at the Rathdowney trend.
- Further drilling is recommended at Kilmurry, with four priority targets defined within the ramp-relay system over 6 kilometres

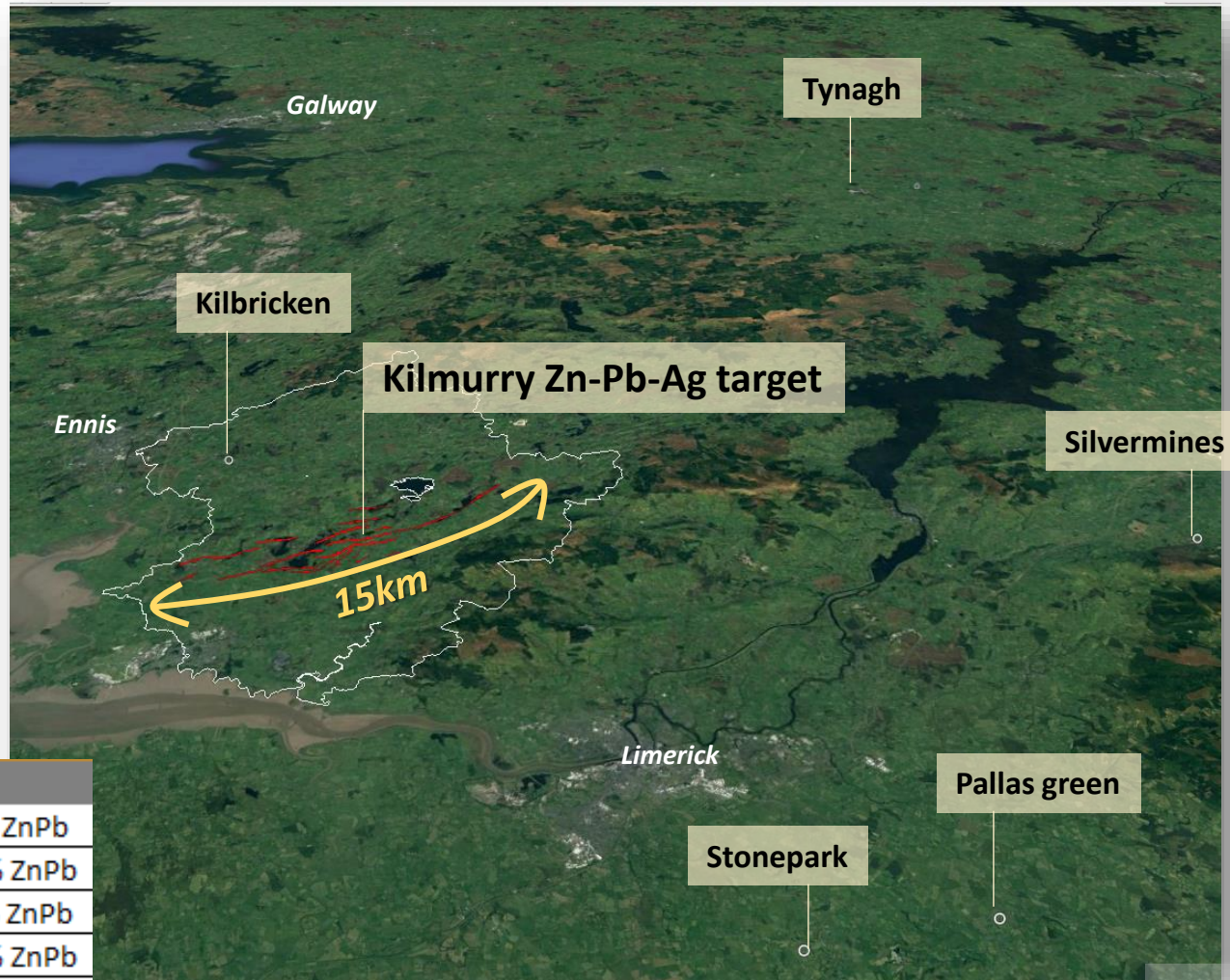


# The Kilmurry Zn-Pb-Ag target

Syn-sedimentary fault system with >650m fault offset

Target depth <800m

Drill target defined over 6km of strike



Significant Irish Zn-Pb Deposits		
Pallas green	44.2Mt	8.4% ZnPb
Stonepark	5.1Mt	11.3% ZnPb
Silvermines	18Mt	8.9 % ZnPb
Tynagh	9Mt	11.2% ZnPb

# The Kilmurry Zn-Pb-Ag target

6km

## Drill ready targets >6km strike

11-3643-10 – A key drillhole

- ✓ Hydrothermal hematite alteration in ABL unit
- ✓ 0.3m @57% ZnPb from 166m structurally hosted massive sulphide
- ✓ 65m of pervasive calcite-dolomite alteration of the Waulsortian limestone

### Footwall “smoke”

019-08: 40cm of massive py  
11-3643-18: 4m @ 0.72% ZnPn from 183m

10-3508-04: 8.5m @ 2.1% ZnPn  
from 43m incl 2m @ 5.14% ZnPb  
10-3508-05: 5m @ 2.97% ZnPb  
from 55m incl 2m @ 5.82 % ZnPb

Drill holes with dissolution or dolomitization alteration.

### Drill targets:

- 1: Max off-set target
- 2: Amplitude target
- 3: Relay target
- 4: Relay target

10

0 1.5 3 km

# Kilmurry vs Lisheen

6km

Drill ready targets >6km strike

11-3643-10 – A Key drillhole

- ✓ Hydrothermal hematite alteration in ABL unit
- ✓ 0.3m @57% ZnPb from 166m structurally hosted massive sulphide
- ✓ 65m of pervasive calcite-dolomite alteration of the Waulsortian limestone

Lisheen

World's 12th largest zinc deposit

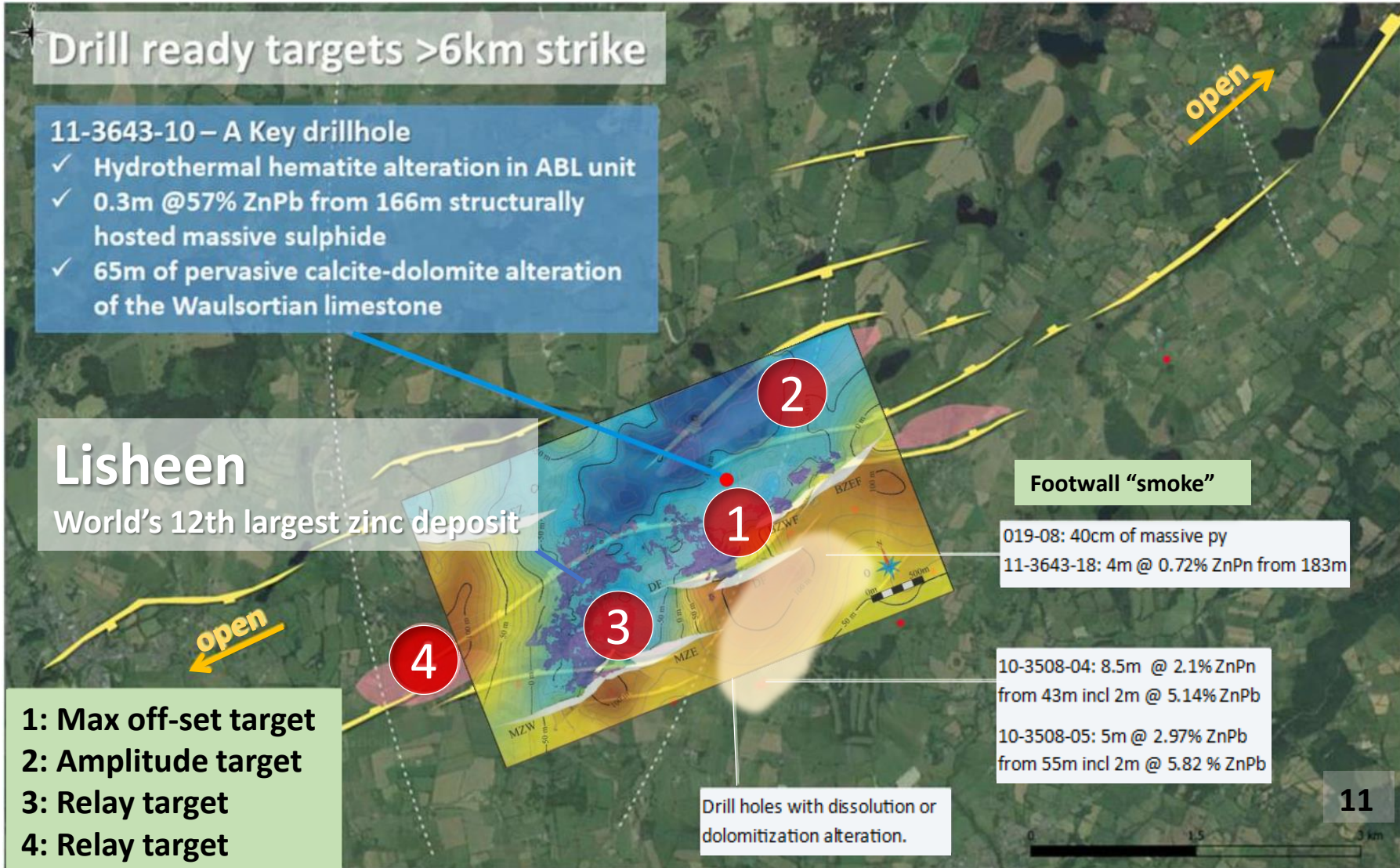
Footwall "smoke"

019-08: 40cm of massive py  
11-3643-18: 4m @ 0.72% ZnPb from 183m

10-3508-04: 8.5m @ 2.1% ZnPb from 43m incl 2m @ 5.14% ZnPb  
10-3508-05: 5m @ 2.97% ZnPb from 55m incl 2m @ 5.82 % ZnPb

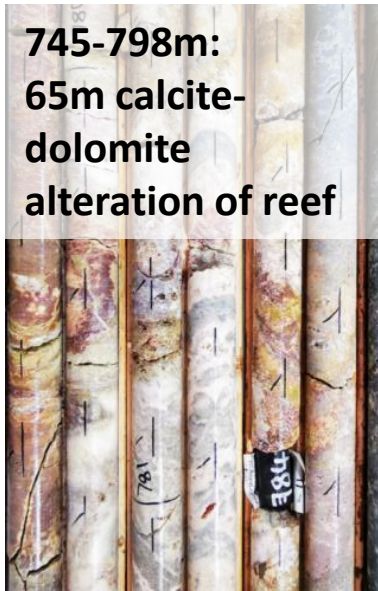
- 1: Max off-set target
- 2: Amplitude target
- 3: Relay target
- 4: Relay target

Drill holes with dissolution or dolomitization alteration.



# The Kilmurry target- context

745-798m:  
65m calcite-  
dolomite  
alteration of reef



745-798m:  
Gossanous patches  
after pyrite



745-798m:  
Calcite  
replacing barite



800-806m:  
Hematite  
alteration of  
ALB

