

New prospective geological features identified in Kilmallock survey

Unicorn Mineral Resources Plc. identifies previously unknown and prospective geological features from a recent geophysical survey at its' Kilmallock Block of licences along the southern margin of the Limerick Basin in Ireland.

Unicorn Mineral Resources, November 14th, 2022 – Unicorn Mineral Resources Plc. (LSE: UMR) is pleased to announce that preliminary analysis of new data acquired by a recently completed geophysical survey (Induced Polarisation and Gravity) has yielded significant results identifying previously unknown geological features that; (i) open up new prospective regions and (ii) refine the geological and structural model for the Kilmallock Block.

Highlights:

- Anomalous Induced Polarisation Chargeability responses identified to the south of the Ballycullane high grade oxide zone and to the north of the Bulgaden massive sulphide zone.
- A series of IP resistivity anomalies with associated gravity features have been delineated in the region to the south of the Bulgaden massive sulphide body. The geophysical anomalies line up to confirm an east-west striking feature that may be related to a major controlling fault.

The Kilmallock Block (Figure 1) is located along the southern margin of the Limerick basin, straddling the southwestern extension of the Rathdowney Trend, and hosting significant zinc / lead / silver mineralisation at the Bulgaden and Ballycullane zones. It lies approximately 10km along strike, to the west, of Group Eleven's new intersection at Ballywire (6.9m of 15.4% Zn+Pb, 6th Sept 2022) and approximately 15km south of Glencore's Pallas Green Deposit (45.6mt 8% Zn+Pb).



Figure 1: The Prospecting Licence disposition and mineral occurrences in the Limerick Basin



"To have completed this geophysical survey and acquired a high-quality data set over the Bulgaden and Ballycullane mineralised zones is a big step forward for Unicorn Mineral Resources," stated Richard O'Shea, CEO. "We are excited to now use this information to fast-track and refine our plans for what should be an exciting exploration program in the near to medium term for this project."

Geophysical Survey:

The recent geophysical survey was carried out by BRG Ltd and consisted of a series of traverses of Induced Polarisation and Gravity surveying across the known mineralised zones and Ballycullane and Bulgaden. A total of 9 line km of Pole–Dipole Induced Polarisation was surveyed along 4 lines and 211 gravity stations were acquired during this phase of work.

Survey Details:

- Induced Polarisation Pole Dipole Array, with a dipole length of 100m and 6 separations. Data
 was obtained using an Iris Instruments Multichannel Receiver (ElrecPro) and Transmitter
 (VIP4000) powered by a 1kVa Hyundai generator, using stainless steel electrodes and nonpolarising copper sulphide pots.
- Gravity Gravity measurements were recorded using a LaCoste & Romberg Model G Gravity meter (G483). A base station was set up to the west of Kilmallock Town and base station readings were measured at a minimum of 3 times daily (morning, mid-day, evening) so that instrument and diurnal drift could be calculated and removed from the data. The stations were accurately surveyed using a Trimble r10 receiver blue tooth connected to a Trimble TDC600 controller (RTK GPS accurate to 5-15mm)

Four lines of detailed gravity and Pole-Dipole IP/Resistivity were completed on the Kilmallock Block, Prospecting Licences 1949 and 3249. The survey was designed to cover the known mineralised zones at Ballycullane (an oxide zone located to the north of the western line) and Bulgaden (a sulphide zone in the centre of the group of 3 lines to the east) (Figure 2).



- Location of the IP traverses relative to the Bulgaden and Ballycullane Zones
- Single traverse (Line 1) testing the region across and downdip of the Ballycullane Zone
- Three IP traverses (Lines 2 4) across the Bulgaden Zone. Designed to test for mineralisation and structural control

Figure 2: Location of geophysical traverses across the Bulgaden and Ballycullane Zones



The pseudosections showing the chargeability and resistivity responses for lines 1 & 3 are presented as Figure 3. The resistivity data clearly shows a series of pronounced breaks and sharp contacts that are interpreted as significant fault zones. Given the well-established connection between "Irish Type" deposits and faulting which controls the emplacement and distribution of mineralisation the delineation of potential faults is considered to be a positive outcome.

The chargeability data defines a number of anomalously high chargeable responses proximal to areas where the presence of mineralisation has been established. The anomalously high chargeability responses at depth are considered by Unicorn Mineral Resources Plc. to be encouraging and worthy of further investigation.



Figure 3: Induced Polarisation Pseudosections - Line I (Ballycullane) and Line 3 (Bulgaden)

The data acquired by these surveys will be used to characterise the geological setting of the Ballycullane and Bulgaden region, allowing Unicorn Mineral Resources Plc. to continue to develop and improve the structural / geological models of this area, effectively targeting the next phases of work.

Qualified Person:

Technical information in this news release has been approved by EurGeol, Graham Reid, P. Geo, a 'Competent Person' as defined under the PERC (Pan European Reporting Code) Reporting Standard.

About Unicorn Mineral Resources Plc.

Unicorn Mineral Resources Plc. (LSE: UMR) is a mineral exploration company focused on zinc and lead exploration in Ireland. The Company's exploration strategy allows it to leverage new geological models and geophysical technology to systematically rethink key aspects of the Irish Midlands Orefield. The Company's two key projects in Ireland include: the Kilmallock Block located in the Limerick Basin



where recent exploration is discovering exciting new mineralised zinc/lead occurrences, and the Lisheen Block, which is located next to two of Ireland's largest zinc mines, namely Lisheen and Galmoy, now worked out. The Company's team includes accomplished mining professionals with direct experience in finding mines, building companies, and exploring for Irish zinc deposits.

Additional information about the Company is available at www.unicornmineralresources.com.

ON BEHALF OF THE BOARD OF DIRECTORS

Richard O'Shea.

Chief Executive Officer

Contact:

I suppose we would need to include Richard's email / phone no. as CEO?