



Roinn Cumarsáide, Gníomhaithe  
ar son na hAeráide & Comhshaoil  
Department of Communications,  
Climate Action & Environment

# Prospecting Licence Areas Open for Application Under Competition and Industry News

1 May 2018

Prepared by the Exploration and Mining Division,  
Department of Communications, Climate Action and Environment  
[www.dccae.gov.ie](http://www.dccae.gov.ie)  
[www.mineralsireland.ie](http://www.mineralsireland.ie)

# Contents

<b>Ground Status and Application Procedure</b> .....	2
Available Ground .....	2
Ground Unavailable.....	4
Application Procedures .....	5
<b>Payments to the Department of Communications Climate Action and Environment</b> .....	6
<b>Prospecting Licence Competition</b> .....	7
Procedures .....	7
Competition Areas .....	8
<b>State Mining And Prospecting Facilities</b> .....	9
State Mining Facilities .....	9
Prospecting Licences Held.....	10
<b>Prospecting Licences Granted Since 1<sup>st</sup> February 2018</b> .....	25
<b>Prospecting Licences Offered and Accepted</b> .....	25
<b>Ireland: Exploration and Mining News</b> .....	26
<b>Appendices</b> .....	33
Publicly Available Prospecting Licence Area Data.....	33
Addresses of Companies Holding State Facilities.....	35

All information is also available at [www.mineralsireland.ie](http://www.mineralsireland.ie)



**Exploration  
& Mining  
Division** Minerals  
Ireland

*Roinn Cumarsáide,  
Gníomhaíthe ar son  
na hAeráide agus  
Comhshaoil*

Department of  
Communications,  
Climate Action &  
Environment

# Ground Status and Application Procedure

This booklet contains listed details of all current prospecting and mining facilities. Details include the names of the licensees, the geographical location and, with reference to prospecting licences, the details of the minerals for which they have been issued. The locations of these prospecting licences and mining facilities, as well as ground that is available for application is available in an online facility maintained by this Department and accessible at <http://www.mineralsireland.ie/OnlineServices>.

## Available Ground

Ground that is available for exploration under a Prospecting Licence (PL) is available online through [www.DCCAE.gov.ie/EMDMapsAndData](http://www.DCCAE.gov.ie/EMDMapsAndData).

### 1. Ground Categories

- a. **Open areas:** Established licence areas available for application at any time are identified by their number and are coloured dark green or pale green. Those areas coloured pale green attract exploration incentives (see Incentive Areas below).
- b. **Held areas:** Current prospecting licences and recently offered licences are restricted to certain minerals (p.10-25). Such ground is available for application for prospecting for other minerals.
- c. **Competition areas:** Available Prospecting Licence areas for this competition are listed on page 8.

### 2. Prospecting Licence Terms

A prospecting licence typically covers an area of 35 km<sup>2</sup>. Prospecting licences are issued for a period of six years (maximum), for specified minerals, and can be renewed. A minimum expenditure per licence is required, and varies with the age of the licence (see table below). A minimum work programme is also required, details of which are agreed with the licensee. Progressively increased

work and expenditure commitments are required on renewal. Work reports are required every two years, and are held confidential for six years thereafter, or until expiry or surrender of the licence. Third party insurance, indemnifying the Minister, is required for the period of the licence.

### 3. Incentive Areas

Significant financial incentives are available for the first six years of exploration on relatively neglected areas or areas where current exploration is restricted to certain minerals. The incentives consist of substantially reduced fees and expenditure requirements, and are designed to provide scope for relatively inexpensive "grass roots" exploration, in order to encourage work in areas where results of earlier exploration had failed to produce sufficient encouragement to the licensee.

The incentives apply to two categories of ground:

- a. **Open Areas** where these Prospecting Licence areas have been available for application for more than four years.
- b. **Areas currently licensed for certain minerals**, but available for exploration for other minerals. Currently licensed areas for which exploration may be undertaken for other minerals are listed on pages 10-25.

**Open Areas available for more than four years:** Where a previously issued Prospecting Licence area has been available for application for at least four years, the licence will be granted, normally, for a term of six years. A reduced fee of €1,250 per Prospecting Licence will apply, payable in advance for each two-year phase as €375 for each of the first and second phases, and €500 for the third phase. This represents a reduction of €1,875 (60%) in fees compared to the standard requirements. (There is no reduction in the application fee).

**Currently Licensed Areas:** Ground is also available to companies that wish to undertake exploration over areas currently held, for minerals that are not assigned to the current prospecting licence holder. Such additional prospecting licences will only be issued where the Minister for Communications, Climate

Action and Environment is satisfied that there will be no clash of mineral interests. The current prospecting licence holder continues to hold a standing Statement of Interest for all other minerals in that area. The fees and expenditure requirements will be the same as for prospecting licences that have been available for over four years i.e. the 'Open Areas' Incentive category (see above).

<b>Fees</b>	<b>Competition / Standard Areas</b>	<b>Incentive Areas</b>
First 2 years	€750	€375
Second 2 years	€875	€375
Third 2 years	€1,500	€500
<b>TOTAL</b>	<b>€3,125</b>	<b>€1,250</b>
<b>Minimum Expenditure Requirements</b>		
First 2 years	€10,000	€2,500
Second 2 years	€15,000	€5,000
Third 2 years	€20,000	€10,000
<b>TOTAL</b>	<b>€45,000</b>	<b>€17,500</b>

## Ground Unavailable

Ground unavailable for application is differentiated as follows:

- Licences under application, and that have been offered to the applicant
- Licence areas that are currently not being made available for application
- Licences that have been applied for under earlier competition
- Excluded areas e.g. National Parks: These are areas that are not available for application at any time.
- Current Prospecting Licences for certain minerals Mining Leases, Mining Licences and Mining Permissions

## Application Procedures

While applications are invited for all categories of available ground, it should be understood that an area may have been already applied for, and that applications are treated on a time-priority basis i.e. "first come, first served". Before making an application for any open area, prospective applicants may wish to consult with the Exploration and Mining Division to ascertain whether there has been a prior application for the area. If there has been a prior application, and if a licence has been offered, the ground is not available for further applications. The acceptance of an application for a Prospecting Licence does not create any obligation on the part of the Minister to grant a licence.

Where there is a valid Statement of Interest over ground that is being applied for, the applicant will be so notified (but no other details provided), and invited to revise their application if they wish to do so.

Applicants are reminded that, if more than one area is applied for, a priority listing of the applications is required; otherwise all applications will be regarded as having equal priority. If separate applications are made over a period of time, the priorities should also take account of any earlier applications. It should be noted that where expenditure proposals are above the minimum required (e.g. in a Competition), these will be taken as the minimum expenditure requirement when the ground is offered to the successful applicant.

All applications for prospecting licences must be made using Form 1 (Application Form), accompanied by a fee of **€190.00 per Prospecting Licence Area**. The form is available to download at <http://www.mineralsireland.ie/OnlineServices/Forms>

Applications may be made to [EMD.info@DCCAE.gov.ie](mailto:EMD.info@DCCAE.gov.ie) or by post to:

Exploration and Mining Division  
Department of Communications, Climate Action and Environment  
29/31 Adelaide Road  
Dublin D02 X285

# Payments to the Department of Communications Climate Action and Environment

The Department can accept payment by Electronic Fund Transfer (EFT) only. Each payment **must** quote your 5-digit customer number. For assistance or for first time applicants please contact EMD directly.

Each payment must be followed by remittance notice detailing

- a. Name and address
- b. Your five digit customer number (eg. 12345)
- c. The date and amount paid into the Department's EFT Account
- d. A listing of the specific Department invoice number(s) to which the payment refers.
- e. Where no invoice has issued a detailed description of purpose of the payment.

The remittance notice can be sent to [AccountsReceivable@DCCAE.gov.ie](mailto:AccountsReceivable@DCCAE.gov.ie) or by mail to Accounts Receivable, Department of Communications, Climate Action and Environment, Elm House, Earlsvale Road, Cavan, H12 A8H7.

**All payments are to be made in Euro.** Applicants should be aware that bank charges can apply, particularly when applying from overseas. Provision should be made for these charges by the applicant to ensure the full amount is received in the Department's account. Failure to do so will lead to delays in applications being accepted.

<b>Bank Details</b>	Bank of Ireland, Main Street, Cavan, H12 E394
<b>Account Name</b>	Department of Communications, Climate Action and Environment Accounts Receivable
<b>Account No.</b>	7849 2156
<b>Bank Sort Code</b>	90 32 93
<b>IBAN</b>	IE48 BOFI 9032 9378 4921 56
<b>BIC</b>	BOFIE2D

The Department cannot accept any responsibility for payments that cannot be identified due to lack of information. Should you have any queries please contact Accounts Receivable at (01) 678 2000.

# Prospecting Licence Competition

## Procedures

Every three months, a Competition is held for certain Prospecting Licence areas. The competition relates to areas for which licences have been surrendered or terminated, or that have been offered but declined, in the previous three months. Previously unavailable ground may also be released through competition. Interested parties normally have two months in which to apply for a licence over a competition area, with all applications received during that period deemed to have been received at the same time i.e. no time priority is given to applications received during those months.

It should be noted that no reduction in financial commitment by aggregating expenditure from contiguous areas will be accepted for the first two-year phase for any licence area awarded under competition.

Prospecting licences available for application under Competition will be published usually on the 1<sup>st</sup> February, 1<sup>st</sup> May, 1<sup>st</sup> August and 1<sup>st</sup> November of each year. They consist of a list of prospecting licence areas that have become available for application under equal competition, together with details of how to apply, and a listing of prospecting licences issued or offered and advertised since the previous publication.

Maps and information on currently held Prospecting Licence areas are available through <http://www.DCCAE.gov.ie/EMDMapsAndData>. Updates to competitions are available on our competition page at <http://www.mineralsireland.ie/ExplorationLicensingProcess/ProspectingLicenceCompetitions.htm>.

## Competition Areas

Prospecting Licence Areas available under competition for the period  
1<sup>st</sup> May 2018 to 31<sup>st</sup> June 2018

PL Area	County	PL Area	County	PL Area	County
582	Longford	3248	Roscommon	3668	Tipperary
1043	Westmeath	3322	Laois	3670	Tipperary
1198	Wexford	3405	Westmeath	3677	Tipperary
1641	Laois	3426	Tipperary	3686	Roscommon
2103	Roscommon	3427	Kildare	3806	Clare
2553	Wexford	3460	Roscommon	3848	Roscommon
2555	Wexford	3531	Westmeath	3862	Galway
2627	Laois	3550	Clare	3934	Roscommon
2666	Roscommon	3585	Leitrim	3985	Westmeath
2700	Galway	3649	Kildare	3996	Longford

# State Mining And Prospecting Facilities

## State Mining Facilities

### 1. Mining Licences

SML No	Licensee	Issued	County	Valid To
2	Boliden Tara Mines Ltd.	03.07.1998	Meath	30.11.2023
3	Boliden Tara Mines Ltd.	03.07.1998	Meath	30.11.2023
4	Boliden Tara Mines Ltd.	11.09.2000	Meath	30.11.2023
5	Boliden Tara Mines Ltd.	15.01.2004	Meath	30.11.2023
11	Vedanta Lisheen Mining Ltd., Killoran Lisheen Mining Ltd. & Lisheen Milling Ltd.	08.01.2013	Tipperary	06.10.2027
12	Boliden Tara Mines Ltd.	22.04.2013	Meath	30.06.2021

### 2. Mining Leases

SML No	Lessee	Issued	County	Valid To
17	Joyce's Marble Quarries Ltd.	01.10.1933	Galway	30.09.2032
23	Fleming's Fireclays Ltd.	01.03.1935	Laois	29.02.2032
30	Connemara Marble Products Ltd.	01.11.1937	Galway	31.10.2034
37	Fleming's Fireclays Ltd.	14.11.1940	Laois	13.11.2039
79	Joyce's Marble Quarries Ltd.	01.12.1957	Galway	30.11.2056
139	Irish Gypsum Ltd.	12.11.2002	Monaghan/ Cavan	11.11.2032
140	Vedanta Lisheen Mining Ltd. Killoran Lisheen Mining Ltd. & Lisheen Milling Ltd.	07.10.1997	Tipperary	06.10.2027
144	Boliden Tara Mines Ltd.	01.07.2006	Meath	30.06.2021
146	Boliden Tara Mines Ltd.	01.12.2013	Meath	30.11.2023
147	Boliden Tara Mines Ltd.	01.12.2013	Meath	30.11.2023

Further details concerning the individual State Mining Facilities (minerals, royalties, etc.) are published in the Six Monthly Report to the Oireachtas by the Minister for Communications, Climate Action and Environment in accordance with the Minerals Development Acts, 1940-1999. Six Monthly Reports are available at <http://www.mineralsireland.ie/LegislationFeesAndPolicy/SixMonthlyReports.htm>

## Prospecting Licences Held

All prospecting licences are restricted to certain minerals and hence the PL areas in question are available for application for other minerals (although the current holder is deemed to have a standing Statement of Interest for all these other minerals). The licensed minerals are abbreviated as follows: Base metals (Bm); Barytes (b); Gold (g); Silver (s); Platinum Group Elements (PGE), Rare Earth Elements (REE).

There are 566 Licences held on 1<sup>st</sup> May 2018.

PL Area	Licensee	Start Date	County	Minerals
184	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE
185	Diversified Asset Holdings Pty. Ltd.	03-09-2014	Longford	Bm, b, s, g, PGE
186	Diversified Asset Holdings Pty. Ltd.	03-09-2014	Longford	Bm, b, s, g, PGE
350	Group Eleven Mining and Exploration Ltd.	12-02-2015	Tipp	Bm, b, s, g
405	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
449	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
450	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
468	Group Eleven Mining and Exploration Ltd.	04-11-2016	Tipp/Limerick	Bm, b, s, g
480	Group Eleven Mining and Exploration Ltd.	13-02-2017	Offaly	Bm, b, s, g
481	Group Eleven Mining and Exploration Ltd.	13-02-2017	Offaly	Bm, b, s, g
580	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE
581	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE
608	Centenary Resources Ltd.	10-04-2017	Offaly	Bm, b, s, g
622	Ballinalack Resources Ltd.	20-02-2006	Longford	Bm, b, s, g, PGE
626	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
627	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
635	Glencore Zinc Ireland Ltd.	06-12-1996	Limerick	Bm, b, s
636	Glencore Zinc Ireland Ltd.	06-12-1996	Limerick	Bm, b, s
666	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE
667	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE
735	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
743	Adventus Zinc Ireland Ltd.	05-02-2014	Mayo	Bm, b, s, g
757	Erris Resources Ltd.	26-08-2013	Sligo	Bm, s, g
786	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
890	Raptor Resources Ltd.	08-05-2017	Offaly	Bm, b, s, g
930	MOAG Copper Gold Resources Inc	25-09-2006	Galway	Bm, s
934	MOAG Copper Gold Resources Inc	31-12-2005	Galway	Bm, s
1051	Oldcastle Zinc Ltd.	28-01-2005	Cavan	Bm, b, s, g, PGE
1053	Oldcastle Zinc Ltd.	28-01-2005	Meath	Bm, b, s, g, PGE
1108	Centenary Resources Ltd.	03-04-2017	Offaly	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
1174R	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
1178	Teck Ireland Ltd.	08-08-2006	Offaly	Bm, b, s, g, PGE
1181	Teck Ireland Ltd.	26-06-2006	W'meath	Bm, b, s, g, PGE
1228	Minco Ireland Ltd.	03-11-2015	W'meath	Bm, b, s, g
1229	Minco Ireland Ltd.	03-11-2015	W'meath	Bm, b, s, g
1244	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
1245	Teck Ireland Ltd.	12-02-2012	W'meath	Bm, b, s, g, PGE
1302	Group Eleven Mining and Exploration Ltd.	10-11-2016	Limerick	Bm, b, s, g
1303	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b, s, g
1316	Teck Ireland Ltd.	26-01-2012	Kildare	Bm, b, s, g, PGE
1317	Teck Ireland Ltd.	26-01-2012	Kildare	Bm, b, s, g, PGE
1318	Teck Ireland Ltd.	26-01-2012	Kildare	Bm, b, s, g, PGE
1319	Teck Ireland Ltd.	12-02-2012	Meath	Bm, b, s, g, PGE
1322	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
1323	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
1324	Boliden Tara Mines Ltd.	16-11-1995	Meath	Bm, b, s
1325	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
1327	Boliden Tara Mines Ltd.	20-04-2011	Meath	Bm, b, s, g
1331	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
1332	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
1333	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
1334	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
1338	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
1339	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
1341	Boliden Tara Mines Ltd.	25-01-2007	Offaly	Bm, b, s, g
1343	Boliden Tara Mines Ltd.	15-11-2006	Offaly	Bm, b, s, g
1344	Ballinalack Resources Ltd.	30-11-2005	W'meath	Bm, b, s, g, PGE
1345	Ballinalack Resources Ltd.	30-11-2005	W'meath	Bm, b, s, g, PGE
1346	Ballinalack Resources Ltd.	30-11-2005	W'meath	Bm, b, s, g, PGE
1347	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
1349	Teck Ireland Ltd.	12-02-2012	W'meath	Bm, b, s, g, PGE
1351	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
1373	Adventus Zinc Ireland Ltd.	05-02-2014	Galway	Bm, b, s, g
1383	Ballinalack Resources Ltd.	20-02-2006	W'meath	Bm, b, s, g, PGE
1384	Ballinalack Resources Ltd.	19-12-2011	W'meath	Bm, b, s, g, PGE
1385	Ballinalack Resources Ltd.	20-02-2006	W'meath	Bm, b, s, g, PGE
1431	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
1440R	Westland Exploration Ltd.	23-10-1972	Meath	Bm, b, s
1450	Beal Na Blath Resources Ltd.	10-07-2015	Meath/Dublin	Bm, b, s, g, PGE
1469	Omagh Minerals Ltd.	18-03-2014	Leitrim	Bm, b, s, g
1473	Wolfhound Lithium Ltd.	21-09-2016	Wicklow	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb,

PL Area	Licensee	Start Date	County	Minerals
1476	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
1496	Rennicks and Bennett Ltd.	16-08-1971	Meath	Bm, b, s
1500	Teck Ireland Ltd.	24-06-2017	Meath	Bm, b, s, g, PGE
1541	Zimtu Capital Corp	30-11-2016	Wexford	Bm, g, REE, Li
1542	Zimtu Capital Corp	30-11-2016	Wexford	Bm, g, REE, Li
1555	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1556	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1583	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
1584	Group Eleven Mining and Exploration Ltd.	10-11-2016	Limerick	Bm, b, s, g
1597	Wolfhound Lithium Ltd.	22-09-2016	Carlow	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb
1601	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
1604	Teck Ireland Ltd.	30-11-2015	Kildare	Bm, b, s, g, PGE
1624	Boliden Tara Mines Ltd.	04-08-2017	Offaly	Bm, b, s, g
1630	Teck Ireland Ltd.	30-11-2015	Kildare	Bm, b, s, g, PGE
1631	Teck Ireland Ltd.	30-11-2015	Kildare	Bm, b, s, g, PGE
1650	Connemara Mining Co. Ltd.	23-05-2017	Laois	Bm, b, s, g
1652	Vedanta Exploration Ireland Ltd.	20-03-2014	Laois	Bm, b, s, g, Calcite
1653	Vedanta Exploration Ireland Ltd.	20-03-2014	Laois	Bm, b, s, g, Calcite
1660	Erris Resources Ltd.	26-08-2013	Sligo	Bm, s, g
1672	BMEEx Pty Ltd.	16-10-2017	Leitrim	Bm, b, s, g
1675	BMEEx Pty Ltd.	16-10-2017	Leitrim	Bm, b, s, g
1677	Adventus Zinc Ireland Ltd.	21-07-2016	Galway	Bm, b, s, g
1695	BMEEx Pty Ltd.	02-11-2017	Cavan	Bm, b, s, g
1700	Boliden Tara Mines Ltd.	03-07-2014	Galway	Bm, b, s, g
1715	Wolfhound Lithium Ltd.	21-09-2016	Wicklow	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb
1788	Boliden Tara Mines Ltd.	03-07-2014	Galway	Bm, b, s, g
1802	BMEEx Pty Ltd.	02-10-2017	Longford	Bm, b, s, g
1803	BMEEx Pty Ltd.	02-10-2017	Longford	Bm, b, s, g
1814	Unicorn Mineral Resources Ltd.	08-09-2010	Kilkenny	Bm, b, s, g, PGE, Co, Fe
1940	Group Eleven Mining and Exploration Ltd.	12-11-2016	Cork	Bm, b,, s, g
1942	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b,, s, g
1943	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b,, s, g
1946	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b,, s, g
1947	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b,, s, g
1948	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b,, s, g
1949	Unicorn Mineral Resources Ltd.	29-09-2016	Limerick	Bm, b, s, g
1952	Unicorn Mineral Resources Ltd.	06-07-2011	Clare	Bm, b, s, g, PGE, Fluorspar

PL Area	Licensee	Start Date	County	Minerals
1966	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1967	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1991	Oldcastle Zinc Ltd.	28-01-2005	Meath	Bm, b, s, g, PGE
2021	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
2024	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
2029	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
2030	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
2053	Hendrick Resources (Ireland) Ltd.	13-01-2012	Wexford	Bm, b, s, g, PGE, Cs, Li, Nb,
2062	Teck Ireland Ltd.	26-06-2006	Kildare/Offaly	Bm, b, s, g, PGE
2063	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
2085	Oriel Selection Trust Ltd.	12-12-2016	Donegal	Bm, b, s, g, PGE, REE, Li
2087	Oriel Selection Trust Ltd.	12-12-2016	Donegal	Bm, b, s, g, PGE, REE, Li
2105	Beal Na Blath Resources Ltd.	03-07-2015	Roscommon	Bm, b, s, g, PGE
2115	Oriel Selection Trust Ltd.	25-02-2010	Donegal	Bm, b, s, g, PGE, REE
2193	Beal Na Blath Resources Ltd.	20-06-2015	Monaghan	Bm, b, s, g, PGE
2194	Conroy Gold Ltd.	15-07-1996	Monaghan	Bm, b, s, g
2236	Hendrick Resources (Ireland) Ltd.	13-01-2012	Wexford	Bm, b, s, g, PGE, Cs, Li, Nb,
2237	Hendrick Resources (Ireland) Ltd.	13-01-2012	Wexford	Bm, b, s, g, PGE, Cs, Li, Nb,
2239	IMC Exploration Ltd.	12-05-2011	Wicklow	Bm, b, s, g
2260	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
2295	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
2301	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
2315	Omagh Minerals Ltd.	30-03-2012	Donegal	Bm, b, s, g
2331	BMEx Pty Ltd.	02-10-2017	Cork	Bm, b, s, g
2394	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2395	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2440	Beal Na Blath Resources Ltd.	30-06-2015	Cork	Bm, b, s, g, PGE
2442	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
2522	Boliden Tara Mines Ltd.	15-11-2006	Offaly/Laois	Bm, b, s, g
2529	Glencore Zinc Ireland Ltd.	06-12-1996	Limerick	Bm, b, s
2530	Glencore Zinc Ireland Ltd.	13-11-1995	Limerick	Bm, b, s
2531	TILZ Minerals Ltd.	28-04-2006	Limerick	Bm, b, s, g, PGE
2537	Boliden Tara Mines Ltd.	15-11-2006	Offaly	Bm, b, s, g
2538	Boliden Tara Mines Ltd.	15-11-2006	Offaly	Bm, b, s, g
2539	Teck Ireland Ltd.	08-08-2006	Offaly	Bm, b, s, g, PGE
2540	Teck Ireland Ltd.	08-08-2006	Meath	Bm, b, s, g, PGE
2551	IMC Exploration Ltd.	12-05-2011	Wexford	Bm, b, s, g
2552	Hendrick Resources (Ireland) Ltd.	13-01-2012	Wexford	Bm, b, s, g, PGE, Cs, Li, Nb,

PL Area	Licensee	Start Date	County	Minerals
2554	Connemara Mining Co. Ltd.	16-04-2008	Wexford	Bm, b, s, g, PGE, Cs, Li
2558	Connemara Mining Co. Ltd.	16-04-2008	Wicklow	Bm, b, s, g, PGE, Cs, Li
2560	Group Eleven Mining and Exploration Ltd.	18-01-2017	Offaly	Bm, b, s, g
2564	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
2567	Group Eleven Mining and Exploration Ltd.	18-01-2017	Tipp	Bm, b, s, g
2568	Group Eleven Mining and Exploration Ltd.	18-01-2017	Tipp	Bm, b, s, g
2579	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b, s, g
2590	Hannan Metals Ireland Ltd.	31-08-2017	Clare	Bm, b, s, g
2594	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b, s, g
2597	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
2610	Adventus Zinc Ireland Ltd.	05-02-2014	Mayo	Bm, b, s, g
2625	Connemara Mining Co. Ltd.	23-05-2017	Laois	Bm, b, s, g
2638	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
2645	Irish Resource Exploration Ltd.	29-06-2012	Mayo	S, g
2647	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
2654	Group Eleven Mining and Exploration Ltd.	30-09-2016	Tipp	Bm, b, s, g
2655	Group Eleven Mining and Exploration Ltd.	30-09-2016	Tipp	Bm, b, s, g
2674	Boliden Tara Mines Ltd.	25-01-2007	W'meath	Bm, b, s, g
2696	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b, s, g
2710	Teck Ireland Ltd.	26-01-2012	Dublin	Bm, b, s, g, PGE
2724	Beal Na Blath Resources Ltd.	03-07-2015	Galway	Bm, b, s, g, PGE
2732	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2752	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
2754	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
2756	Group Eleven Mining and Exploration Ltd.	29-09-2016	Limerick	Bm, b, s, g
2775	Ballinalack Resources Ltd.	19-12-2011	Longford	Bm, b, s, g, PGE
2777	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
2778	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
2779	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
2781	Centenary Resources Ltd.	10-04-2017	Offaly	Bm, b, s, g
2782	Centenary Resources Ltd.	10-04-2017	Offaly	Bm, b, s, g
2812	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2813	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2814	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2815	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
2835	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b, s, g
2836	Beal Na Blath Resources Ltd.	10-07-2015	Meath	Bm, b, s, g, PGE
2840	Group Eleven Mining and Exploration Ltd.	30-09-2016	Limerick/Tipp	Bm, b, s, g
2845	Group Eleven Mining and Exploration Ltd.	10-11-2016	Limerick	Bm, b, s, g
2860	Unicorn Mineral Resources Ltd.	04-07-2011	Offaly	Bm, b, s, g, PGE, Fluorspar
2861	Centenary Resources Ltd.	10-04-2017	Offaly	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
2872	Diversified Asset Holdings Pty. Ltd.	19-03-2014	Limerick	Bm, b, s, g, PGE,
2881	BMEEx Pty Ltd.	16-10-2017	Leitrim	Bm, b, s, g
2882	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
2883	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
2884	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
2895	Unicorn Mineral Resources Ltd.	16-02-2016	Clare	Bm, b, s, g, PGE
2899	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
2900	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
2901	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
2902	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
2927	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
2930	Wolfhound Lithium Ltd.	22-09-2016	Carlow	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb,
2931	Wolfhound Lithium Ltd.	22-09-2016	Carlow	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb,
2946	Adventus Exploration Ltd.	24-01-2014	Cork	Bm, b, s, g
2947	Adventus Exploration Ltd.	24-01-2014	Cork	Bm, b, s, g
2948	Adventus Exploration Ltd.	24-01-2014	Cork	Bm, b, s, g
2949	Adventus Exploration Ltd.	28-11-2013	Cork	Bm, b, s, g
2964	Connemara Mining Co. Ltd.	08-12-2016	Donegal	Bm, s, g
3007	Connemara Mining Co. Ltd.	08-12-2016	Donegal	Bm, s, g
3008	Connemara Mining Co. Ltd.	08-12-2016	Donegal	Bm, s, g
3012	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
3013	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
3014	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
3027	Beal Na Blath Resources Ltd.	20-06-2015	Monaghan	Bm, b, s, g, PGE
3028	Conroy Gold and Natural Resources Plc	15-07-1996	Monaghan	Bm, b, s, g
3039	Omagh Minerals Ltd.	30-03-2012	Donegal	Bm, b, s, g
3040	Omagh Minerals Ltd.	30-03-2012	Donegal	Bm, b, s, g
3047	Adventus Exploration Ltd.	27-10-2016	Cork	Bm, b, s, g
3062	Connemara Mining Co. Ltd.	08-12-2016	Donegal	Bm, s, g
3063	Connemara Mining Co. Ltd.	10-04-2015	Donegal	Bm, s, g
3065	Conroy Gold and Natural Resources Plc	28-02-2017	Monaghan	Bm, b, s, g
3066	Conroy Gold and Natural Resources Plc	16-07-2012	Monaghan	Bm, b, s, g
3076	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
3077	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
3094	Connemara Mining Co. Ltd.	08-12-2016	Donegal	Bm, s, g
3095	Connemara Mining Co. Ltd.	10-04-2015	Donegal	Bm, s, g
3112	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3128	BMEEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3129	Group Eleven Mining and Exploration Ltd.	13-02-2017	Offaly	Bm, b, s, g
3130	Conroy Gold and Natural Resources Plc	27-11-1996	Cavan	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
3132	BMEEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3133	BMEEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3134	BMEEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3135	Omagh Minerals Ltd.	31-05-2013	Donegal	Bm, b, s, g
3136	BMEEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3145	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
3154	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
3156	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipp	Bm, b, s, g
3158	Connemara Mining Co. Ltd.	23-05-2017	Laois	Bm, b, s, g
3160	Connemara Mining Co. Ltd.	23-05-2017	Laois	Bm, b, s, g
3162	Omagh Minerals Ltd.	18-03-2014	Leitrim	Bm, b, s, g
3163	Beal Na Blath Resources Ltd.	03-07-2015	Roscommon	Bm, b, s, g, PGE
3169	Irish Resource Exploration Ltd.	04-07-2011	Galway	Bm, b, s, g
3170	Irish Resource Exploration Ltd.	29-06-2012	Galway	S, g
3194	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
3195	Unicorn Mineral Resources Ltd.	20-03-2015	Kilkenny/Waterford	Bm, b, s, g, PGE
3202	Beal Na Blath Resources Ltd.	30-06-2015	Cork	Bm, b, s, g, PGE
3205	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
3206	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
3207	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
3208	Unicorn Mineral Resources Ltd.	20-03-2015	Waterford	Bm, b, s, g, PGE
3211	Wolfhound Lithium Ltd.	21-09-2016	Kilkenny	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb,
3213	Zimtu Capital Corp	30-11-2016	Kilkenny	Bm, g, REE, Li
3214	Kenmare Resources Plc.	24-11-2014	Kilkenny	Bm, b, s, g, PGE
3215	Zimtu Capital Corp	30-11-2016	Kilkenny	Bm, g, REE, Li
3216	Zimtu Capital Corp	30-11-2016	Kilkenny	Bm, g, REE, Li
3227	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
3228	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
3229	Adventus Exploration Ltd.	28-11-2013	Cork	Bm, b, s, g
3230	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
3232	Boliden Tara Mines Ltd.	04-08-2017	W'meath	Bm, b, s, g
3234	Omagh Minerals Ltd.	31-05-2013	Donegal	Bm, b, s, g
3235	Omagh Minerals Ltd.	30-03-2012	Donegal	Bm, b, s, g
3237	Diversified Asset Holdings Pty. Ltd.	15-07-2015	Wexford	Bm, b, s, g, PGE, Fe
3249	Unicorn Mineral Resources Ltd.	29-09-2016	Limerick	Bm, b, s, g
3251	Beal Na Blath Resources Ltd.	03-07-2015	Galway	Bm, b, s, g, PGE
3263	Connemara Mining Co. Ltd.	23-05-2017	Laois	Bm, b, s, g
3267	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b, s, g
3268	Glencore Zinc Ireland Ltd.	08-11-1991	Limerick	Bm, b, s
3273	Group Eleven Mining and Exploration Ltd.	18-01-2017	Offaly	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
3281	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
3282	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3294	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3307	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
3312	Vedanta Exploration Ireland Ltd.	30-06-2014	Laois	Bm, b, s, g, Calcite
3313	Connemara Mining Co. Ltd.	14-07-2014	Kilkenny	Bm, b, s, g, PGE
3318	Centenary Resources Ltd.	10-04-2017	Tipp	Bm, b, s, g
3323	Unicorn Mineral Resources Ltd.	06-03-2015	Waterford	Bm, b, s, g, PGE
3324	Boliden Tara Mines Ltd.	16-12-2005	W'meath	Bm, b, s, g
3329	Teck Ireland Ltd.	26-01-2012	Kildare	Bm, b, s, g, PGE
3331	Teck Ireland Ltd.	30-11-2015	Kildare	Bm, b, s, g, PGE
3335	Trove Metal Ltd.	22-01-2018	Wicklow	Bm, b, s, g, REE
3342	Glencore Zinc Ireland Ltd.	21-05-1999	Limerick	Bm, b, s
3344	Glencore Zinc Ireland Ltd.	25-05-1999	Limerick	Bm, b, s
3346	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
3366	Group Eleven Mining and Exploration Ltd.	10-11-2016	Limerick	Bm, b, s, g
3367	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
3368	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
3369	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
3370	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
3373	Boliden Tara Mines Ltd.	01-03-1993	Meath	Bm, b, s
3374	Teck Ireland Ltd.	08-08-2006	Kildare	Bm, b, s, g, PGE
3380	Bowpark Exploration Ireland Ltd.	10-09-2010	Sligo	Bm, b, s, g
3381	Bowpark Exploration Ireland Ltd.	10-09-2010	Sligo	Bm, b, s, g
3382	Bowpark Exploration Ireland Ltd.	10-09-2010	Sligo	Bm, b, s, g
3397	Beal Na Blath Resources Ltd.	27-04-2017	Cavan	Bm, b, s, g, PGE
3400	Conroy Gold and Natural Resources Plc	27-11-1996	Cavan	Bm, b, s, g
3407	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,
3411	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,
3423	Adventus Zinc Ireland Ltd.	05-02-2014	Mayo	Bm, b, s, g
3424	Adventus Zinc Ireland Ltd.	05-02-2014	Mayo	Bm, b, s, g
3425	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
3429	Boliden Tara Mines Ltd.	15-11-2006	Galway	Bm, b, s, g
3431	Glencore Zinc Ireland Ltd.	30-05-2005	Limerick	Bm, b, s, PGE
3432	Centenary Resources Ltd.	10-04-2017	Offaly	Bm, b, s, g
3435	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
3459	Beal Na Blath Resources Ltd.	03-07-2015	Galway	Bm, b, s, g, PGE
3467	Adventus Zinc Ireland Ltd.	05-02-2014	Mayo	Bm, b, s, g
3469	Conroy Gold and Natural Resources Plc	28-02-2017	Monaghan	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
3470	Boliden Tara Mines Ltd.	27-11-2006	Galway	Bm, b, s, g
3471	Boliden Tara Mines Ltd.	27-11-2006	Galway	Bm, b, s, g
3475	Group Eleven Mining and Exploration Ltd.	18-01-2017	Tipp/Offaly	Bm, b, s, g
3476	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
3477	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
3479	Unicorn Mineral Resources Ltd.	06-07-2011	Galway	Bm, b, s, g, PGE, Fluorspar
3488	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
3489	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
3492	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3493	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3494	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3495	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3496	Connemara Mining Co. Ltd.	08-12-2016	Donegal	Bm, s, g
3500	Conroy Gold and Natural Resources Plc	14-05-2012	Clare	Bm, b, s, g
3504	Conroy Gold and Natural Resources Plc	19-11-2011	Clare	Bm, b, s, g
3505	Adventus Zinc Ireland Ltd.	05-02-2014	Galway	Bm, b, s, g
3508	Hannan Metals Ireland Ltd.	17-04-2017	Clare	Bm, b, s, g, Calcite
3509	Hannan Metals Ireland Ltd.	20-08-2012	Clare	Bm, b, s
3518	Unicorn Mineral Resources Ltd.	06-03-2015	Waterford	Bm, b, s, g, PGE
3519	Unicorn Mineral Resources Ltd.	05-04-2017	Waterford	Bm, b, s, g
3522	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3523	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3524	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3525	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3526	Beal Na Blath Resources Ltd.	27-04-2017	Cavan	Bm, b, s, g, PGE
3527	Adventus Zinc Ireland Ltd.	05-06-2017	Longford	Bm, b, s, g
3528	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
3529	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
3530	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
3535	Diversified Asset Holdings Pty. Ltd.	05-05-2014	Cork	Bm, b, s, g, PGE
3536	Diversified Asset Holdings Pty. Ltd.	05-05-2014	Cork	Bm, b, s, g, PGE
3537	Diversified Asset Holdings Pty. Ltd.	05-05-2014	Cork	Bm, b, s, g, PGE
3538	Diversified Asset Holdings Pty. Ltd.	05-05-2014	Cork	Bm, b, s, g, PGE
3544	Group Eleven Mining and Exploration Ltd.	29-09-2016	Limerick	Bm, b, s, g
3545	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
3552	Group Eleven Mining and Exploration Ltd.	04-11-2016	Tipp	Bm, b, s, g
3555	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3556	Group Eleven Mining and Exploration Ltd.	14-12-2015	Kerry	Bm, b, s, g
3559	Wolfhound Lithium Ltd.	21-09-2016	Kilkenny	Bm, s, Be, Cs, Fluorspar, Li, Nb, Rb,
3570	Unicorn Mineral Resources Ltd.	06-03-2015	Waterford	Bm, b, s, g, PGE

PL Area	Licensee	Start Date	County	Minerals
3571	Unicorn Mineral Resources Ltd.	06-03-2015	Waterford	Bm, b, s, g, PGE
3574	Unicorn Mineral Resources Ltd.	06-03-2015	Waterford	Bm, b, s, g, PGE
3575	Teck Ireland Ltd.	26-06-2006	W'meath	Bm, b, s, g, PGE
3576	Teck Ireland Ltd.	26-06-2006	W'meath	Bm, b, s, g, PGE
3579	Adventus Zinc Ireland Ltd.	05-06-2017	Monaghan/ Cavan	Bm, b, s, g
3581	Group Eleven Mining and Exploration Ltd.	29-09-2016	Limerick	Bm, b, s, g
3582	Unicorn Mineral Resources Ltd.	29-09-2016	Limerick	Bm, b, s, g
3583	Adventus Zinc Ireland Ltd.	05-06-2017	W'meath	Bm, b, s, g
3586	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
3587	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
3589	Boliden Tara Mines Ltd.	04-08-2017	W'meath	Bm, b, s, g
3604	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3605	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
3606	Trove Metal Ltd.	22-01-2018	Wicklow	Bm, b, s, g, REE
3608	Group Eleven Mining and Exploration Ltd.	29-09-2016	Limerick	Bm, b, s, g
3609	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
3611	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
3613	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3614	Teck Ireland Ltd.	26-01-2012	Kildare	Bm, b, s, g, PGE
3615	Viridian Metals Ireland Ltd.	28-05-2012	Galway	Bm, b, s, g, Dolomite and Dolomitic Limestone, Mn, Silica Sand
3619	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3622	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
3634	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE
3636	Teck Ireland Ltd.	08-08-2006	Meath	Bm, b, s, g, PGE
3637	Boliden Tara Mines Ltd.	27-11-2006	Galway/ Roscommon	Bm, b, s, g
3638	Boliden Tara Mines Ltd.	16-12-2005	W'meath	Bm, b, s, g
3640	Hannan Metals Ireland Ltd.	14-07-2008	Clare	Bm, b, s
3641	Unicorn Mineral Resources Ltd.	26-02-2018	Clare	Bm, b, s, g, PGE
3642	Hannan Metals Ireland Ltd.	17-04-2017	Clare	Bm, b, s, g, Calcite
3643	Hannan Metals Ireland Ltd.	25-05-1999	Clare	Bm, b, s
3644	IMC Exploration Ltd.	12-05-2011	Clare	Bm, b, s
3645	Group Eleven Mining and Exploration Ltd.	30-03-2017	Tipp/Kilkenny	Bm, b, s, g
3646	Group Eleven Mining and Exploration Ltd.	30-03-2017	Tipp	Bm, b, s, g
3647	Glencore Zinc Ireland Ltd.	08-11-1991	Tipp/Limerick	Bm, b, s
3650	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b, s, g
3651	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b, s, g
3652	Boliden Tara Mines Ltd.	04-08-2017	W'meath/Offaly	Bm, b, s, g
3654	Group Eleven Mining and Exploration Ltd.	29-09-2016	Limerick	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
3655	Ballinalack Resources Ltd.	19-12-2011	W'meath	Bm, b, s, g, PGE
3658	Teck Ireland Ltd.	12-02-2012	W'meath	Bm, b, s, g, PGE
3659	Teck Ireland Ltd.	12-02-2012	W'meath	Bm, b, s, g, PGE
3660	Teck Ireland Ltd.	12-02-2012	Meath	Bm, b, s, g, PGE
3664	Teck Ireland Ltd.	07-10-2008	Dublin	Bm, b, s, g
3665	Teck Ireland Ltd.	07-10-2008	Dublin	Bm, b, s, g
3676	Hendrick Resources (Ireland) Ltd.	13-01-2012	Wicklow	Bm, b, s, g, PGE, Cs, Li, Nb
3678	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
3679	Hannan Metals Ireland Ltd.	19-12-2005	Clare	Bm, b, s, g
3681	Boliden Tara Mines Ltd.	07-07-2012	Galway	Bm, b, s, g
3693	Unicorn Mineral Resources Ltd.	08-09-2010	Kilkenny	Bm, b, s, g, PGE, Co, Fe
3694	Unicorn Mineral Resources Ltd.	08-09-2010	Kilkenny/Tipp	Bm, b, s, g, PGE, Co, Fe
3695	Unicorn Mineral Resources Ltd.	08-09-2010	Kilkenny	Bm, b, s, g, PGE, Co, Fe
3709	Zimtu Capital Corp	30-11-2016	Kilkenny	Bm, g, REE, Li
3713	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
3715	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
3727	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
3729	IMC Exploration Ltd.	20-04-2011	Clare	Bm, b, s
3730	Adventus Exploration Ltd.	24-01-2014	Louth	Bm, b, s, g, Gypsum
3731	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
3732	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
3733	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3735	Erris Resources Ltd.	26-08-2013	Sligo	Bm, s, g
3743	Adventus Zinc Ireland Ltd.	21-07-2016	Galway	Bm, b, s, g
3755	Boliden Tara Mines Ltd.	07-07-2012	Galway	Bm, b, s, g
3757	Boliden Tara Mines Ltd.	27-11-2006	Galway	Bm, b, s, g
3777	Canex JV	19-12-2011	Kildare	Bm, b, s, g
3782	Group Eleven Mining and Exploration Ltd.	04-11-2016	Tipp	Bm, b, s, g
3783	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
3787	Hannan Metals Ireland Ltd.	08-06-1994	Clare	Bm, b, s
3788	Hannan Metals Ireland Ltd.	08-06-1994	Clare	Bm, b, s, Calcite, Fluorite
3789	Hannan Metals Ireland Ltd.	08-06-1994	Clare	Bm, b, s
3801	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
3813	Centenary Resources Ltd.	03-04-2017	Offaly/ W'meath	Bm, b, s, g
3814	Centenary Resources Ltd.	03-04-2017	Offaly	Bm, b, s, g
3819	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
3820	Connemara Mining Co. Ltd.	10-04-2015	Donegal	Bm, s, g
3824	Aurum Mineral Resources Ltd.	27-05-2004	Limerick	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
3825	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
3828	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3829	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3839	Teck Ireland Ltd.	12-02-2012	Meath	Bm, b, s, g, PGE
3846	Raptor Resources Ltd.	21-09-2015	Kildare	Bm, b, s, g, PGE
3849	IMC Exploration Ltd.	07-02-2013	Wicklow	Bm, b, s, g
3850	IMC Exploration Ltd.	07-02-2013	Wicklow	Bm, b, s, g
3851	Boliden Tara Mines Ltd.	30-04-2001	Meath	Bm, b, s
3852	Boliden Tara Mines Ltd.	16-12-2005	Meath	Bm, b, s, g
3857	IMC Exploration Ltd.	12-05-2011	Wicklow/ Wexford	Bm, b, s, g
3858	Group Eleven Mining and Exploration Ltd.	28-11-2016	Limerick	Bm, b, s, g
3863	Unicorn Mineral Resources Ltd.	16-02-2016	Clare	Bm, b, s, g, PGE
3864	Blackstairs Lithium Ltd.	07-08-2009	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,
3866	Raptor Resources Ltd.	21-09-2015	Kildare	Bm, b, s, g, PGE
3870	Beal Na Blath Resources Ltd.	27-04-2017	Monaghan	Bm, b, s, g, PGE
3871	Beal Na Blath Resources Ltd.	20-06-2015	Monaghan	Bm, b, s, g, PGE
3878	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipp	Bm, b, s, g
3880	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
3880	Beal Na Blath Resources Ltd.	03-07-2015	Galway	Bm, b, s, g, PGE
3881	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
3884	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
3891	Dan Morrissey (Ireland) Ltd.	27-09-1999	Laois	Coal, Fireclay
3893	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,
3894	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,
3895	Zimtu Capital Corp	30-11-2016	Wexford	Bm, g, REE, Li
3896	Hendrick Resources (Ireland) Ltd.	27-10-2012	Wexford	Bm, b, s, g, PGE, Cs, Li, Nb,
3899	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3901	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3907	Group Eleven Mining and Exploration Ltd.	18-01-2017	Offaly	Bm, b, s, g
3908	Glencore Zinc Ireland Ltd.	17-07-2001	Limerick	Bm, b, s
3914	Centenary Resources Ltd.	03-04-2017	Galway	Bm, b, s, g
3920	Boliden Tara Mines Ltd.	04-08-2017	Offaly	Bm, b, s, g
3921	Connemara Mining Co. Ltd.	10-04-2015	Donegal	Bm, s, g
3922	Connemara Mining Co. Ltd.	10-04-2015	Donegal	Bm, s, g

PL Area	Licensee	Start Date	County	Minerals
3923	Adventus Zinc Ireland Ltd.	22-09-2016	Limerick	Bm, b, s, g
3925	Oldcastle Zinc Ltd.	28-01-2005	Meath	Bm, b, s, g, PGE
3926	Oldcastle Zinc Ltd.	28-01-2005	Meath	Bm, b, s, g, PGE
3931	Dan Morrissey (Ireland) Ltd.	27-04-2005	Laois/Carlow	Coal, Fireclay
3932	Boliden Tara Mines Ltd.	16-12-2005	W'meath	Bm, b, s, g
3936	Ballinalack Resources Ltd.	20-02-2006	W'meath	Bm, b, s, g, PGE
3937	Teck Ireland Ltd.	26-06-2006	W'meath	Bm, b, s, g, PGE
3938	Teck Ireland Ltd.	26-06-2006	Meath	Bm, b, s, g, PGE
3939	Teck Ireland Ltd.	26-06-2006	Meath	Bm, b, s, g, PGE
3940	Boliden Tara Mines Ltd.	25-01-2007	Offaly	Bm, b, s, g
3941	Boliden Tara Mines Ltd.	25-01-2007	Offaly	Bm, b, s, g
3942	Boliden Tara Mines Ltd.	15-11-2006	Offaly	Bm, b, s, g
3943	Boliden Tara Mines Ltd.	25-01-2007	Offaly	Bm, b, s, g
3944	Boliden Tara Mines Ltd.	25-01-2007	W'meath	Bm, b, s, g
3945	Boliden Tara Mines Ltd.	25-01-2007	W'meath	Bm, b, s, g
3946	Boliden Tara Mines Ltd.	25-01-2007	Offaly/ W'meath	Bm, b, s, g
3947	Boliden Tara Mines Ltd.	25-01-2007	W'meath	Bm, b, s, g
3948	Boliden Tara Mines Ltd.	25-01-2007	W'meath	Bm, b, s, g
3953	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipp	Bm, b, s, g
3954	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipp	Bm, b, s, g
3955	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipp	Bm, b, s, g
3956	Boliden Tara Mines Ltd.	25-01-2007	Offaly/ W'meath	Bm, b, s, g
3957	Group Eleven Mining and Exploration Ltd.	30-03-2017	Kilkenny	Bm, b, s, g
3963	Unicorn Mineral Resources Ltd.	08-08-2012	Galway	Bm, b, s, g, PGE, Fluorspar
3964	Adventus Zinc Ireland Ltd.	05-02-2014	Galway	Bm, b, s, g
3965	Adventus Zinc Ireland Ltd.	05-02-2014	Galway	Bm, b, s, g
3967	Erris Resources Ltd.	26-08-2013	Sligo	Bm, s, g
3980	Group Eleven Mining and Exploration Ltd.	18-01-2017	Offaly	Bm, b, s, g
3981	Minco Ireland Ltd.	03-11-2015	W'meath	Bm, b, s, g
3989	Boliden Tara Mines Ltd.	08-07-2015	Meath	Bm, b, s, g
3990	Boliden Tara Mines Ltd.	20-04-2011	Meath	Bm, b, s, g
3991	Teck Ireland Ltd.	07-10-2008	Meath	Bm, b, s, g
3992	Teck Ireland Ltd.	07-10-2008	Dublin	Bm, b, s, g
3994	Group Eleven Mining and Exploration Ltd.	10-11-2016	Limerick	Bm, b, s, g
3995	Boliden Tara Mines Ltd.	22-02-2010	Offaly	Bm, b, s, g
4003	Oriel Selection Trust Ltd.	12-12-2016	Donegal	Bm, b, s, g, PGE, REE, Li
4004	Oriel Selection Trust Ltd.	25-02-2010	Donegal	Bm, b, s, g, PGE, REE
4031	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,

PL Area	Licensee	Start Date	County	Minerals
4032	Blackstairs Lithium Ltd.	07-08-2009	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb,
4034	Omagh Minerals Ltd.	31-05-2013	Donegal	Bm, b, s, g
4035	Centenary Resources Ltd.	10-04-2017	Tipp	Bm, b, s, g
4038	Erris Resources Ltd.	30-09-2013	Sligo	Bm, b, s, g
4041	Vedanta Exploration Ireland Ltd.	23-07-2015	Laois	Bm, b, s, g
4042	Vedanta Exploration Ireland Ltd.	23-07-2015	Laois	Bm, b, s, g
4043	Vedanta Exploration Ireland Ltd.	09-03-2015	Laois	Bm, b, s, g
4045	Boliden Tara Mines Ltd.	06-02-2011	Offaly	Bm, b, s, g
4051	Boliden Tara Mines Ltd.	20-04-2011	Meath	Bm, b, s, g
4052	Teck Ireland Ltd.	26-01-2012	Meath	Bm, b, s, g, PGE
4053	Connemara Mining Co. Ltd.	07-07-2011	Wexford	Bm, b, s, g, PGE, Cs, Li, Nb,
4054	Zimtu Capital Corp	30-11-2016	Wexford	Bm, g, REE, Li
4057	Unicorn Mineral Resources Ltd.	04-07-2011	Offaly	Bm, b, s, g, PGE, Fluorspar
4068	Teck Ireland Ltd.	30-11-2015	Kildare	Bm, b, s, g, PGE
4069	Raptor Resources Ltd.	21-09-2015	Kildare	Bm, b, s, g, PGE
4070	Raptor Resources Ltd.	21-09-2015	Kildare	Bm, b, s, g, PGE
4072	Raptor Resources Ltd.	21-09-2015	Kildare	Bm, b, s, g, PGE
4073	Raptor Resources Ltd.	21-09-2015	Kildare	Bm, b, s, g, PGE
4075	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
4076	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
4077	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
4078	Adventus Exploration Ltd.	01-07-2013	Cork	Bm, b, s, g
4087	BMEEx Pty Ltd.	02-11-2017	Cavan	Bm, b, s, g
4092	Boliden Tara Mines Ltd.	20-03-2012	Meath	Bm, b, s, g
4095	Unicorn Mineral Resources Ltd.	24-05-2012	Clare	Bm, b, s, g, PGE, Fluorspar
4098	Conroy Gold and Natural Resources Plc	16-07-2012	Cavan	Bm, b, s, g
4099	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
4100	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
4101	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
4102	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
4103	Adventus Exploration Ltd.	27-06-2013	Cork	Bm, b, s, g
4104	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
4121	Group Eleven Mining and Exploration Ltd.	29-09-2016	Limerick	Bm, b, s, g
4236	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
4248	Beal Na Blath Resources Ltd.	27-04-2017	Monaghan	Bm, b, s, g, PGE
4251	Beal Na Blath Resources Ltd.	27-04-2017	Monaghan	Bm, b, s, g, PGE
4257	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
4363	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE
4364	Beara Coast Copper	22-11-2016	Cork	Bm, s, g, PGE

PL Area	Licensee	Start Date	County	Minerals
4469	Erris Resources Ltd.	26-08-2013	Sligo	Bm, s, g
4470	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
4470	Zetland Resources Ltd.	03-07-2013	Galway	Bm, b, s, g
4471	Zetland Resources Ltd.	03-07-2013	Galway	Bm, b, s, g
4471	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
4472	Zetland Resources Ltd.	03-07-2013	Galway	Bm, b, s, g
4472	Zetland Resources Ltd.	08-07-2015	Galway	Gemstones including semi-precious stones
4473	Ballinalack Resources Ltd.	15-04-2013	W'meath	Bm, b, s, g, PGE
4474	Diversified Asset Holdings Pty. Ltd.	31-05-2013	Tipp/Limerick	Bm, b, s, g
4477	Boliden Tara Mines Ltd.	28-06-2013	Meath	Bm, b, s, g
4478	Boliden Tara Mines Ltd.	28-06-2013	Meath	Bm, b, s, g
4479	Boliden Tara Mines Ltd.	28-06-2013	Meath	Bm, b, s, g
4484	Adventus Exploration Ltd.	24-01-2014	Monaghan	Bm, b, s, g, Gypsum
4485	Adventus Exploration Ltd.	05-02-2014	Monaghan	Bm, b, s, g, Gypsum
4486	Adventus Exploration Ltd.	24-01-2014	Louth	Bm, b, s, g, Gypsum
4489	Adventus Zinc Ireland Ltd.	05-02-2014	Mayo	Bm, b, s, g
4491	Boliden Tara Mines Ltd.	19-04-2002	Meath	Bm, b, s
4498	Group Eleven Mining and Exploration Ltd.	12-02-2015	Tipp	Bm, b, s, g
4499	Oriel Selection Trust Ltd.	12-12-2016	Donegal	Bm, b, s, g, PGE, REE, Li
4500	Oriel Selection Trust Ltd.	29-05-2015	Donegal	Bm, b, s, g, PGE, REE
4502	Boliden Tara Mines Ltd.	26-10-1970	Meath	Bm, b, s, g
4503	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipp	Bm, b, s, g
4504	Connemara Mining Co. Ltd.	05-12-2016	Cork	Bm, b, s, g
4505	Connemara Mining Co. Ltd.	05-12-2016	Cork	Bm, b, s, g
4506	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
4507	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
4508	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
4509	Centenary Resources Ltd.	10-04-2017	Offaly	Bm, b, s, g
4510	Centenary Resources Ltd.	10-04-2017	Tipp	Bm, b, s, g
4513	Shanoon Resources Ltd.	13-07-2017	Kilkenny/Laois	Bm, b, s, Dolomite and Dolomitic Limestone
4514	Shanoon Resources Ltd.	13-07-2017	Kilkenny	Bm, b, s, Dolomite and Dolomitic Limestone

PL Area	Licensee	Start Date	County	Minerals
4515	Shanoon Resources Ltd.	13-07-2017	Kilkenny	Bm, b, s, Dolomite and Dolomitic Limestone
4516	BMEEx Pty Ltd.	02-10-2017	Cork	Bm, b, s, g

## Prospecting Licences Granted Since 1<sup>st</sup> February 2018

PL Area	Licensee	Start	County	Minerals
184	Longford Zinc Mining Limited	13/04/2018	Longford	Bm, b, s, g, PGE
580	Longford Zinc Mining Limited	13/04/2018	Longford	Bm, b, s, g, PGE
581	Longford Zinc Mining Limited	13/04/2018	Longford	Bm, b, s, g, PGE
666	Longford Zinc Mining Limited	13/04/2018	Longford	Bm, b, s, g, PGE
667	Longford Zinc Mining Limited	13/04/2018	Longford	Bm, b, s, g, PGE
3634	Longford Zinc Mining Limited	13/04/2018	Longford	Bm, b, s, g, PGE
3641	Unicorn Mineral Resources Ltd.	26/02/2018	Clare	Bm, b, s, g, PGE

## Prospecting Licences Offered and Accepted

PL Area	Applicant	County	Minerals
3794	Irish Marine Oil Ltd.	Kildare	g
4520	Connemara Granite Teo	Galway	Bm, b, Be, Fluorspar, Gemstones including semi-precious stones

# Ireland: Exploration and Mining News

1<sup>st</sup> May 2018

## Mining Highlights

### **Mine Operations**

There are currently two operating mines in Ireland (Figure 1): Navan (zinc-lead) and Drummond (gypsum). The underground zinc-lead mines at Lisheen (Co. Tipperary) and Galmoy (Co. Kilkenny) ceased production in December 2015 and October 2012 respectively.

### **2017 Mine Production**

- Zinc metal in concentrates: 131kt
- Lead metal in concentrates: 17kt

### **2017 Mine Output (Metal Content)**

#### **(a) Zinc**

- Ireland produced 12.8% of European zinc mine output (3<sup>rd</sup> in Europe)
- Ireland produced 0.98% of World zinc mine output (16<sup>th</sup> in World)

#### **(b) Lead**

- Ireland produced 4.0% of European lead mine output (6<sup>th</sup> in Europe)
- Ireland produced 0.35% of World lead mine output (22<sup>nd</sup> in World)

Source of Production Data: International Lead & Zinc Study Group

## **Development**

In 2017, Ireland's zinc-lead production accounted for approximately 13% of European zinc mine output (19% of EU28 production) and 4% of European lead mine output (10% of EU28 production). These figures equate to 1% of world mine production for zinc and 0.35% for lead. According to data published by the International Lead and Zinc Study Group, in 2017, Ireland ranked 16<sup>th</sup> and 22<sup>nd</sup> in the world in relation to zinc and lead mine output respectively. Ireland is no longer placed first in terms of European mine production for zinc; Ireland currently places third in Europe, behind the Russian Federation and Sweden.

**Boliden Tara Mines'** underground operation at **Navan**, Co. Meath, is the largest zinc mine in Europe. In 2017, Tara milled 2.3Mt of ore grading 5.92% Zn and 1.14% Pb. Since mining operations commenced in 1977, up until 31 December 2017, total production at Navan has amounted to 92.6Mt grading 7.79% Zn and 1.79% Pb. At the end of 2017, the mine's JORC classified ore reserves (proven and probable) stood at 19.5Mt grading 5.8% Zn and 1.4% Pb, whilst mineral resources (measured, indicated and inferred) were 22.1Mt at 7.1% Zn and 1.9% Pb.

**Irish Gypsum Ltd.**, a subsidiary of French multi-national Saint Gobain, produced approximately 250kt of gypsum in 2017 from its underground mine at **Drummond**, Co. Monaghan. The gypsum is crushed and blended on site, before being transported by road to a production facility at the nearby town of Kingscourt for manufacturing plaster and plasterboard. A smaller tonnage of gypsum is additionally used in the manufacture of cement. In late 2017, the company received planning permission to re-commence extraction operations from the Knocknacran open pit, adjacent to the Drummond Mine.

### **Exploration Activity**

As of 30th April 2018, 45 exploration companies held a total of 566 Prospecting Licences. A further 95 Prospecting Licence applications are currently being processed. Since the last PL competition on 1<sup>st</sup> February 2018, 30 licences have been surrendered. In the same period, 7 licence areas have been issued to the following companies: **Longford Zinc Mining Ltd** (6) and **Unicorn Mineral Resources** (1).

Zinc and lead remain the principal commodities of exploration interest in Ireland. Other commodities that are currently being sought in Ireland include: Gold, silver, barite, copper, PGEs, molybdenum, lithium, antimony and gem minerals.

### Exploration Highlights

Number of Current Prospecting Licences (PLs):	566
Number of Corporate Entities holding Prospecting Licences:	45
Percentage of Ireland Land Area under Licence:	27%
Total Exploration Expenditure in 2017:	€19.545 Million
Exploration Expenditure on PLs in 2017:	€17.30 Million
Exploration Expenditure on State Mining Facilities in 2017:	€2.24 Million
2017 Drilling on PLs (non-mine related):	Approx. 60,000 metres.

**Group Eleven Resources Corp.** presently controls the largest ground position in Ireland comprising 99 Prospecting Licences that cover an area of 3,200km<sup>2</sup>. The company exclusively holds 82 licences in four main project areas; Pallas Green West, Silvermines North, Tralee and Silvermines. In 2017, Group Eleven acquired Teck's 60% interest in **Ballinalack Resources Ltd** (11 PLs centred on the **Ballinalack** deposit) and its 76.56% stake in **TILZ Minerals Ltd 'Stonepark Project'** (6 licences adjacent to Glencore's Pallas Green property).

In early 2018, the **Ballinalack JV**, commenced a 3,700m drilling programme to confirm the historic mineral resource estimate (7.7Mt grading 7.3% Zn + Pb) and investigate the potential for Pale Bed hosted mineralization occurring at greater depths. In January 2018, the company also announced the results of a re-interpretation of seismic data from the Ballinalack area. The study has led to a new interpretation of the regional structure of the Ballinalack property. In addition to the NW dipping Ballinalack Fault, the study has identified a seemingly larger, hitherto unrecognized new structure that dips to the SE. The company's new interpretation places known Ballinalack mineralization in the footwall of the new fault, rather than its hanging wall.

In April 2018, **TILZ Minerals Ltd.**, a joint venture between Group Eleven and Connemara Mining Company Plc, announced a maiden Inferred Resource Estimate (NI43-101) for the **Stonepark** deposit of 5.3Mt grading 11.15% Zn+Pb combined. The deposit comprises flat-lying, stratiform (1.0 to >7.5m thick) lenses of mineralization at depths of 190m to 395m. The mineral resource estimate was prepared by CSA Global (UK) Ltd. based on drilling conducted by Teck Resources Limited from 2007 to 2011. Mineralization at Stonepark is reported to be open both along and across strike.

In July 2017, **Hannan Metals Ltd** published a maiden mineral resource for the Zn-Pb-Ag-Cu **Kilbricken** project in Co. Clare, comprising 2.7 million tonnes at 8.8% zinc equivalent (“ZnEq”), including 1.4 million tonnes at 10.8% ZnEq indicated and inferred resources of 1.7 million tonnes at 8.2% ZnEq. In its first year diamond drill programme, the company has focused on expanding the Kilbricken resource, drilling 12 holes for 6,492 metres. Hannan has also recently completed a 41 line kilometre 2D seismic survey in the Kilbricken area to identify and map geological structures that may control and host mineralization. The company is currently planning a 20,000 metre drill programme to test geological, seismic and soil targets at Kilbricken and elsewhere within the Clare project area.

**Glencore** has updated its resource for the **Pallas Green** project in Co Limerick in its 31<sup>st</sup> December 2017 Resource and Reserve Statement. Following the 2017 drilling campaign the resource has been upgrade from an inferred resource of 44.0m tonnes at 7.0% zinc and 1.0% lead in 2016 to an inferred resource of 44.2m tonnes at 7.2% zinc and 1.2% lead 2017. The Inferred Mineral Resource is based on 392,000m of diamond drilling in 775 drill holes completed between 2002 and the end of 2017. Drill spacing is nominally 100m, but 178 infill drill holes at 50m spacing have been completed.

New drilling totalled 15,060 m in 23 drillholes. All but two of these were directional cuts from existing drillholes for a total of 28,350 m of effective drilling. All drillholes continued a 100 m spaced programme aimed at basic delineation of the Caherline Zone, which was discovered in 2012. The Caherline Zone is deeper than the rest of the Resource, but has better than average grade, presently 9.9 Mt at 8.7% Zn and 1.4% Pb.

**Erris Resources Plc** has completed in-fill soil geochemical surveys at its Streamstown, Lugawarry and Skreen prospects, near **Abbeytown** in Co. Sligo. The company has also commenced a 5,000m drilling programme. Initial drilling has focused on testing a NNE-trending, 3 km long zinc in soil anomaly at Skreen.

**Shannon Resources Limited** has lodged a planning application with Kilkenny County Council to re-open the old **Galmoy** Mine closed in 2012. The application is for recommencing the underground mining of zinc and lead at the mine. The proposed development will also involve the refurbishment of a number of buildings at the site,

while the company is also looking for permission to construct a wheel wash and water conditioning pond.



Figure 1: County Map of Ireland showing locations mentioned in text.

AB	Abbeytown
BL	Ballinalack
DR	Drummond
KB	Kilbricken
GA	Galmoy
LI	Lisheen
NA	Navan
PG	Pallas Green
SP	Stonepark

### Exploration and Mining Expenditures 2017

Based on provisional figures provided by exploration and mining companies, expenditure during the calendar year 2017 totalled **€19.55 million** (excluding office overheads). This is significantly higher than the 2016 figure of €13.11 million.

Expenditure of €19.55 million is comprised of €17.30 million in Prospecting Licence Areas (“greenfield” exploration) and €2.24 million in areas covered by State Mining Facilities (SMF, “brownfield” exploration). Expenditure on drilling on PLs in 2017 amounted to €10.26M and more than doubled that reported for 2016.

The expenditure in PL Areas is mainly related to base metal exploration (€16.63M), with lesser amounts being spent on gold (€531k) and other minerals (€147k).

## Drilling statistics

Figures provided by Prospecting Licence holders indicate that a total of some 60,246 metres of drilling (non mine-related) was carried out during 2017, mainly for base metals (zinc, lead).

<b>Prospecting Licences (PLs)</b>				
<b>Activity</b>	<b>Base Metals</b>	<b>Gold</b>	<b>Other</b>	<b>Total</b>
<b>Geology</b>	€2,349,863.66	€192,377.18	€65,607.00	<b>€2,607,847.84</b>
<b>Geochemistry</b>	€884,304.36	€117,735.00	€74,402.00	<b>€1,076,441.36</b>
<b>Geophysics</b>	€2,476,301.00	€40,300.00	€0.00	<b>€2,516,601.00</b>
<b>Airborne Surveys</b>	€22,750.00	€0.00	€0.00	<b>€22,750.00</b>
<b>Drilling</b>	€10,169,297.20	€87,323.90	€0.00	<b>€10,256,621.10</b>
<b>Trenching</b>	€0.00	€0.00	€0.00	<b>€0.00</b>
<b>Environmental Studies</b>	€156,682.00	€9,708.50	€0.00	<b>€166,390.50</b>
<b>Other Costs</b> (Includes data acquisition, consultancies, storage costs and report writing but excludes office overheads)	€568,666.30	€83,564.83	€6,587.00	<b>€658,818.13</b>
<b>Total Expenditure [PL Areas]</b> <b>(A)</b>	€16,627,864.52	€531,009.41	€146,596.00	<b>€17,305,469.93</b>
<b>Irish Office Overheads</b>	€1,734,926.75	€236,014.00	€26,318.00	<b>€1,997,258.75</b>
<b>Total plus Irish Office Overheads</b>	<b>€18,362,791.27</b>	<b>€767,023.41</b>	<b>€172,914.00</b>	<b>€19,302,728.68</b>
<b>State Mining Facilities (SMFs)</b>				
<b>Drilling</b>				€2,167,153.00
<b>All Other Expenditure</b>				€73,032.00
<b>Total Exploration Expenditure (B)</b>				€2,240,185.00
<b>Total Exploration Expenditure</b>				
<b>PLs + SMFs excluding office overheads (A + B)</b>				<b>€19,545,654.93</b>

## **PDAC Convention, Toronto, March 2018**

The 86<sup>th</sup> Annual Convention and Trade Show of the Prospectors and Developers Association of Canada (PDAC) was held in Toronto from 4<sup>th</sup> to 7<sup>th</sup> March 2018. As usual, the Exploration and Mining Division jointly exhibited at the Trade Show with the Geological Survey of Northern Ireland and the Geological Survey of Ireland, in a combined **Ireland** exhibit. This year, the Irish delegation was significantly boosted by the attendance of Minister of State for Natural Resources, Seán Kyne, TD. The Minister presented at a number of events including the International Mines Ministers Summit, the inaugural EU-Canada Exploration and Mining Day, a half-day 'Ireland-Open for Business' session (facilitated by Geoscience Ireland, Enterprise Ireland and GSI) and a business breakfast with over 80 exploration company representatives and potential investors.

The PDAC meeting is the biggest of its kind in the world, attended by investors, analysts, mining executives, geologists and government officials. This year, the attendance figure was in excess of 25,600. It is hoped that Ireland's involvement in the Trade Show will result in an increased interest in exploration in Ireland.

# Appendices

## Publicly Available Prospecting Licence Area Data

### Public viewing access

Publicly available Prospecting Licence area data consists of non-confidential company work reports, both on surrendered Prospecting Licences, and on work more than 6 years old in current Prospecting Licences. This 'open file' data is available for viewing by members of the public from the Geological Survey of Ireland ([www.gsi.ie](http://www.gsi.ie)), Department of Communications, Climate Action and Environment, Beggars Bush, Haddington Road, Dublin, D04 A068, and also from the Exploration and Mining Division, ([www.DCCAE.gov.ie/EMD](http://www.DCCAE.gov.ie/EMD)) 29/31 Adelaide Road, Dublin, D02 X285 (only for data released from 1st January, 2000). The following viewing arrangements currently apply:

- Access to the Databank held by GSI. By making an appointment with the Minerals Section to view the reports at the GSI (see contact below), or by visiting the GSI Customer Centre and accessing the databanks through the public computer system.
- Digital copies of these may be obtained. Please contact GSI for details and charges. All digital data from EMD is free.
- Photocopies (b/w). These are supplied at cost. Currently the charges are: A0 €6.00; A1 €5.00; A2 €3.00; A3 €0.30; A4 €0.15

For appointments or further information, please contact either the Geological Survey, Gerry Stanley of the Minerals Section, Tel: 01 678 2863, [gerry.stanley@gsi.ie](mailto:gerry.stanley@gsi.ie), or the Exploration and Mining Division (Dr Wayne Cox, Tel: 01 678 2677, [wayne.cox@dccae.gov.ie](mailto:wayne.cox@dccae.gov.ie)).

## **Catalogue of Open File Data**

A digital copy of the 'Catalogue of Exploration Company Open File Data' is available free of charge from the Geological Survey. The catalogue lists all of the approximately 75,000 individual items (reports, maps, sections, drill logs), which are currently held in the open file system. The Catalogue is available as an Access database on CD and may be obtained by applying to Gerry Stanley of the Minerals Section, Tel: 01 678 2863 or: [gerry.stanley@gsi.ie](mailto:gerry.stanley@gsi.ie).

## **Online Data Availability**

Since mid-2003, the Exploration and Mining Division have been progressively providing publicly available company exploration data released since 1<sup>st</sup> January 2000 on the [www.MineralsIreland.ie](http://www.MineralsIreland.ie) website. Data relating to over 1700 PL areas, including those in the current PL competition, are now available.

# Addresses of Companies Holding State Facilities

## 1. Prospecting Licences

Name	Address
Adventus Exploration Ltd	69-70 Main Street, Oughterard, Galway, H91 E827, Ireland
Adventus Zinc Ireland Ltd	69-70 Main Street, Oughterard, Galway, H91 E827, Ireland
Aurum Mineral Resources Ltd	c/o Alba Mineral Resources Plc, Ridge House, The Ridge, Broadblunsdon, Swindon, Wiltshire, SN26 7AD, UK
Ballinalack Resources Ltd	The Murrough, Wicklow, A67 K039, Ireland
Beal Na Blath Resources Ltd	Gokane Point, Tragumna, Skibbereen, Cork, P81 EP84, Ireland
Beara Coast Copper	67 Hillhurst Boulevard, Toronto, Ontario, M5N 1N5, Canada
Blackstairs Lithium Ltd	c/o Company Bureau Formations Limited, The Black Church, St Mary's Place, Dublin, D07 P4AX, Ireland
BMEEx Pty. Ltd	2 Benson Street, Toowong, Queensland, 4066, Australia
Boliden Tara Mines Ltd	Knockumber, Navan, Meath, C15 NH63, Ireland
Bowpark Exploration Ireland Ltd	Nore View, Thomastown, Kilkenny, R95 R5H9, Ireland
Canex JV	12 Durham Road, Sandymount, Dublin, D04 ED61, Ireland
Centenary Resources Ltd	Gokane Point, Tragumna, Skibbereen, Cork, P81 EP84, Ireland
Connemara Mining Co. Ltd	162 Clontarf Road, Dublin, D03 F6Y0, Ireland
Conroy Gold & Natural Resources Plc	3300 Lake Drive, City West Business Campus, Dublin, D24 TD21, Ireland
Conroy Gold Ltd	3300 Lake Drive, City West Business Campus, Dublin, D24 TD21, Ireland
Dan Morrissey (Ireland) Ltd	Dan Morrissey (IRL) Ltd, Bennekerry, Carlow, R93 E099, Ireland
Diversified Asset Holdings Pty. Ltd	44 Kings Park Road, West Perth, Western Australia, 6005, Australia
Erris Resources Ltd	209 Tower Bridge Business Centre, 46-48 East Smithfield, London, E1W 1AW, UK
Glencore Zinc Ireland Ltd	Unit 1, Dromkeen Industrial Park, Dromkeen, Limerick, V94 TW59, Ireland
Gold Note Minerals Ltd	1158-409, Granville Street, Vancouver, British Columbia, V6C 1T2, Canada
Group Eleven Mining & Exploration Ltd	'Cratloe', Ballyprekas, Bunclody, Wexford, Y21 PC43, Ireland
Hannan Metals Ireland Ltd	Blair House, Upper O'Connell Street, Ennis, Clare, V95 FD1V, Ireland
Hendrick Resources (Ireland) Ltd	c/o BRG Ltd, Unit 8B, Block C, Athy Business Campus, Athy, Kildare, R14 FF96, Ireland
IMC Exploration Ltd	70 Ballybough Road, Ballybough, Dublin, D03 F9P7, Ireland
Irish Resource Exploration Ltd	22 Northumberland Road, Ballsbridge, Dublin, D04 ED73, Ireland
Kenmare Resources Plc.	Chatham House, Chatham Street, Dublin, D02 VP46, Ireland
Longford Zinc Mining Ltd.	Trinity House, Charleston Road, Ranelagh, Dublin, D06 C8X4, Ireland

Name	Address
Minco Ireland Ltd	Coolfore Road, QME, Ardbracken, Navan, Meath, C15 KXY3, Ireland
MOAG Copper Gold Resources Inc	21 Burkebrook Place, Suite 405, Toronto, Ontario, M4G 0A2, Canada
Oldcastle Zinc Ltd	162 Clontarf Road, Dublin, D03 F6Y0, Ireland
Omagh Minerals Ltd	56, Botera Upper Road, Omagh, Tyrone, BT78 5LH, Northern Ireland
Oriel Selection Trust Ltd	Aurum Exploration Services Ltd, Unit 34, Kells Business Park, Virginia Road, Kells, Meath, A82 E6K0, Ireland
Raptor Resources Ltd	Gokane Point, Tragumna, Skibbereen, Cork, P81 EP84, Ireland
Rennicks and Bennett Ltd	c/o Boliden Tara Mines Ltd, Knockumber, Navan, Meath, C15 NH63, Ireland
Shanoon Resources Ltd	New Work Junction, Dublin Road, Kilkenny, Kilkenny, R95 VP83, Ireland
Teck Ireland Ltd	The Murrough, Wicklow, A67 K039, Ireland
TILZ Minerals Ltd	12 Merrion Square, Dublin, D02 H798, Ireland
Trove Metal Ltd	11 Loreto Avenue, Bishops Meadows, Kilkenny, R95 HK4D, Ireland
Unicorn Mineral Resources Ltd	c/o BRG Ltd, Unit 8B, Block C, Athy Business Campus, Castlecomer Road, Athy, Kildare, R14 FF96, Ireland
Vedanta Exploration Ireland Ltd	Killoran, Moyne, Thurles, Tipperary, E41 R622, Ireland
Viridian Metals Ireland Ltd	70 Sir John Rogerson's Quay, Dublin, D02 R296, Ireland
Westland Exploration Ltd	c/o Peter McParland, Coolfore Road QME, Ardbraccan, Navan, Meath, C15 KXY3, Ireland
Wolfhound Lithium Ltd	Gokane Point, Tragumna, Skibbereen, Cork, P81 EP84, Ireland
Zetland Resources Ltd	c/o Zetland House Hotel, Cashel, Connemara, Galway, H91 AW61, Ireland
Zimtu Capital Corp	Suite 1450-789 West Pender Street, Vancouver, British Columbia, V6C 1H2, Canada

## 2. Mining Facilities

Name	Address
Boliden Tara Mines Ltd	Knockumber House, Knockumber, Navan, Co. Meath, C15 NH63, Ireland
Connemara Marble Products Ltd.	Moycullen, Co Galway, H91 YR83, Ireland
Fleming's Fireclays Ltd.	The Swan, Athy, Co. Kildare, R14 TE81, Ireland
Irish Gypsum Ltd.	Unit 4, Kilcarbery Business Park, Nangor Road, Dublin, D22 R277, Ireland
Joyce's Marble Quarries Ltd.	Lissoughter, Recess, Connemara, Co Galway, H91 K3E8, Ireland
Killoran Lisheen Mining Ltd.	Killoran, Moyne, Thurles, Co Tipperary, Co Tipperary, E41 R622, Ireland
Lisheen Milling Ltd.	41/45 St. Stephen's Green, Dublin, Ireland
Vedanta Lisheen Mining Ltd.	The Lisheen Mine, Killoran, Moyne, Thurles, Co. Tipperary, E41 R622, Ireland



**Rialtas na hÉireann**  
Government of Ireland

Exploration and Mining Division,  
Department of Communications, Climate Action and Environment

29-31 Adelaide Road  
Dublin  
D02 X285  
Ireland

Tel: + 353-1-6782000  
Email: [EMD.info@dccae.gov.ie](mailto:EMD.info@dccae.gov.ie)

[www.dccae.gov.ie](http://www.dccae.gov.ie)  
[www.dccae.gov.ie/EMD](http://www.dccae.gov.ie/EMD)