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All information is also available at 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 <http://spatial.dcenr.gov.ie/ExplorationAndMining/SpatialViewer/index.html>.

1. Ground Categories

- a. **Open areas (Green/Pale Green):** Established licence areas available for application at any time are identified by their number. Those areas coloured pale green attract exploration incentives (see Incentive Areas below).
- b. **Held areas (Red):** 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 (Yellow):** 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 km². 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).

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

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 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 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.

Bank Details	Bank of Ireland, Main Street, Cavan, H12 E394
Account Name	Department of Communications, Climate Action and Environment Accounts Receivable
Account No.	7849 2156
Bank Sort Code	90 32 93
IBAN	IE48 BOFI 9032 9378 4921 56
BIC	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 1st February, 1st May, 1st August and 1st 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
1st November 2019 to 31st December 2019

PL Area	County	PL Area	County	PL Area	County
930	Galway	2948	Cork	3801	Cork
1650	Laois	2949	Cork	4053	Wexford
2394	Cork	3158	Laois	4092	Meath
2395	Cork	3160	Laois	4099	Cork
2442	Cork	3230	Cork	4100	Cork
2625	Laois	3263	Laois	4101	Cork
2812	Cork	3586	Cork	4102	Cork
2814	Cork	3587	Cork	4103	Cork
2947	Cork	3605	Cork	4104	Cork

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) Lithium (Li), Beryllium (Be), Caesium (Cs), Niobium (Nb), Rubidium (Rb), Iron (Fe).

There are 541 Licences held on 1st November 2019.

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	Tipperary	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	Tipperary Limerick	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
622	Ballinalack Resources Ltd.	20-02-2006	Longford	Bm, b, s, g, PGE
626	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	Bm, b, s, g
627	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	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	Tullyduff Explorations	22-05-2019	Mayo	Bm, b, s, g, PGE
754	Unicorn Mineral Resources Ltd.	28-02-2019	Laois	Bm, b, s
757	Erris Zinc 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
934	MOAG Copper Gold Resources Inc	31-12-2005	Galway	Bm, s
1022	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
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
1102	Boliden Tara Mines Ltd.	22-06-2018	Galway	Bm, b, s, g
1178	Teck Ireland Ltd.	08-08-2006	Offaly	Bm, b, s, g, PGE

PL Area	Licensee	Start Date	County	Minerals
1181	Teck Ireland Ltd.	26-06-2006	W'meath	Bm, b, s, g, PGE
1185	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
1188	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
1190	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
1191	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
1196	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
1198	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
1199	IMC Exploration Ltd.	09-10-2018	Wexford	Bm, s, g
1200	IMC Exploration Ltd.	09-10-2018	Wexford	Bm, s, g
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
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	Group Eleven Mining and Exploration Ltd	02-07-2019	W'meath	Bm, b, s, g, PGE
1349	Teck Ireland Ltd.	12-02-2012	W'meath	Bm, b, s, g, PGE
1356	Great Glen Resources Ltd	26-07-2019	Monaghan	Bm, b, s, g
1357	Great Glen Resources Ltd	26-07-2019	Monaghan	Bm, b, s, g
1362	Boliden Tara Mines Ltd.	22-06-2018	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

PL Area	Licensee	Start Date	County	Minerals
1431	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
1450	Beal Na Blath Resources Ltd.	10-07-2015	Meath Dublin	Bm, b, s, g, PGE
1457	Group Eleven Mining and Exploration Ltd	19-08-2019	Meath Dublin	Bm, b, s
1469	Omagh Minerals Ltd.	18-03-2014	Leitrim	Bm, b, s, g
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
1555	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1556	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1562	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
1577	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	Bm, b, s
1578	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	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
1586	BMEx Pty Ltd.	03-08-2018	Longford	Bm, b, s, g
1587	BMEx Pty Ltd.	03-08-2018	Longford	Bm, b, s, g
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
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 Zinc Ltd.	26-08-2013	Sligo	Bm, s, g
1672	BMEx Pty Ltd.	16-10-2017	Leitrim	Bm, b, s, g
1675	BMEx Pty Ltd.	16-10-2017	Leitrim	Bm, b, s, g
1700	Boliden Tara Mines Ltd.	03-07-2014	Galway	Bm, b, s, g
1764	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g
1788	Boliden Tara Mines Ltd.	03-07-2014	Galway	Bm, b, s, g
1789	Boliden Tara Mines Ltd.	22-06-2018	Galway	Bm, b, s, g
1791	Boliden Tara Mines Ltd.	22-06-2018	Galway	Bm, b, s, g
1796	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g
1797	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g
1798	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g
1800	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
1802	BMEx Pty Ltd.	02-10-2017	Longford	Bm, b, s, g
1803	BMEx Pty Ltd.	02-10-2017	Longford	Bm, b, s, g
1870	Conroy Gold and Natural Resources Plc	05-09-2019	Monaghan	Bm, b, s, g
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

PL Area	Licensee	Start Date	County	Minerals
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
1959	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
1960	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
1966	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1967	Adventus Zinc Ireland Ltd.	07-11-2016	Waterford	Bm, b, s
1979	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
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
2033	Foresight Exploration Ltd	11-07-2018	Cork	Bm, b, s, g, PGE
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
2083	Oriel Selection Trust Ltd.	08-06-2018	Donegal	Bm, b, s, g, PGE, REE, Li
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
2097	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
2098	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
2099	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
2115	Oriel Selection Trust Ltd.	25-02-2010	Donegal	Bm, b, s, g, PGE, REE
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
2260	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
2280	Great Glen Resources Ltd.	07-01-2019	Cork	Bm, b, s, g
2295	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
2331	BMEx Pty Ltd.	02-10-2017	Cork	Bm, b, s, g
2416	Great Glen Resources Ltd.	20-12-2018	Monaghan	Bm, b, s, g
2442	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
2447	Unicorn Mineral Resources Ltd.	28-02-2019	Tipperary	Bm, b, s

PL Area	Licensee	Start Date	County	Minerals
2522	Boliden Tara Mines Ltd.	15-11-2006	Offaly Laois	Bm, b, s, g
2523	Beal Na Blath Resources Ltd.	27-11-2018	R'common	Bm, b, s, g, PGE, Mo
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
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	Tipperary	Bm, b, s, g
2567	Group Eleven Mining and Exploration Ltd.	18-01-2017	Tipperary	Bm, b, s, g
2568	Group Eleven Mining and Exploration Ltd.	18-01-2017	Tipperary	Bm, b, s, g
2579	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	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
2637	Foresight Exploration Ltd	26-06-2018	Cork	Bm, b, s, g, PGE
2638	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
2645	Irish Resource Exploration Ltd.	29-06-2012	Mayo	S, g
2654	Group Eleven Mining and Exploration Ltd.	30-09-2016	Tipperary	Bm, b, s, g
2655	Group Eleven Mining and Exploration Ltd.	30-09-2016	Tipperary	Bm, b, s, g
2664	BMEEx Pty Ltd.	03-08-2018	Longford	Bm, b, s, g
2674	Boliden Tara Mines Ltd.	25-01-2007	W'meath	Bm, b, s, g
2678	Great Glen Resources Ltd.	20-12-2018	Monaghan	Bm, b, s, g
2679	Great Glen Resources Ltd.	20-12-2018	Monaghan	Bm, b, s, g
2680	Great Glen Resources Ltd.	20-12-2018	Monaghan	Bm, b, s, g
2681	Great Glen Resources Ltd.	20-12-2018	Monaghan	Bm, b, s, g
2682	Great Glen Resources Ltd.	20-12-2018	Monaghan	Bm, b, s, g
2683	Conroy Gold and Natural Resources Plc	05-09-2019	Monaghan	Bm, b, s, g
2696	Group Eleven Mining and Exploration Ltd.	12-11-2016	Limerick	Bm, b, s, g
2702	Beal Na Blath Resources Ltd.	27-11-2018	Offaly	Bm, b, s, g, PGE
2710	Teck Ireland Ltd.	26-01-2012	Dublin	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
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

PL Area	Licensee	Start Date	County	Minerals
2776	BMEEx Pty Ltd.	03-08-2018	Leitrim	Bm, b, s, g
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
2780	BMEEx Pty Ltd.	03-08-2018	Longford	Bm, b, s, g
2813	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 Tipperary	Bm, b, s, g
2845	Group Eleven Mining and Exploration Ltd.	10-11-2016	Limerick	Bm, b, s, g
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
2885	Boliden Tara Mines Ltd.	22-06-2018	Galway	Bm, b, s, g
2886	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g
2888	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g
2889	Boliden Tara Mines Ltd.	22-06-2018	Galway	Bm, b, s, g
2895	Unicorn Mineral Resources Ltd.	16-02-2016	Clare	Bm, b, s, g, PGE
2927	TILZ Minerals Ltd.	31-01-2005	Limerick	Bm, b, s, g, PGE
2933	Foresight Exploration Ltd	11-07-2018	Kerry	Bm, b, s, g, PGE
2934	Foresight Exploration Ltd	11-07-2018	Kerry	Bm, b, s, g, PGE
2946	Adventus Exploration Ltd.	24-01-2014	Cork	Bm, b, s, g
2954	Foresight Exploration Ltd	11-07-2018	Kerry	Bm, b, s, g, PGE
2964	Challenge Exploration Ltd.	08-04-2019	Donegal	Diamond, Gemstones including semi- precious stones
2981	Beal Na Blath Resources Ltd.	27-11-2018	R'common	Bm, b, s, g, PGE, Mo
2982	Beal Na Blath Resources Ltd.	27-11-2018	R'common	Bm, b, s, g, PGE, Mo
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
3028	Conroy Gold and Natural Resources Plc	15-07-1996	Monaghan	Bm, b, s, g
3030	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
3035	Oriel Selection Trust Ltd.	08-06-2018	Donegal	Bm, b, s, g, PGE, REE, Li
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

PL Area	Licensee	Start Date	County	Minerals
3062	Challenge Exploration Ltd.	08-04-2019	Donegal	Diamond, Gemstones including semi-precious stones
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
3112	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3128	BMEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3130	Conroy Gold and Natural Resources Plc	27-11-1996	Cavan	Bm, b, s, g
3132	BMEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3133	BMEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3134	BMEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3136	BMEx Pty Ltd.	16-10-2017	Donegal	Bm, b, s, g
3145	Gold Note Minerals Ltd.	21-06-2013	Galway	Bm, s, g
3156	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipperary	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	R'common	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
3185	Great Glen Resources Ltd.	20-12-2018	Tipperary	Bm, b, s, g
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
3219	Beal Na Blath Resources Ltd.	27-11-2018	Dublin	Bm, b, s, g, PGE
3220	Beal Na Blath Resources Ltd.	27-11-2018	Dublin	Bm, b, s, g, PGE
3228	Adventus Exploration Ltd.	30-06-2013	Cork	Bm, b, s, g
3229	Adventus Exploration Ltd.	28-11-2013	Cork	Bm, b, s, g
3232	Boliden Tara Mines Ltd.	04-08-2017	W'meath	Bm, b, s, g
3235	Omagh Minerals Ltd.	30-03-2012	Donegal	Bm, b, s, g
3236	Oriel Selection Trust Ltd.	08-06-2018	Donegal	Bm, b, s, g, PGE, REE, Li
3237	Diversified Asset Holdings Pty. Ltd.	15-07-2015	Wexford	Bm, b, s, g, PGE, Fe
3246	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	Bm, b, s
3249	Unicorn Mineral Resources Ltd.	29-09-2016	Limerick	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
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
3285	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb

PL Area	Licensee	Start Date	County	Minerals
3293	Foresight Exploration Ltd	26-06-2018	Limerick	Bm, b, s, g, PGE
3294	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
3295	Foresight Exploration Ltd	26-06-2018	Cork	Bm, b, s, g, PGE
3312	Vedanta Exploration Ireland Ltd.	30-06-2014	Laois	Bm, b, s, g, Calcite
3318	Centenary Resources Ltd.	10-04-2017	Tipperary	Bm, b, s, g
3321	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	Bm, b, s
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
3338	Foresight Exploration Ltd	26-06-2018	Cork	Bm, b, s, g, PGE
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
3365	Adventus Zinc Ireland Ltd.	26-06-2018	Cork	Bm, b, s, g, PGE
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
3400	Conroy Gold and Natural Resources Plc	27-11-1996	Cavan	Bm, b, s, g
3404	Hannan Metals Ireland Ltd.	02-08-2018	Kilkenny	Bm, b, s
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
3425	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	Bm, b, s, g
3426	Group Eleven Mining and Exploration Ltd.	28-02-2019	Tipperary	Bm, b, s
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
3459	Beal Na Blath Resources Ltd.	03-07-2015	Galway	Bm, b, s, g, PGE
3465	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
3466	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
3469	Conroy Gold and Natural Resources Plc	28-02-2017	Monaghan	Bm, b, s, g
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	Tipperary Offaly	Bm, b, s, g

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3476	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	Bm, b, s, g
3477	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	Bm, b, s, g
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
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
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	Tipperary	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
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
3578	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
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
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
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
3633	BMEx Pty Ltd.	03-08-2018	Longford	Bm, b, s, g
3634	Longford Zinc Mining Ltd.	13-04-2018	Longford	Bm, b, s, g, PGE

PL Area	Licensee	Start Date	County	Minerals
3636	Teck Ireland Ltd.	08-08-2006	Meath	Bm, b, s, g, PGE
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
3647	Glencore Zinc Ireland Ltd.	08-11-1991	Tipperary 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
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
3668	Group Eleven Mining and Exploration Ltd.	28-02-2019	Tipperary	Bm, b, s
3670	Group Eleven Mining and Exploration Ltd.	28-02-2019	Tipperary	Bm, b, s
3676	Hendrick Resources (Ireland) Ltd.	13-01-2012	Wicklow	Bm, b, s, g, PGE, Cs, Li, Nb
3677	Group Eleven Mining and Exploration Ltd.	28-02-2019	Tipperary	Bm, b, s
3678	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	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
3706	Great Glen Resources Ltd.	20-12-2018	Tipperary	Bm, b, s, g
3713	Foresight Exploration Ltd	07-11-2016	Waterford	Bm, b, s
3715	Foresight Exploration Ltd	07-11-2016	Waterford	Bm, b, s
3716	Great Glen Resources Ltd.	07-01-2019	Cork	Bm, b, s, g
3717	Great Glen Resources Ltd.	07-01-2019	Cork	Bm, b, s, g
3718	Great Glen Resources Ltd.	07-01-2019	Cork	Bm, b, s, g
3719	Great Glen Resources Ltd.	07-01-2019	Waterford	Bm, b, s, g
3727	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	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 Zinc Ltd.	26-08-2013	Sligo	Bm, s, g
3737	Hannan Metals Ireland Ltd.	02-08-2018	Kilkenny	Bm, b, s
3738	Hannan Metals Ireland Ltd.	02-08-2018	Kilkenny	Bm, b, s

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3739	Hannan Metals Ireland Ltd.	02-08-2018	Kilkenny	Bm, b, s
3740	Hannan Metals Ireland Ltd.	02-08-2018	Kilkenny	Bm, b, s
3755	Boliden Tara Mines Ltd.	07-07-2012	Galway	Bm, b, s, g
3771	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
3772	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
3774	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
3782	Group Eleven Mining and Exploration Ltd.	04-11-2016	Tipperary	Bm, b, s, g
3783	Group Eleven Mining and Exploration Ltd.	18-12-2015	Kerry	Bm, b, s, g
3785	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	Bm, b, s
3786	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	Bm, b, s
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
3794	Irish Marine Oil Ltd.	05-06-2018	Kildare	G
3799	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
3818	Erris Zinc Ltd.	17-08-2018	Galway	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
3822	Minerex Ltd.	03-04-2019	Wexford	Bm, s, g
3824	Aurum Mineral Resources Ltd.	27-05-2004	Limerick	Bm, b, s, g
3825	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
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
3878	Group Eleven Mining and Exploration Ltd.	27-03-2017	Tipperary	Bm, b, s, g
3887	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
3888	BMEx Pty Ltd.	03-08-2018	Leitrim	Bm, b, s, g
3889	BMEx Pty Ltd.	03-08-2018	Leitrim	Bm, b, s, g
3890	BMEx Pty Ltd.	03-08-2018	Leitrim	Bm, b, s, g
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

PL Area	Licensee	Start Date	County	Minerals
3894	Blackstairs Lithium Ltd.	07-08-2009	Carlow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
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
3902	Foresight Exploration Ltd	26-06-2018	Cork	Bm, b, s, g, PGE
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
3920	Boliden Tara Mines Ltd.	04-08-2017	Offaly	Bm, b, s, g
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
3929	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
3930	Beal Na Blath Resources Ltd.	17-12-2018	Mayo	Bm, b, s, g, PGE, Mo
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	Tipperary	Bm, b, s, g
3954	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipperary	Bm, b, s, g
3955	Group Eleven Mining and Exploration Ltd.	29-09-2016	Tipperary	Bm, b, s, g
3956	Boliden Tara Mines Ltd.	25-01-2007	Offaly W'meath	Bm, b, s, g
3963	Unicorn Mineral Resources Ltd.	08-08-2012	Galway	Bm, b, s, g, PGE, Fluorspar
3980	Group Eleven Mining and Exploration Ltd.	18-01-2017	Offaly	Bm, b, s, g
3981	Minco Ireland Ltd.	03-11-2015	Westmeath	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

PL Area	Licensee	Start Date	County	Minerals
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
4032	Blackstairs Lithium Ltd.	07-08-2009	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4035	Centenary Resources Ltd.	10-04-2017	Tipperary	Bm, b, s, g
4038	Erris Zinc 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
4044	Hannan Metals Ireland Ltd.	02-08-2018	Laois Kilkenny	Bm, b, s
4045	Boliden Tara Mines Ltd.	06-02-2011	Offaly	Bm, b, s, g
4050	Erris Zinc Ltd.	30-08-2018	Galway	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
4055	Hannan Metals Ireland Ltd.	02-08-2018	Tipperary	Bm, b, s
4056	Unicorn Mineral Resources Ltd.	28-02-2019	Tipperary	Bm, b, s
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
4081	Minerex Ltd.	03-04-2019	Wexford	Bm, 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
4132	Adventus Zinc Ireland Ltd.	26-06-2018	Cork	Bm, b, s, g, PGE
4133	Adventus Zinc Ireland Ltd.	26-06-2018	Cork	Bm, b, s, g, PGE
4135	Adventus Zinc Ireland Ltd.	26-06-2018	Cork	Bm, b, s, g, PGE
4136	Adventus Zinc Ireland Ltd.	26-06-2018	Cork	Bm, b, s, g, PGE
4236	Adventus Zinc Ireland Ltd.	16-06-2017	Cork	Bm, b, s, g
4257	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
4272	Erris Zinc Ltd.	30-08-2018	Galway	Bm, b, s, g
4469	Erris Zinc Ltd.	26-08-2013	Sligo	Bm, s, g

PL Area	Licensee	Start Date	County	Minerals
4473	Ballinalack Resources Ltd.	15-04-2013	W'meath	Bm, b, s, g, PGE
4474	Group Eleven Mining and Exploration Ltd	19-08-2019	Tipperary Limerick	Bm, b, s
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
4491	Boliden Tara Mines Ltd.	19-04-2002	Meath	Bm, b, s
4498	Group Eleven Mining and Exploration Ltd.	12-02-2015	Tipperary	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	Tipperary	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
4510	Centenary Resources Ltd.	10-04-2017	Tipperary	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
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
4518	Adventus Zinc Ireland Ltd.	11-07-2018		Bm, b, s, g, PGE
4520	Connemara Granite Teo	05-07-2018	Galway	Bm, b, Be, Fluorspar, Gemstones including semi- precious stones
4525	Foresight Exploration Ltd	11-07-2018		Bm, b, s, g, PGE
4526	Foresight Exploration Ltd	11-07-2018		Bm, b, s, g, PGE
4527	Foresight Exploration Ltd	11-07-2018	Kerry	Bm, b, s, g, PGE
4528	Foresight Exploration Ltd	11-07-2018	Kerry	Bm, b, s, g, PGE
4529	Foresight Exploration Ltd	11-07-2018	Kerry	Bm, b, s, g, PGE
4530	Foresight Exploration Ltd	11-07-2018		Bm, b, s, g, PGE
4534	Erris Zinc Ltd.	17-08-2018	Galway	Bm, b, s, g

PL Area	Licensee	Start Date	County	Minerals
4536	LRH Resources Ltd.	23-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4537	LRH Resources Ltd.	23-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4538	LRH Resources Ltd.	23-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4539	LRH Resources Ltd.	23-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4540	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4541	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4542	LRH Resources Ltd.	23-10-2018	Dublin Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4543	LRH Resources Ltd.	23-10-2018	Dublin Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4544	LRH Resources Ltd.	23-10-2018	Dublin	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4545	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4546	LRH Resources Ltd.	12-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
4547	LRH Resources Ltd.	23-10-2018	Wicklow	Bm, s, g, REE, Be, Cs, Li, Nb, Rb
1174R	Adventus Exploration Ltd.	24-01-2014	Meath	Bm, b, s, g, Gypsum
1440R	Westland Exploration Ltd.	23-10-1972	Meath	Bm, b, s

Prospecting Licences Granted Since 1st August 2019

PL Area	Licensee	Start	County	Minerals
1870	Conroy Gold and Natural Resources Plc	05-09-2019	Monaghan	Bm, b, g
2683	Conroy Gold and Natural Resources Plc	05-09-2019	Monaghan	Bm, s, g
4474	Group Eleven Mining and Exploration Ltd.	19-08-2019	Tipperary	Bm, b, s
1457	Group Eleven Mining and Exploration Ltd.	19-08-2019	Limerick	Bm, b, s

Prospecting Licences Accepted and Advertised

PL Area	Applicant	County	Minerals
415	Firecrest Resources Ltd	Wicklow	Bm, g, s, Li, PGE, REE
930	MOAG Copper Gold Resources Inc	Galway	Bm, g, s
1473	Blackstairs Lithium Ltd	Wicklow	Bm, Li, Cs
1628	Raptor Resources Ltd	Offaly	Bm, b, s, g, PGE
1640	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
1641	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
1715	Blackstairs Lithium Ltd	Wicklow	Bm, Li, Cs
1716	Firecrest Resources Ltd	Wicklow	Bm, s, Li, PGE, REE
2219	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
2474	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
2512	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
2513	Raptor Resources Ltd	Kildare	Bm, b, s, g, PGE
2516	Raptor Resources Ltd	Kildare	Bm, b, s, g, PGE
2627	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
2748	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
3029	Firecrest Resources Ltd	Wicklow	Bm, g, s, Li, PGE, REE
3322	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
3427	Raptor Resources Ltd	Kildare	Bm, b, s, g, PGE
3648	Raptor Resources Ltd	Offaly	BM, b, s, g, PGE
3649	Raptor Resources Ltd	Kildare	Bm, b, s, g, PGE
3662	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
3674	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
3675	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
3777	Irish Marine Oil Ltd	Kildare	Bm, g, s
3854	Raptor Resources Ltd	Offaly	Bm, b, s, g, PGE
4065	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
4066	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
4067	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
4071	Raptor Resources Ltd	Kildare	Bm, b, s, g, PGE
4356	Raptor Resources Ltd	Laois	Bm, b, s, g, PGE
4550	Blackstairs Lithium Ltd	Wicklow	Bm, Li, Cs

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Mining Highlights

Mine Operations

There are currently two operating mines in Ireland (Figure 1): Navan (zinc-lead) and Drummond /Knocknacran (gypsum). Underground Zn-Pb production from the Lisheen Mine ceased in October 2015. The Galmoy Zn-Pb Mine terminated its mining operations in October 2012.

2019 Half Yearly (Jan-June) Mine Production

- Zinc metal in concentrates: 58kt (Equivalent figure for H1, 2018 was 76kt)
- Lead metal in concentrates: 7kt (Equivalent figure for H1, 2018 was 10kt)

2019 Half Yearly (Jan-June) Mine Output (Metal Content)

(a) Zinc

- Ireland produced 10.5% of European zinc mine output in H1, 2019 (3rd in Europe)
- Ireland produced 0.91% of World zinc mine output in H1, 2019 (18th in World)

(b) Lead

- Ireland produced 3.0% of European lead mine output in H1, 2019 (Equal 7th in Europe)
- Ireland produced 0.30% of World lead mine output in H1, 2019 (Equal 25th in World)

Source of Production Data: International Lead & Zinc Study Group

Mining

In the first half of 2019, the Navan underground zinc-lead mine accounted for 10.5% percent of European zinc mine output (16.2% of EU28 production) and 3.0% of European lead mine output (7.6% of EU28 production). Output from the mine also amounted to 0.91% of world mine production for zinc and 0.30% for lead. According to data published by the International Lead and Zinc Study Group, in the first half of 2018, Ireland ranked 18th and 25th in the world in relation to zinc and lead mine output respectively. Following the cessation of operations at Lisheen in late 2015, Ireland now places third in Europe, behind the Russian Federation and Sweden in terms of European mine production for zinc.

Boliden Tara Mines DAC operation at **Navan**, Co. Meath, is the largest zinc mine in Europe. In the first half of 2019, the mine milled 1.20Mt of ore grading 5.06% Zn and 0.95 Pb. Since mining operations commenced in 1977, up until 30 June 2019, total production at Navan has amounted to 95.97Mt grading 7.87% Zn and 1.79% Pb. At the end of 2018, the mine's PERC classified ore reserves (proven and probable) stood at 19.0Mt grading 5.7% Zn and 1.5% Pb, whilst mineral resources (measured, indicated and inferred) were 23.0Mt at 7.2% Zn and 1.7% Pb.

Irish Gypsum Ltd., a subsidiary of French multi-national Saint Gobain, produced approximately 200kt of gypsum in 2018 from its underground (**Drummond**) and open pit (**Knocknacran**) operations in 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 May 2018, the company also re-commenced extraction operations from the Knocknacran open pit, adjacent to

Exploration Highlights

Number of Current Prospecting Licences (PLs):	541
Number of Companies holding Prospecting Licences:	47
Percentage of Ireland Land Area under Licence:	Approx. 26%
Total Exploration Expenditure in 2018:	€20.94 Million
Exploration Expenditure on PLs in 2018:	€18.715 Million
Exploration Expenditure on State Mining Facilities in 2018:	€2.07 Million
2018 Drilling on PLs (non-mine related):	Approx. 60,000 metres.

Exploration Activity

As of 31st October 2019, forty seven corporate entities held a total of 541 Prospecting Licences (PLs). A further 62 Prospecting Licence applications are currently being processed. Since 1st May 2019, eight licences have been issued. Of these licences, three have been granted to Group Eleven Mining and Exploration Ltd, two to Great Glen Resources in Co. Monaghan and two to Conroy Gold and Natural Resources Plc (also in Co. Monaghan). A single PL Area in Co. Mayo has additionally been issued to an Irish company, Tullyduff Explorations, for base metals, barite, silver and calcite.

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

Group Eleven Mining and Exploration Ltd continue to control the largest ground holding in Ireland. The company exclusively holds 76 licences, the majority of which are situated in four main project areas; Pallas Green West, Silvermines North (19 PLs), Tralee (15 PLs) and Silvermines (5 PLs). Drilling at Ballywire (PLA 2654) on the PG West Block intersected three zones of mineralization over a 36.5m interval at the base of the Waulsortian Limestone at approximately 700m depth. Mineralized intervals included 0.90m grading 5.77% Zn+Pb and 8.3 g/t Ag and 0.75m at 13.1% Zn+Pb and 39.1g/t Ag. Group Eleven additionally holds a 60% interest in Ballinalack Resources Ltd (11 PLs centred on the **Ballinalack** deposit) and a 76.56% stake in TILZ Minerals Ltd '**Stonepark**' project (6 licences adjacent to Glencore's **Pallas Green** property). Recent drilling at Ballinalack has focused on testing the prospective Navan Beds, which are located several hundred metres below the existing Waulsortian-hosted mineralization.

On 15 October 2019, Group Eleven announced a non-brokered private placement and Shareholder Rights Agreement with Glencore. As part of this agreement, Glencore has invested over CAD \$1M in Group Eleven, implying an equity ownership of 11.58%. Group Eleven has covenanted that a minimum of 70% of the net proceeds of the offering is to be spent on advancing exploration on the Stonepark and Pallas Green West licence areas.

Glencore has updated its resource for the **Pallas Green** project in Co Limerick in its 31st December 2018 Resource and Reserve Statement. Following the 2018 drilling campaign the resource has been upgraded from an inferred resource of 44.2Mt at 7% zinc and 1% lead in 2017 to an inferred resource of 45.1Mt at 7% zinc and 1% lead in 2018. The Inferred Mineral Resource is reported to be 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.

In July 2019, **Raptor Resources Ltd.**, a 100% owned subsidiary of Australian explorer **Zinc of Ireland NL**, announced an increase in the inferred mineral resource for its **Kildare Zinc Project**. Based on a 5.5% 'zinc equivalent' (ZnEq) cut off, Raptor reports a total inferred resource for its McGregor and Shamrock deposits of 9.0Mt grading 8.2% Zn and 1.3% Pb. Metallurgical testwork has yielded positive results, with excellent Zn and Pb recoveries (96.4% and 86.4% respectively) being attained for zinc and lead concentrates at a coarse grind size. Additional drilling, up to 200m outside of the current resource boundary has also returned multiple, high grade intercepts including;

- Hole HZDD005: 5m @ 13.7% Zn, 1.4% Pb from 391 to 396m and 2m @ 17.6% Zn, 5.5% Pb from 400-402m,
- Hole HZDD004: 6m @ 11.7% Zn, 0.8% Pb from 401 to 407m and 10m @ 8.2% Zn, 0.9% Pb from 418-428m.

IMC Exploration Ltd continues to evaluate the gold and base metal potential of mining wastes at **Avoca** in Co. Wicklow. The company recently engaged CSA Global Pty Ltd to complete a mineral resource estimate based on data from 14 sample pits, excavated within various Avoca spoil heaps (e.g. Mount Platt, Cronebane, Tigroney East, etc). The total inferred mineral resource amounted to 1.871Mt grading 0.14% Cu, 0.42% Pb, 0.14% Zn and 0.3 g/t Au (no cut-off grade has been applied to tonnages). Elsewhere, the company has also completed drilling on a number of its gold-focused licences during 2019.

Conroy Gold and Natural Resources Plc has published the results of its 2019 drilling programme at **Slieve Glah** in the Longford-Down Massif. Two separate gold-in-soil anomalies were targeted by a total of four drillholes. Low grade gold mineralization was intersected in all four holes.

Forthcoming Report on Social, Environmental and Economic Analysis of Galmoy and Lisheen Mines (SeeGaL)

In 2018, EMD issued a Request for Tender for the provision of a social, environmental and economic analysis of the effects of Galmoy and Lisheen Mines on their respective local communities. The successful tenderer was required to; (1) Identify and compile available data on the full life cycle of the mines (e.g. baseline, construction, production and closure) and (2) produce an independent and reasoned report that assesses the social, environmental and economic effects of each mine on the area in which it was located. The contract was awarded to AECOM Ireland Ltd in January 2019. The final report of this work is anticipated to be published on the Department's website (www.dccae.gov.ie) in late 2019.



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

AV	Avoca
BL	Ballinalack
DR	Drummond
GA	Galmoy
KE	Kildare
LI	Lisheen
NA	Navan
PG	Pallas Green
SG	Slieve Glah
SM	Silvermines
SP	Stonepark

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), 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) 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, Eoin McGrath of the Minerals Section, Tel: 01 678 2863, eoin.mcgrath@gsi.ie, or the Exploration and Mining Division (Dr Wayne Cox, Tel: 01 678 2677, 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 Eoin McGrath of the Minerals Section, Tel: 01 678 2863 or: eoin.mcgrath@gsi.ie.

Online Data Availability

Since mid-2003, the Exploration and Mining Division have been progressively providing publicly available company exploration data released since 1st January 2000 on the 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
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
Centenary Resources Ltd	Gokane Point, Tragumna, Skibbereen, Cork, P81 EP84, Ireland
Challenge Exploration Ltd	Blackthorn Business Park, FDW House, Coes Road, Dundalk, Louth, A91 RW26
Connemara Granite Teo	Ros an Mhil, Baile na hAbhain, Galway, H91 V8YA
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 Zinc 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
Great Glen Resources Ltd	Suite 2, 70 Queensway, Hemel Hempstead, Hertfordshire, HP2 5HD, UK
Group Eleven Mining & Exploration Ltd	'Cratloe', Ballyprecas, 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 Marine Oil Ltd	162 Clontarf Road, Dublin, D03 F6Y0
Irish Resource Exploration Ltd	22 Northumberland Road, Ballsbridge, Dublin, D04 ED73, Ireland

Name	Address
Longford Zinc Mining Ltd.	Trinity House, Charleston Road, Ranelagh, Dublin, D06 C8X4, Ireland
LRH Resources Ltd	69-70 Main Street, Oughterard, Galway, H91 E827
Minco Ireland Ltd	Coolfore Road, QME, Ardbracken, Navan, Meath, C15 KXY3, Ireland
Minerex Ltd	1 Marine Terrace, Dun Laoghaire, Dublin, A96 KD68
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

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