

INDUSTRY NEWS

During the last six months there has been a clear improvement in the fortunes of Ireland's mining sector, and a noticeable increase in optimism in the exploration sector. In base metal mining, the three underground zinc-lead mines continue to account for a very significant amount of the production of zinc (42%) and lead (29%) concentrate in Western Europe. All three mines have also been drilling in search of further resources in the vicinity of the mines. In May, **Arcon International Resources**, owner of the Galmoy Mine, was acquired by **Lundin Mining**. Mining of gypsum continues at **Irish Gypsum's** open pit at Knocknacran, Co. Monaghan, while a number of dolomite and dolomitic limestone quarries are also in production.

Base metal exploration outside near-mine areas has resumed, and a number of companies have increased budgets to carry out drilling programmes this year. Some exploration for gold has also been carried out.

DEVELOPMENT

- **Navan (New Boliden)**

Production at the New Boliden-Tara Mines underground zinc-lead mine at Navan, Co. Meath during 2004 amounted to 2.5Mt grading 9.15% Zn and 1.82% Pb. This produced 381,275t of zinc concentrate (55.9% Zn) and 52,263t of lead concentrate (60.5% Pb). Total production (1977-2004) amounts to more than 60Mt grading 8.37% Zn and 2.04% Pb. At the end of 2004, Tara's JORC Classified Ore Reserves for the entire orebody amounted to 16.3Mt at 8.7% Zn and 1.9% Pb, with an additional 20.2Mt of Mineral Resources grading 7.2% Zn and 2.1% Pb.

An electric motor breakdown at one of the grinding mills caused production disruptions in June. Production of zinc and lead concentrates was expected to decline by approximately 40 per cent over the 6 weeks that the repairs are expected to take. The mine is expected to return to full production in mid-July.

- **Lisheen (Anglo American)**

During 2004 **Anglo American** produced 1.46Mt of ore grading 11.71% Zn and 1.76% Pb from the underground mine at Lisheen, Co. Tipperary. This ore produced 293,092t of zinc concentrate (53.3% Zn). Total production (1999-2004) is 6.57Mt grading 11.62% Zn and 2.27% Pb. Reserves at end December 2004 were 11.97Mt grading 11.69% Zn and 1.94% Pb, with added Resources of 1.77Mt at 12.14% Zn and 2.10% Pb.

Tipperary (NR) County Council have agreed to grant planning permission to Anglo to work minerals in the Bog Zone, northeast of the current underground workings. These minerals lie within the existing State Mining Lease area. One appeal against this decision was lodged on 13th June, and the matter is now with An Bord Pleanála.

- **Galmoy (Arcon Mines)**

Production during 2004 by **Arcon Mines Ltd.** from their underground zinc-lead mine at Galmoy, Co. Kilkenny yielded 0.64Mt grading 12.9% Zn and 5.5% Pb. This resulted in 134,000t of zinc concentrate (51.5% Zn) and 26,000t of lead concentrate (57.7% Pb). Total production since start of mining to end 2004 is 4.4Mt at 11.02% Zn and 1.99% Pb. Reserves at the end of December 2004 were 3.96Mt at 14.1% Zn and 4.3% Pb. This tonnage comprises 2.62Mt of Proven Reserves at 15.9% Zn and 4.96% Pb, and 1.34Mt of Probable Reserves at 10.62% Zn and 3.0% Pb.

In April, Arcon International Resources, the parent company of Arcon Mines Ltd, was acquired by **Lundin Mining**. Lundin, which is listed on the Toronto and the Stockholm Stock Exchanges, is a Canadian mining and exploration company with a primary focus in Europe. The principal asset of the company is the Zinkgruvan zinc-lead-silver mine in Sweden. Lundin Mining also holds more than 95% of the shares in North Atlantic Natural Resources (NAN), whose primary asset is the Storliden copper-zinc mine in Northern Sweden. In addition, Lundin Mining holds a copper/gold exploration project in the Norrbotten Mining District in northern Sweden.

Development of the high grade R zone at Galmoy is underway, following the issue of a new State Mining Licence in January.

Arcon continued their near mine exploration programme, with particular attention being paid to areas on strike along the 'en echelon' G Fault system that links Galmoy with the nearby Lisheen zinc-lead deposit.



County Map of Ireland showing locations mentioned in the text. Bulgaden (BG), Galmoy (GA), Knocknacran (KC), Lisheen (LI), Navan (NA), Pallas Green (PG), Slieve Glah (SG), Tullybuck-Lisglassan (TL)

EXPLORATION

• Company Activities

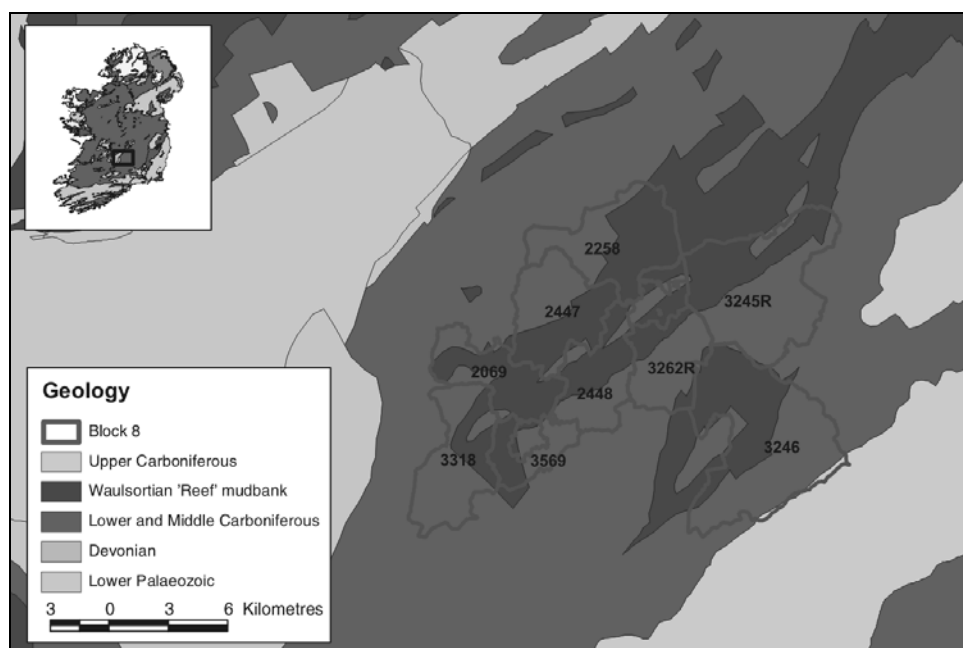
During the past six months, **Arcon Exploration Plc** continued to concentrate most of its efforts in the vicinity of the company's underground zinc-lead mine at Galmoy, Co. Kilkenny (operated by **Arcon Mines Ltd**), where they have been drill-testing geophysical targets generated by a variety of methods, including gravity surveying, Schlumberger array IP and resistivity depth soundings.

Asarco Exploration Company Inc. (Asarco) has undertaken a comprehensive technical review of its ground holding in Ireland. The ground holding covers an area of 555 sq. km, and is divided into five licence blocks. These are located in Cos. Kildare, Laois, Offaly, Tipperary and Limerick, where there are the same dolomitized Waulsortian Limestone Complex lithologies as host the Lisheen and Galmoy zinc-lead ore bodies. Asarco is seeking joint venture partners for their ground.

In September 2004, **Conroy Diamonds and Gold Plc** received a commissioned report from SRK Consulting (UK) on the gold prospects and exploration potential of the company's licences in the Longford-Down Massif. The report recommended focusing on three target areas. Each area is characterised by a deep-seated lineament that intersects the major NE-SW Orlock Bridge fault, which is believed to be the controlling structural influence on gold mineralization within the Lower Palaeozoic rocks of the Massif. At the end of February, Conroy said that recent deep overburden sampling at Slieve Glah, which lies some 45km southwest of the Tullybuck-Lisglassan prospect, had outlined two zones of "anomalous bedrock mineralization".

In the latter part of 2004, **Minco** and their joint venture partner, **Noranda**, carried out a drilling programme that extended the known mineralized zone at their Pallas Green, Co. Limerick prospect. A significant drill programme is proposed for this prospect in 2005.

Also in Co. Limerick, **Tara Mines** will carry out a drilling programme this year on the Bulgaden prospect, where they have intersected 5.3m grading 9.6% Zn, 2.1% Pb, and 4.5m grading 12.3% Zn, 1.6% Pb, at a depth of approximately 300m.



Currently held Prospecting Licence areas over the southern part of the 'Rathdowney Trend', for which exploration data has just been released.

- **Prospecting Licences**

At the end of June 2005, there were 241 current Prospecting Licences, held by a total of 26 different companies or individuals. During the past six months, twenty-nine licences were issued. Twenty-one licences were issued to Connemara Mining Co. Ltd. These included a block of ten licences in south Co. Limerick / north Co. Cork (Kilmeedy), all of which were issued for base metals, barytes, silver, gold and Platinum Group Elements. The company were also granted five licences in east Co. Limerick (three at Fedamore and two at Holycross). These licences are for base metals, barytes and silver; the five licences are already held by Aurum Mineral Resources for gold. Connemara Mining also received a block of five licences in north Co. Meath / Co. Cavan (Oldcastle), all of which are for base metals, barytes, silver, gold and Platinum Group Elements. A single licence in Co. Kerry (Castlemaine,) for base metals, barytes, silver, gold and Platinum Group Elements, was also granted to the company. Oriel Selection Trust were granted five licences in Co. Mayo (Charlestown), for base metals, barytes, silver and gold. Arcon were granted a licence at Carrickboy Co. Longford for base metals, barytes and silver. Minco were granted a licence at Lisnagry Co. Limerick for base metals, barytes, silver and Platinum Group Elements. Finally, Dan Morrissey (Irl) Ltd was granted a licence in Co. Carlow / Co. Laois for coal and fireclay. Twenty-three licences were surrendered during that period, and a further nineteen Navan Resources licences were revoked, following liquidation of the company.

Exploration Support

During the past six months, the Exploration and Mining Division has maintained its ongoing complementary exploration support programmes, designed to encourage exploration; all data is provided free of charge and in digital format.

- **The MAPS (Minerals Administration Programme Support) Programme.**

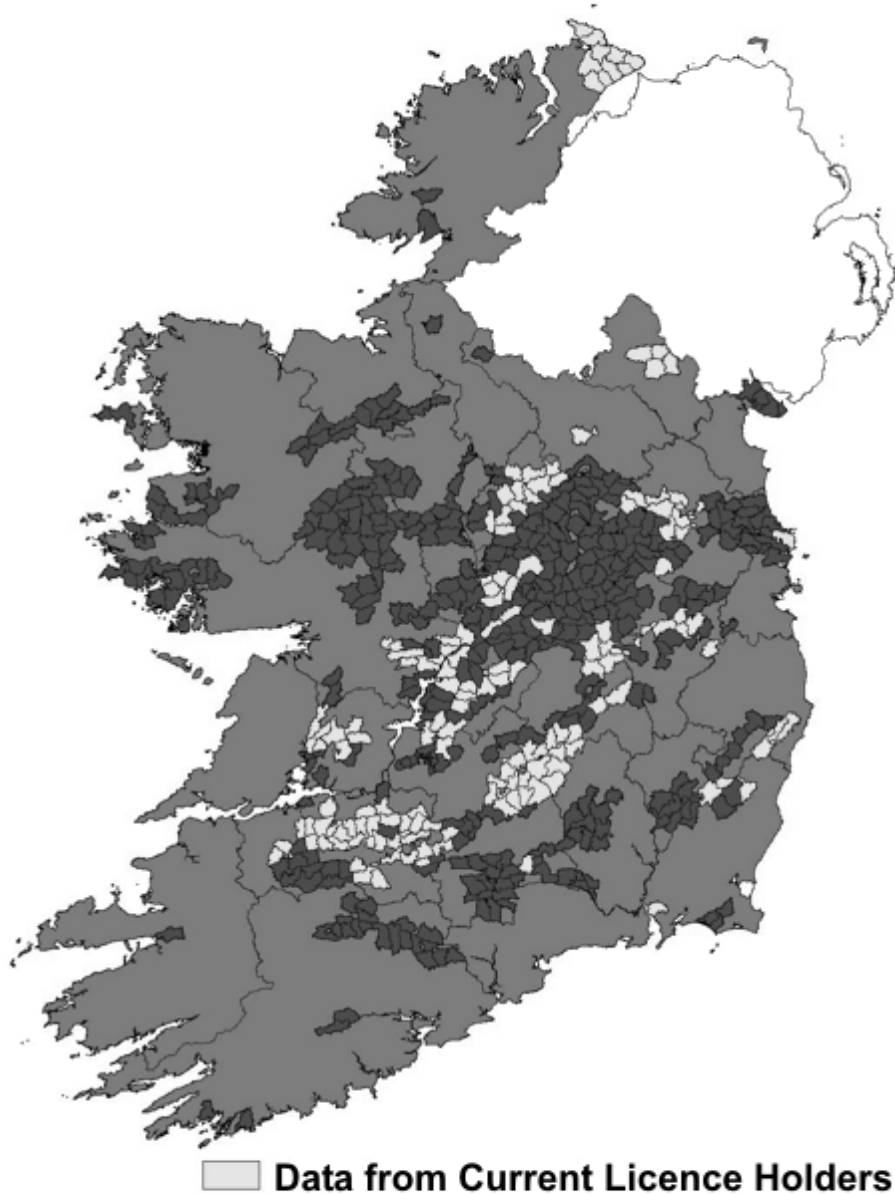
The Minerals Administration Programme Support programme is designed to provide online clients with the available background data that will allow them to assess ground, apply for permits and otherwise undertake eBusiness. The programme is now nearing completion. The MAPS website (www.minex.ie) has recently been completely revised, with the addition of substantial new content and a GIS map viewer with increased functionality. There are now 21 spatial datasets available, with a new mining theme that includes data on current and historic mines, and on current or expired mining permits. It is expected that the remaining elements of this programme will be completed by late 2005. These include the full e-Business facilities for permitting, and the back office workflow system, which will deliver increased efficiency for customers.

- **Data Availability Programmes**

A substantial amount of company exploration data has been made available free through the Data Availability Programmes, both online, at www.minex.ie, and on CD/DVD. **All** non-confidential reports held by EMD, relating to in excess of 600 Prospecting Licence areas, have now been released into the public domain. Online data is currently available for over 40% of the ground enclosed by Prospecting Licence boundaries (See Figure below).

Data from current holders. Company reports older than six years have been published online for over 140 currently held licence areas. As many of these reports are large and relatively slow to download, EMD has also released much of this data on CD-ROM. To date, nine of these “exploration data release” CDs have been made available, the most recent of which focuses on the highly prospective Rathdowney Trend. In addition, all companies who availed of the exploration expenditure concessions and are seeking joint venture partners have also had their data released online (some 110 licence areas in total).

Data from surrendered ground. Data for an additional 37 surrendered licence areas has been made publicly available, linked with the relevant quarterly Prospecting Licence Competition for ground surrendered in the previous quarter (1st February or 1st May 2005).



**Map showing Prospecting Licence areas for which exploration data is available online.
The coverage relates to all data released since 1st January 2000.**

Online Availability of Company Data. This programme is driven by the objective of providing both industry and the general public with as much free information as possible regarding company activities, ground assessment for exploration, and newly available areas for competitive application. All data released since 1st January 2000 has now been published online, including some 70% of the Central

Ireland Basin Zinc Province (see Figure). All further data releases will be immediately available on the website, apart from the airborne geophysical data (for which file sizes are too large). Although none of the exploration data released prior to 2000 is online, it is available through the Geological Survey of Ireland.

Digital Prospecting Licence Data. A digital version of the Prospecting Licence map is now published twice yearly, on 1st May and 1st November. These are provided free on request (email: EMDTechnical.info@dcmnr.gov.ie). All licence data are provided on CD in shapefile format, for use with the ESRI suite of GIS products. A free map viewer “ArcExplorer,” is bundled with the licence data. This enables clients without access to standard GIS desktop applications to display the licence data, and determine ground status and joint venture availability. The area boundaries can also be downloaded off the www.minex.ie website.

Airborne Geophysical Data Release. No further data has been released since August 2004.

• Target Areas Programme

The Target Areas programme was established to stimulate exploration interest in specific areas of the country by providing focused information and added value to ongoing data release programmes. Four projects have been undertaken to date.

Data on Gold in Ireland To increase the awareness of the gold potential of the country a digital release of all known gold localities in a GIS format was issued in 2004 in association with the Geological Survey of Ireland. The gold localities are all described, and are located on a simplified geological map. The free CD also includes a review of the potential for gold mineralization in Ireland, a bibliography, and has been revised to update the status of exploration licence areas. The gold spatial data are also accessible through the www.minex.ie website.

Ballinalack Zinc-Lead Deposit The Ballinalack zinc-lead deposit has measured and indicated resources of 7.83 Mt grading 6.4% Zn and 1.0% Pb. The massive sulphide mineralization is hosted in a similar setting to the Lisheen and Galmoy zinc-lead deposits. All exploration data over this deposit and the adjacent area, with the geology and drill hole locations in a GIS format, was published on CD and distributed in March 2005. The Prospecting Licence areas relating to this deposit in Co. Westmeath were recently made available under competition, with a closing date of 31st July 2005.

Cregganbaun Gold Prospect. Exploration in the area of this gold prospect has demonstrated extensive gold mineralization, with grades of up to 270 g/t Au. The prospect is located in a 10 km long shear zone in deformed Ordovician sediments. A compilation of the exploration data, geology etc. for the prospect and adjacent areas was published in May, 2005 and is available free on CD. The ground was recently made available under competition, with a closing date of 31st July 2005.

The Airborne Magnetic Interpretation Project This project, in partnership with PGW Europe Ltd., continues to be delayed. Focused on three blocks covering part the Lower Carboniferous Central Basin area, the digital products for the first of the blocks to be available have been completed and are being prepared for release.

Joint Venture Opportunities

Six Prospecting Licence holders are seeking joint venture partners. The companies that have properties on offer are: Arcon Exploration, Asarco Exploration, Cambridge Mineral Resources, Glencar Mining,

Minco, and Mineral Estates (Ireland) Ltd. A booklet providing details of the licence areas on offer is available from the Exploration and Mining Division.

PDAC Convention 2005, Toronto

The 73rd annual Convention and Trade Show of the Prospectors and Developers Association of Canada (PDAC) was held in Toronto from 6th to 9th March 2005. The Exploration and Mining Division took its usual stand location at the Trade Show, sharing an extended display with colleagues from Northern Ireland (Department of Enterprise, Trade and Investment, and the Geological Survey of Northern Ireland), in a combined 'Ireland' exhibit. The PDAC meeting is the biggest of its kind in the world, and this year had an estimated attendance of 11,500, the largest in its history. There was abundant evidence of increased funding available for exploration, and there was increased interest in exploration in Ireland from several major as well as junior companies.

Exploration and Mining Expenditure for 2003

Expenditure on mineral exploration and development is derived from data supplied by Prospecting Licence and State Mining Facility holders. The figures for 2003 (the latest year for which figures are available) are provided below in summary form. Expenditure on exploration totalled €8.04 million, a 21% increase over the previous year (€6.55 million), but still well down on earlier years. The increase was reflected in figures for exploration in both Prospecting Licences and within State Mining Facilities. However, it is notable that exploration expenditure within State Mining Facilities (Navan, Lisheen and Galmoy) is greater than the total spent in Prospecting Licences. Gold exploration expenditure was substantially higher at €0.3 million, the third successive annual increase. The development costs at €13.9 million (€15 million in 2002) were again essentially related to base metal operations.

Prospecting Licence Areas	Base Metals €	Gold €	Other Minerals	Total €
Geology	266,520	71,528	0	338,048
Geochemistry	158,396	51,596	0	209,992
Geophysics	261,508	20,000	0	281,508
Airborne Surveys	187,475	0	0	187,475
Drilling	1,645,060	44,623	0	1,689,683
Trenching	0	11,402	0	11,402
Environmental Studies	1,500	0	0	1,500
Feasibility Studies	0	0	0	0
Other Field Related Costs*	285,816	68,242	0	354,058
Other Costs**	24,000	28,125	0	52,125
Total Expenditure (PL Areas)	2,830,275	295,516	0	(a) €3,125,791

State Mining Facilities (SMF)

Exploration Expenditure:

Drilling	4,555,586
All other expenditure, excluding Irish office overheads	<u>356,448</u>
Total Exploration Expenditure (SMFs)	(b) €4,912,034

Total Development Expenditure:

Total Expenditure SMF Areas	<u>13,865,211</u>	18,777,245
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Irish Office Overheads

1,456,633

Total Overall Expenditure

€23,359,669

Exploration Expenditure, PLs and SMFs i.e. (a) + (b) €8,037,825

*Includes accommodation, travel, salaries during fieldwork, and report writing, but excludes office overheads.

** Includes consultancies, data acquisition.