



BioMinE - FP6 Project  
IP NMP2-CT-2005-500329



## Synthesis Report - BioMinE Deliverable DI.3

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The Deliverable DI.3 of the BioMinE Integrated Project is a report entitled:

### **"Finalised initial database on primary and secondary resources for biotechnological metal extraction - a review of non-ferrous mineral deposits in Europe"**

The level of dissemination of this deliverable is PUBLIC. A summary is proposed hereafter.

#### **Public Summary:**

The BioMinE Integrated Project aims to investigate and demonstrate the opportunities for applying bioleach processes to representative primary and secondary metal-bearing resources in Europe. Although various process options for treating metal concentrates are either already well established or will be identified during the BioMinE technology development programs, the real challenge is to demonstrate the economic feasibility of these technologies when applied to specific European ores, concentrates, and secondary resources with complex mineralogy, low grade, or derived from medium- to small-sized deposits.

An ultimate selection of metal deposits is required whereby various flow-sheet configurations for bioleaching of ores, concentrates, or processing waste can be identified, developed, and economically evaluated. The objective of this deliverable DI.3 is to present the selection of mineral resources in Europe that have been retained as targets for BioMinE RTD. The listing is not exclusive as the fast development of the non-ferrous metal market segment in Europe in reply to the actual steep commodity prices influences the administration of mining reserves, project ownership and mine development. Known deposits may become re-evaluated and new deposits may be discovered as more attention for non-ferrous metal exploration is drawn to Europe.

By using pre-existing know-how from BRGM on continent-scale mineral deposit databases and past efforts to start compiling European mineral deposit information the study in this report could query a database hosting over 12000 European metallic and non-metallic mineral deposits all recorded in over 40 fields of information. Following an earlier defined focus on copper, zinc, gold and accompanying commodities, a further selection on available information, and a final evaluation on importance and metal potential about 200 deposits have been retained and summarized in the annex to this report. A similar analysis for secondary resources is impossible due to the heterogeneous spatial coverage and often incomplete availability of the information. Instead the work will focus on existing initiatives, industry information, and case-by-case opportunities.







BioMinE



Project NMP2-CT-2005-500329

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Authors / contributors (in alphabetical order)

Andor Lips (BRGM)

With contributions from

Vincent Bouchot (BRGM), Yves Deschamps (BRGM),  
Jean-Marc Leistel (BRGM), Jean-Claude Picot (BRGM),  
and other BRGM colleagues.

Edited by

Andor Lips (BRGM)

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# A review of non-ferrous mineral deposits in Europe

*Finalised initial database on primary and secondary resources for biotechnological metal extraction*

Deliverable DI.3 - Final Report

BioMinE Integrated Project (FP6 IP 500239)

**BRGM/RP - 54957- FR**

October, 2006

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**A.L.W. Lips**

With the collaboration of

**V. Bouchot, Y. Deschamps, J-M. Leistel, J-C. Picot  
and other BRGM colleagues.**

**Checked by:**

Name: Daniel Cassard

Date: ..... 2006

Original signed by Daniel Cassard

**Approved by:**

Name: Jack Testard

Date: .....2006

Original signed by Jack Testard

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## Synopsis

The BioMinE Integrated Project aims to investigate and demonstrate the opportunities for applying bioleach processes to representative primary and secondary metal-bearing resources in Europe. Although various process options for treating metal concentrates are either already well established or will be identified during the BioMinE technology development programs, the real challenge is to demonstrate the economic feasibility of these technologies when applied to specific European ores, concentrates, and secondary resources with complex mineralogy, low grade, or derived from medium- to small-sized deposits.

An ultimate selection of metal deposits is required whereby various flow-sheet configurations for bioleaching of ores, concentrates, or processing waste can be identified, developed, and economically evaluated. The objective of this deliverable DI.3 is to present the selection of mineral resources in Europe that have been retained as targets for BioMinE RTD. The listing is not exclusive as the fast development of the non-ferrous metal market segment in Europe in reply to the actual steep commodity prices influences the administration of mining reserves, project ownership and mine development. Known deposits may become re-evaluated and new deposits may be discovered as more attention for non-ferrous metal exploration is drawn to Europe.

By using pre-existing know-how from BRGM on continent-scale mineral deposit databases and past efforts to start compiling European mineral deposit information the study in this report could query a database hosting over 12000 European metallic and non-metallic mineral deposits all recorded in over 40 fields of information. Following an earlier defined focus on copper, zinc, gold and accompanying commodities, a further selection on available information, and a final evaluation on importance and metal potential about 200 deposits have been retained and summarized in the annex to this report. A similar analysis for secondary resources is impossible due to the heterogeneous spatial coverage and often incomplete availability of the information. Instead the work will focus on existing initiatives, industry information, and case-by-case opportunities.

The analysis has returned that the amount of metal that is economically mineable and expressed in the reserves in domestic European resources presents similar volumes as the amounts historically produced in the past for silver, gold and copper. The reserves have been based on the long-term projections of metal prices that had been established before the drastic price increases over the last years. Extrapolating higher long-term prices could contribute to an increase of reserves by conversion of parts of the resources due to lower cut-off estimates. Additional resources that have been reported as currently non or sub-economic or often more than twice the reserve. In total this means that over 2-3 times of the historic production in Europe of these commodities is still in the ground, but often expressed in lower grades.

The mineral deposit types that contain the resources are part of the same that host most of these commodities on a global scale. In addition volcanogenic massive sulphide deposits are present in SW Spain and Portugal (Iberian Pyrite Belt), and Sweden and Finland, add significant importance to the European non-ferrous metal potential. The mineralogy of the above mentioned ore deposit types is often characterized by primary sulphide ore with complex-sulphides, arsenides, sulphosalts, etc.

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Initial list of primary mineral deposits that have been used for further evaluations

### **ANNEX 2**

Final list of primary mineral deposits that have been used for cumulating past production, reserves, and resources of different contained commodities

### **ANNEX 3**

Final list of primary mineral deposits that have been retained for detailed descriptions.

### **ANNEX 4**

Deposit description files - top 200 of European non-ferrous metal deposits



# 1. Introduction

## 1.1. GENERAL OBJECTIVE

The general objective of the Integrated Project BioMinE is the development and integration of innovative biotechnology based processes for recovery and/or removal of metals from primary materials such as ores and concentrates, and secondary materials such as mining wastes, mineral processing wastes, and metallurgical slag. The project aims to establish environmentally friendly biotechnologies which could be economic particularly at a small scale and will provide an alternative to current technologies such as roasting and smelting. The anticipated breakthroughs under the RTD programme will be commercially evaluated through integrated piloting of the new processes together with preliminary economic assessments. This will provide a sound basis for decisions by industrial companies on whether to then proceed to commercial demonstration.

The main objective of the BioMinE project is to investigate and demonstrate the opportunities for applying bioleach processes to representative primary and secondary metal-bearing resources in Europe. Although various process options for treating metal concentrates are either already well established or will be identified during the BioMinE technology development programs, the real challenge is to demonstrate the economic feasibility of these technologies when applied to specific European ores, concentrates, and secondary resources with complex mineralogy, low grade, and / or derived from medium- to small-sized deposits.

With reference to the details and procedures provided in BioMinE Deliverable DI.1, a mineral deposit database for the European continent has been developed by BRGM. An ultimate selection of metal deposits is required whereby various flow-sheet configurations for bioleaching of ores, concentrates, or processing waste can be identified and economically evaluated. In addition to the obvious technical considerations, like ore characteristics or grades and tonnages, this techno-economic evaluation procedure needs to assess the economic consequences specific to each process option. Additional information associated with the metal deposits will allow the evaluation of subsequent environmental and socio-economic consequences of newly developed or better-integrated biotechnologies, once the economic viability of a process option has been determined.

The objective of this deliverable DI.3 is to present the selection of mineral resources in Europe that have been retained as targets for BioMinE RTD. This identification and proposition of resources in Europe for metal extraction by integrated biotechnologies will further direct the integration of the "downstream" work packages, notably WP2, WP3 and WP4.



After reporting of the RTD progress from the subsequent work packages WP1 will evaluate the shift towards industrial sustainability by monitoring and assessing the impact of the RTD advancement under WP2 to WP4 from a sustainable development viewpoint. Finally WP1 will put forward "benchmark resources", based on the development and integration of innovative biotechnology based processes for recovery and/or removal of metals.

## 1.2. THE EFFECT OF RISING COMMODITY PRICES ON NON-FERROUS METAL EXTRACTION IN EUROPE

The start of the BioMinE project in November 2004 coincided with a spectacular rise in worldwide commodity prices. Non-ferrous metals that receive particular attention in the framework of BioMinE, like copper, zinc, and gold, and accompanying metals in the primary resources in Europe like nickel, silver, and lead, all witnessed a strong price increase over 2005 and early 2006, that sustained well over 2006 (figure 1, table 1).

	<b>Copper (\$/t)</b>	<b>Zinc (\$/t)</b>	<b>Gold (\$/oz)</b>	<b>Nickel (\$/t)</b>	<b>Silver (\$cts/oz)</b>	<b>Lead (\$/t)</b>
<b>1998-2003</b>	1 500 - 2 000	1 000	260 - 400	4 000 - 10 000	410 - 600	500
<b>2006</b>	7 000 - 8 000	3 000 - 4 000	520 - 720	20 000 - 35 000	880 - 1 490	900 - 1 300
	+ 400 - 500%	+ 300 - 400%	+ 200%	+ 300 - 500%	+ 200 - 250%	+ 200%

Table 1. LME and LBMA price indices evolution from 1998 to 2006 for main non-ferrous metals

Most commodity prices saw a price correction in May 2006, except for nickel that continued its strong price rise due to supply shortage and further speculation. The global rise of commodity prices triggered a new cycle of investments and development in the mineral industry, including new exploration programmes, mineral reserves upgrades, mine development, industrial development, and take-overs. Higher metal prices dominantly add to the net profit of the producing company as currently producing projects have been developed with planned gross margins determined on lower long-term projections of metal prices. The effects of the persistent elevated prices spread across the mining dominated continents and also arrived in Europe. In contrast to the strong decline of non-ferrous metal mining over the last 15 years in Europe and in spite of a reduction of access to land for mineral resource exploitation in many parts of the continent, mineral exploration and mining project development is reviving strongly.

The fast development of the non-ferrous metal market segment in Europe in reply to the high commodity prices handicaps a clear administration of mining reserves, project ownership and mine development as sub-economic views are easily overtaken by new long term projections of commodity prices. As a result, this report should be considered as a snap-shot of the 2005-2006 situation.

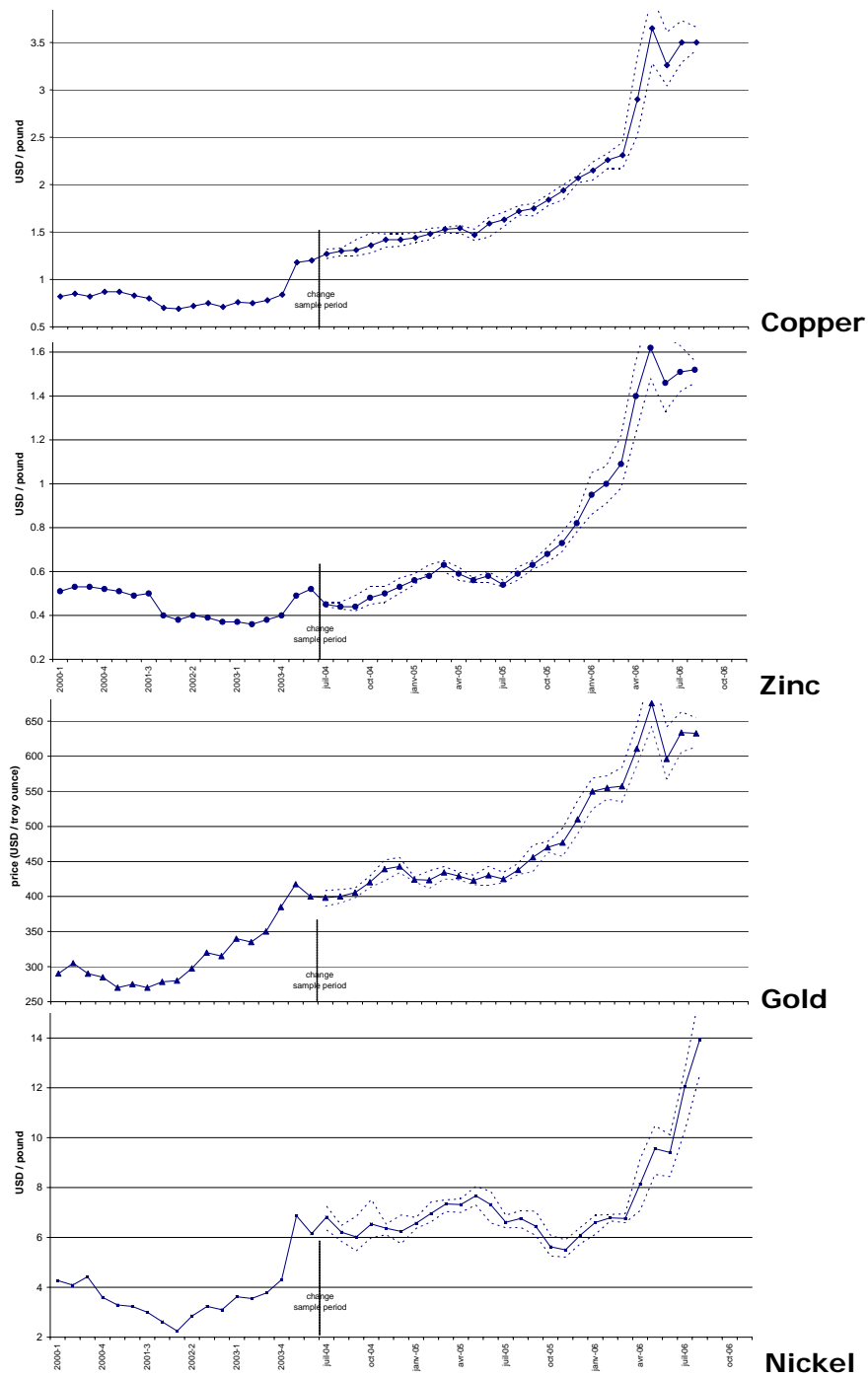


Figure 1. LME and LBMA monthly average price indices<sup>1</sup> for copper, zinc, gold and nickel over the period 2001-2006 (dashed lines indicate maximum and minimum prices per month).

<sup>1</sup> LME: London Metal Exchange <http://www.lme.co.uk/> LME cash settlements ; LBMA: London Bullion Market Association <http://www.lbma.org.uk/> pm London fix



## 2. Resource selection in BioMinE WP1

### 2.1. DATABASE STRUCTURES AND INVENTORY OF METAL BEARING RESOURCES

#### 2.1.1. Primary Resources

The mineral deposit database with information on primary mineral resources developed and used at BRGM in the last decade is organised under Access and structured in 6 sheets (table 2). The detailed information per sheet is entered as free text or is guided by hierarchical lexicons allowing the entry of uniform information and avoiding the risk of heterogeneous typing or spelling. The mineral deposit database is adapted for simple as well as sophisticated querying and allows a geographic display of the queried information (figure 2). In this way, mineral deposits and mineralogical information with entered economic information (grade and tonnage of reserves and resources per respective commodity) can become associated with their regional infrastructures (processing facilities, smelter, transport routes) around a mining region and with regional social parameters (population, employment, etc.), all important for further assessment of the information in the BioMinE project.

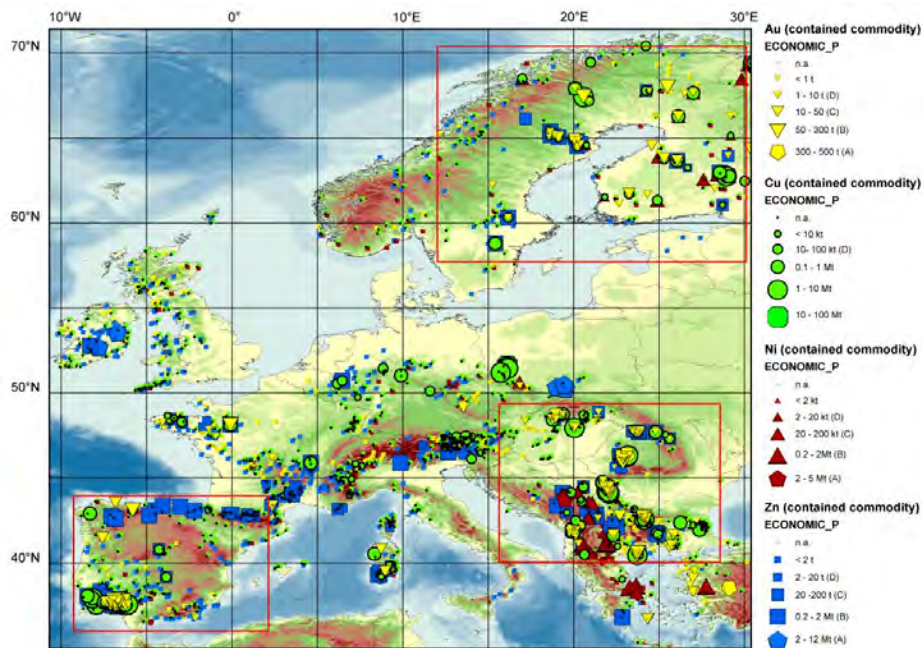


Figure 2 - Past and present mineral deposits and occurrences in Europe compiled to serve BioMinE resource identification (version Summer 2005, developed and presented at annual meeting and first annual report PAR). Three main non-ferrous mining areas are indicated (Iberia, Scandinavia, SE Europe).

Much information for Europe has been collected over the past years in the framework of GIS Central Europe for the Balkan region<sup>2</sup>, in the collaborative effort carried out in the framework of the ESF funded programme GEODE, and to produce "LODE - Large Ore deposits in Europe"<sup>3</sup>, summarizing the 50 largest metal deposits in Europe, also using the available BRGM's database structures.

<p><b>1. General Information</b></p> <p><u>Lexicon guided fields</u></p> <ul style="list-style-type: none"> <li>▪ Status: detailed information on mine, deposit, occurrence, showing.</li> </ul> <p><u>Free text fields</u></p> <ul style="list-style-type: none"> <li>▪ Mining company (owner); Mining District</li> <li>▪ Country; link to list of countries</li> <li>▪ Links to other databases and numbering in these databases</li> <li>▪ Longitude (xx.xxx° and xx°xx'xx"), Latitude (xx.xxx° and xx°xx'xx")</li> <li>▪ Ore deposit name(s): multi-entry field to list all possible names of the same deposit</li> <li>▪ Free comment field</li> <li>▪ Author + date of entry, Controller + date of control</li> <li>▪ URL + source of the mine site (if any)</li> </ul>
<p><b>2. Deposit information</b></p> <p><u>Lexicon guided fields</u></p> <ul style="list-style-type: none"> <li>▪ Deposit type(s): multi-entry field of deposit type hierarchical listing</li> <li>▪ Main morphology &amp; Deposit morphologies: multi-entry field of deposit morphology hierarchical listing</li> </ul> <p><u>Free text fields</u></p> <ul style="list-style-type: none"> <li>▪ Azimuth, dip, length, width, down dip information associated with ore morphology</li> </ul>
<p><b>3. Information on mineralization + host rocks</b></p> <p><u>Lexicon guided fields</u></p> <ul style="list-style-type: none"> <li>▪ Mineralization stratigraphic age (upper and lower limit)</li> <li>▪ Ore mineralogy, Gangue mineralogy, Hydrothermal alteration: multi-entry fields</li> <li>▪ Host rock lithologies: multi-entry field &amp; Host rock stratigraphic age (upper and lower limit)</li> </ul> <p><u>Free text fields</u></p> <ul style="list-style-type: none"> <li>▪ Mineralization absolute age, Host rock absolute age (with error + dating method from lexicon)</li> <li>▪ Host rock formation name</li> </ul>
<p><b>4. Economic information</b></p> <p><u>Lexicon guided fields</u></p> <ul style="list-style-type: none"> <li>▪ Exploitation type(s) : multi-entry field</li> <li>▪ Main commodity</li> <li>▪ Multi-commodity window: per commodity: <ul style="list-style-type: none"> <li>▪ ore type; production and grade units</li> <li>▪ former production, grade of former production, duration of former production</li> <li>▪ reserve, type of reserve (proven, probable, measured, ...), grade of reserve, year of estimate</li> <li>▪ resource, type of resource (proven, probable, measured, ...), grade of resource, year of estimate</li> <li>▪ automatic calculation of i) former production, ii) reserves, iii) resources and iv) deposit size class</li> </ul> </li> </ul>
<p><b>5. Comments</b></p> <ul style="list-style-type: none"> <li>▪ General comments on geology, General comments on economy, Mine site infrastructure</li> </ul>
<p><b>6. Bibliography</b></p> <ul style="list-style-type: none"> <li>▪ Geological reference(s), Economic reference(s)</li> </ul>

Table 2 - Organisation of Access-based mineral deposit database at BRGM (to be exploited by different data queries and extractions)

<sup>2</sup> see <http://giseurope.brgm.fr/>

<sup>3</sup> European Science Foundation Programme GEODE Geodynamics and Ore Deposit Evolution 1998-2003; LODE database <http://www.gl.rhul.ac.uk/geode/dbase.html>

Since the start of BioMinE the database has been extended significantly and registers at present over 12 000 deposits and occurrences of all commodities (metallic and non-metallic) heterogeneously distributed across Europe (with some inclusion of areas outside Europe into Turkey, Caucasus and Russia). The database can be explored by simple and complex querying ([figure 3](#)).

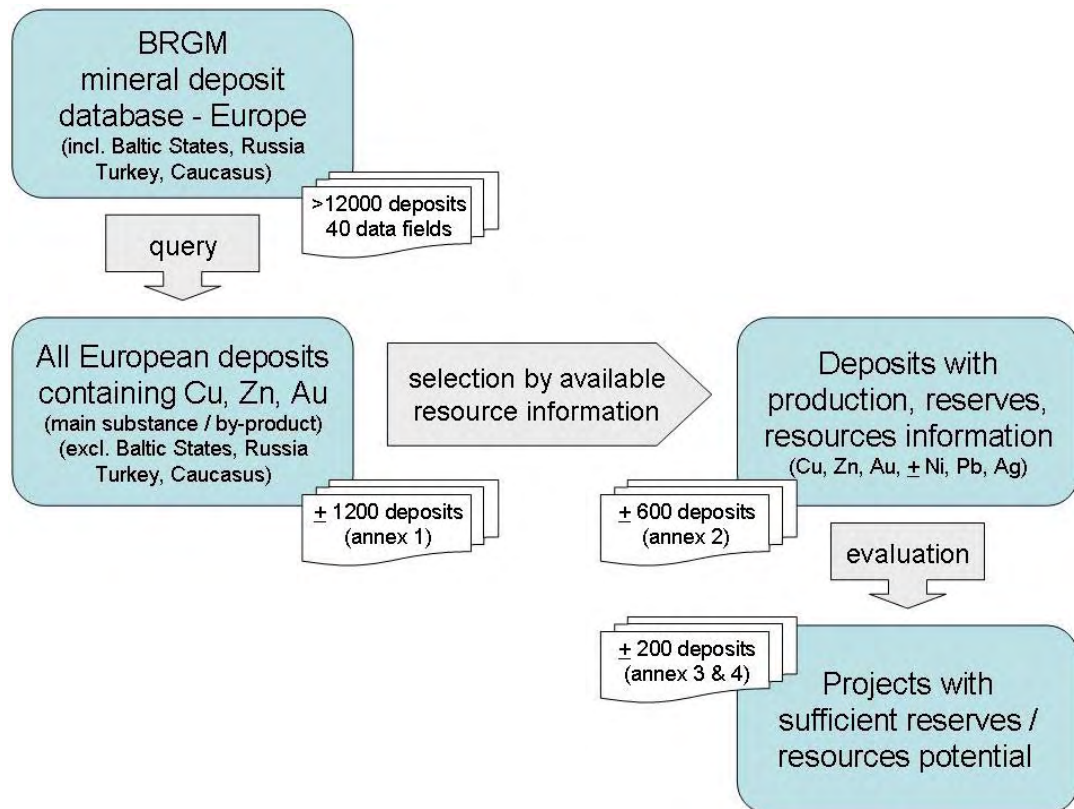


Figure 3 - Deposit selection in BioMinE using BRGM's mineral deposit database - Europe

After identification of copper, zinc and gold as main commodities of focus in BioMinE, a first query is applied to the database to retain deposits in Europe that are known to contain copper, zinc or gold as main commodity or as by-product ([figure 3](#)). The query results in an initial list of primary mineral deposit information ([annex 1](#)) that is readily available for further evaluations. This primary listing includes mining districts, mines, projects under development, dormant deposits, sub-economic deposits, abandoned and exhausted mines, old mine workings, occurrences, prospects, and deposits or occurrences of unknown status. The listing in [annex 1](#) also highlights in bold the deposits that are listed in GEODE's LODE "Large Ore Deposits of Europe" database, with reference to the code used in the GEODE listing.

A second screening of the deposits listed in [annex 1](#) for deposits with known production, reserve, and/or resource information (metal produced, grade & tonnage) has returned a list of primary mineral deposits ([annex 2](#)) that are readily available for cumulating past production, reserves, and resources of different contained

commodities (Au, Cu, Zn, and Pb+Zn combined, and associated commodities Ag, Co, Ni, Pb). A final selection of deposits with sufficient present-day mineral potential, i.e. sufficient quantities of proven and probable reserves and resources ([annex 3](#)) are expressed in more detail in [annex 4](#). [Table 3](#) expresses the fields that are retained to provide some detail of the mineral site in [annex 4](#).

<i>Country</i>	<i>Name</i>	<i>ID database</i>
<i>Commodities - Commodities available in deposit</i>		<i>Long: xx,xxx° - Lat: yy,yyy°</i>
<i>Mining Company</i>	Owner	
<i>url</i>	Internetsource of mine site	
<i>Status</i>	Status information on mine, deposit, occurrence, showing (dormant, in operation, under development etc.).	
<i>Exploitation type</i>	Type of exploitation (open pit, underground etc.)	
<i>Mineralogy</i>	Ore mineralogy	
<i>Ore deposit type</i>	Ore Deposit type(s) according to general classification	
<i>Past production</i>	in grade(s) & tonnage(s) or total metal if grade/tonnage is unknown	
<i>Reserves</i>	in grade(s) & tonnage(s)	
<i>Resources</i>	in grade(s) & tonnage(s)	

Table 3 - Deposit description of retained deposits in [annex 4](#)

### 2.1.2. Secondary Resources

Secondary metal bearing resources of interest for BioMinE (mining wastes, metallurgical slags, metal bearing scrap and combustion/power plant ashes) are at present not collected in a similar extensive database across Europe as used for the primary metal bearing resources. The geographic distribution and the information associated with the possible secondary resources is simply too heterogeneously distributed and often has too sparse data to register them in a homogeneous inventory. The above also handicapped the plan to counterbalance the database of primary mineral deposits and occurrences in Europe with sophisticated queries on the DG-ENV database on European Mining Waste<sup>4</sup> due to the lack of sufficient information related to the BioMinE relevant metal sectors - copper and zinc ([figure 4](#)), other mine sites covered industrial minerals, uranium, coal and lignite. As a consequence the data is obtained on a case-to-case basis, either proposed by BioMinE partners or identified otherwise at a specific location or in a specific industrial sector in Europe.

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<sup>4</sup> At the request of the Directorate-General Environment of the European Commission, BRGM has completed in 2001 a study on the management of mining, quarrying and ore-processing waste in the European union - Tender DG XI E3/ETU/980116



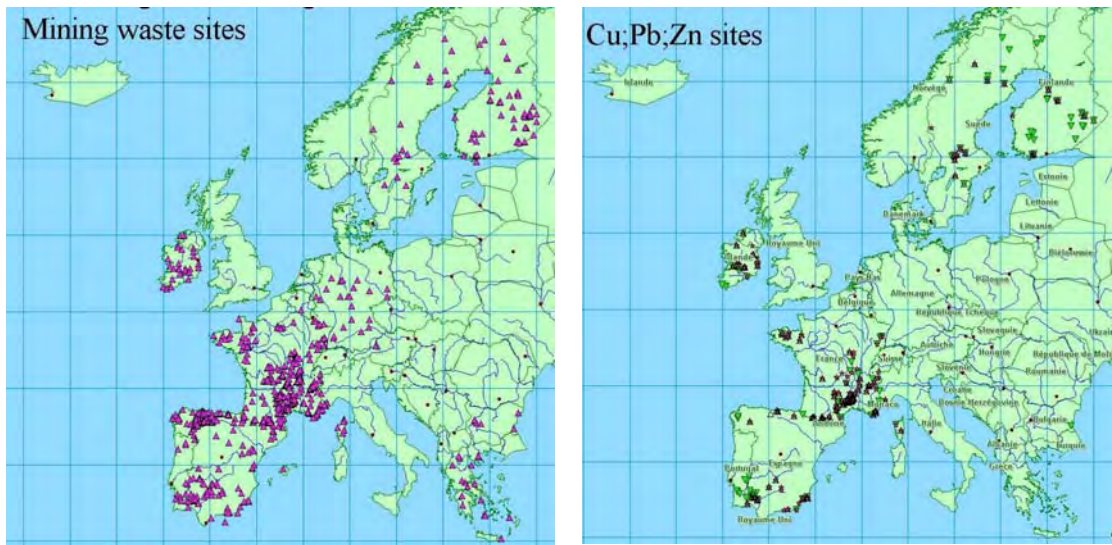


Figure 4 - left) Distribution of all studied sites in the "Mining waste" report (DG XI E3/ETU/980116) right) Distribution of all Cu, Pb and Zn sites in the same report.

## 2.2. RESOURCE SELECTION AND PRIORITISATION

The following activities are applied to allow further selection and prioritisation of available resources:

- Resource identification – a combination of "top down" and "bottom-up" ("bottom-up" being submission and tabulation of specific opportunities from participants as has been done under deliverable DI.2. The danger of solely relying on this is that it is inherently unstructured and potential opportunities may not be captured. The "top-down" approach is a structured, macro-geological assessment of the entire region). The activities are complementary and both valuable.
- Resource segmentation – segmentation or categorisation, both from a processing technology viewpoint as well as a resource perspective (i.e. Primary resources, Secondary resources split further into mine waste, mine tailings, refinery wastes, industrial wastes, etc).
- Screening and ranking by the application of economic filters (a filter being a set of criteria for evaluation of resource opportunities).





### 3. Characterisation of Primary Metal Bearing Resources in Europe

#### 3.1. MINING OPERATIONS

Country	Sites in production (owner) <u>commodities</u>	Sites in advanced stage of development	Sites in review	Exploration
Spain	El Valle & Carles (Rio Narcea) <u>Au</u> <sup>5</sup> Aguablanca (Rio Narcea) <u>Cu-Ni-(PGE)</u>	Aguas Tenidas (PGM) <u>Zn-Cu-Pb-Ag-Au</u> Las Cruces (InMet Mining)	Y	Y
Portugal	Neves Corvo (Eurozinc-Lundin) <u>Cu-Zn-Pb</u>	Aljustrel (Eurozinc-Lundin) <u>Zn-Pb-Ag</u>	Y	Y
Ireland	Galmoy (Lundin Mining) <u>Zn-Pb</u> Navan-Tara (Boliden) <u>Zn-Pb</u> Lisheen (Anglo-American plc.) <u>Zn-Pb</u>		Y	Y
Sweden	Aitik (Boliden) <u>Cu-Au-Ag</u> Garpenberg (2 mines Boliden) <u>Zn-Ag-Pb-Cu-Au</u> Boliden area (4 mines Boliden) <u>Cu-Zn-Pb-Ag-Au</u> Storliden (Lundin Mining) <u>Cu-Zn</u> Zinkgruvan (Lundin Mining) <u>Zn-Pb-Ag</u> Svartliden (Dragon Mining) <u>Au</u>	Björkdal (Gold Ore Resources) <u>Au</u>	Y	Y
Finland	Pyhäsalmi (InMet Mining) <u>Cu-Zn</u> Pahtavaara (Scan Mining) <u>Au</u>	Suurikuusikko - Kittila mine (Agnico Eagle) <u>Au</u> Talvivaara (Talvivaara Oy) <u>Ni-Cu-Zn</u>	Y	Y
Poland	Kupferschiefer (6 mines KGHM) <u>Cu-Ag-(Au-Ni)</u>		?	Y
Romania	Baia Mare - Suior stockpile (Eurogold) <u>Au</u>	Rosia Montana (Gabriel Resources) <u>Au</u>	Y	Y
Serbia	Majdanpek (RTB) <u>Cu-Au</u> Veliki Krivelj (RTB) <u>Cu</u> Tilva Rosh (RTB) <u>Cu</u>		Y	Y
Bulgaria	Asarel-Medet (Asarel-Medet) <u>Cu</u>	Chelopech expansion (Dundee) <u>Cu-Au</u>	Y	Y
Greece	Stratoni (European Goldfields) <u>Zn-Pb-Ag</u>	Olympias (European Goldfields) <u>Au-Ag-Zn-Pb</u> Skouries (European Goldfields) <u>Cu-Au</u>	Y	?
Italy		Furtei (Sargold) <u>Au</u>	Y	Y

Table 4 - Summary of main non-ferrous metal mining operations and operations in advanced stage of development in Europe.

There are about 20 mines in Europe where non-ferrous metal resources are being produced today. The global rise of commodity prices over the last years has triggered a new cycle of investments and development in the mineral industry, including new exploration programmes, mineral reserves upgrades, mine development, industrial development, and take-overs. The effects of the persistent elevated prices spread across the mining dominated continents and have also arrived in Europe.

<sup>5</sup> Mine sites are announced to be closed by Rio Narcea Resources at the end of 2006

In contrast to the strong decline of non-ferrous metal mining over the last decades in Europe and in spite of a reduction of access to land for mineral resource exploitation in many parts of the continent, mineral exploration and mining project development is reviving significantly. An attempts to list the main sites of current non-ferrous metal extraction in Europe is summarised in [table 4](#).

### 3.2. METAL PRODUCTION

With the listing of primary mineral deposits available ([annex 2](#)) that have sufficient economic information estimations of past production, reserves, and resources in tonnes of metal for gold, copper, zinc and associated commodities like silver, lead, nickel (from sulfide material), and cobalt can be obtained ([table 5](#)).

	Ag (kt)	Au (t)	Co (kt)	Cu (Mt)	Ni <sub>sulfide</sub> (kt)	Pb (Mt)	Zn (Mt)
Past production	58.4	1640	226.5	27.3	499	48.1	71.3
Reserves	43.2	1386	0	40.0	216	15.6	47.4
Resources	300.6	3348	116.5	121.8	1619	24.9	89.6
<b>Total</b>	<b>402.2</b>	<b>6374</b>	<b>343</b>	<b>189.1</b>	<b>2334</b>	<b>88.6</b>	<b>208.3</b>

Table 5 - Tonnes of metal in past production, current reserves and resources from the listing of primary mineral deposits ([annex 2](#)).

The metal summaries in [table 5](#) show the non-ferrous metal potential in Europe, based on the main deposits ([annex 2](#)) that have sufficient information on metal grade and mineral tonnage to express the amounts of metal in past production, reserves and / or resources. It is to be noted that new discoveries or very recent re-evaluations of reserves and resources have not yet been taken into account. Striking point is the observation that over 50% of most non-ferrous metal potential in Europe is still in the ground ([figure 5](#)).

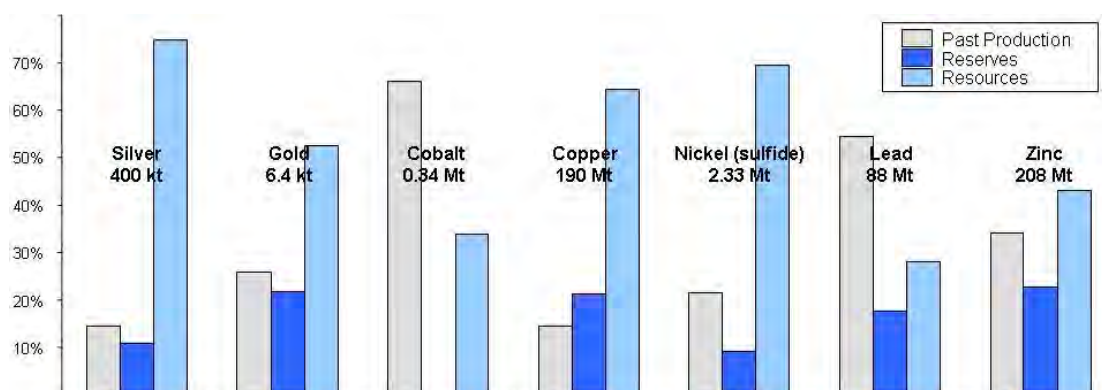


Figure 5 - Percentages of metal commodities in past production, current reserves and resources, as presented in [table 5](#).

The amount of metal that is economically mineable and expressed in the reserves presents similar volumes as the amounts produced in the past for silver, gold and copper. The reserves have been based on the long-term projections of metal prices that had been established before the drastic price increases over the last years. Extrapolating higher long-term prices could contribute to an increase of reserves by conversion of parts of the resources due to lower cut-off estimates. Additional resources that have been reported as currently non or sub-economic or often more than twice the reserve. In total this means that over 2-3 times the historic production of these commodities is still in the ground, but often expressed in lower grades.

### **3.3. MINERAL DEPOSIT TYPES AND MINERALOGY**

Several types of mineral deposits dominate the European resource potential for non-ferrous metals.

The mineral deposit types that dominated copper production and reserves in Europe are porphyry-type (esp. in SE Europe, but also in Aitik - Sweden) and reduced-facies-type (Kupferschiefer in Poland)) copper deposits. Also on a worldwide basis these two types of copper deposits account for roughly 80% of the world's copper production. In addition in Europe volcanogenic massive sulphide deposits (Spain-Portugal, Sweden-Finland, Cyprus-Albania) contribute significantly to Europe's copper potential

Gold bearing deposits in Europe formed during different periods in the geological evolution of Europe, from the Archean and Proterozoic in the Fennoscandian Shield (Scandinavia), to the Paleozoic in the Hercynian Massifs in Europe (Central Europe and NW Iberia), and to the Cretaceous and Neogene in the Alpine systems (SE Europe).

Four main mineral deposit types are distinguished that contribute largely to Europe's gold potential. Magmatic-hydrothermal gold deposits represent a large economic potential, especially in the Carpathian-Balkan domains of SE Europe, with porphyry-type copper-gold deposits (Assarel - Bulgaria; Bucim - Macedonia; Bor district - Serbia, etc.), (low-, high- and hybrid-) epithermal deposits (Rosia Montana - Romania, Chelopech - Bulgaria), and skarn deposits (Olympia - Greece). Geologically older deposits but of similar types are present in SW Europe (Sardinia, Spain) and Scandinavia (Aitik - Sweden), with additional potential in derivative types with projects under evaluation like Salomon (Spain) or Monte Ollastedu (Sardinia). Gold deposits of orogenic-mesothermal type are found from Iberia, across central Europe, until Poland, with the biggest known deposits already exploited like Salsigne (France), Kasperske Hory and Mokrsko-Celina (Czech Republic). In Scandinavia similar types of deposits are generally associated with greenstone belts (Jokisuru, Suurikuussikko - Finland). Grantie-related gold deposits are an emerging type in Europe and provide significant potential for exploration. Reference deposits, associated with Hercynian Massifs in Europe are Jales (Portugal), Salave (and El Valle-Carlès, Spain) or Petrakova Hora (Czech Republic). Formed in a different geological period the Trun project (Bulgaria) may express this potential into a new geological context. Volcanogenic massive

sulphide deposits (esp. in Spain, Portugal) have produced large quantities of gold from their supergene enriched zones since historic times. Such deposit types still represent a large potential for Europe, with copper, zinc and lead, and additional metal value in gold in deposits especially in Spain, Portugal, Sweden and Finland.

Zinc and lead often come associated in the same types of deposits. In Europe the types of deposits dominating zinc & lead production and reserves are volcanogenic massive sulphide (VMS) Zn-Pb(-Cu) deposits (Spain-Portugal, Finland-Sweden) and Mississippi Valley-type carbonate-hosted stratabound and vein Pb-Zn deposits (Bytom - Poland, Navan - Ireland). Minor zinc and lead potential is available through epithermal and skarn deposits (SE Europe).

Silver is present in a multitude of deposit types. Economically attractive quantities are present in i) volcanogenic massive sulphide deposits of the Iberian Pyrite Belt (SW Spain and S Portugal), of the ophiolite related rocks in Cyprus and Albania, and of Scandinavia, ii) in polymetallic epithermal veins in the Balkan (Slovakia, Czech Republic, Romania, Bulgaria) and porphyry deposits (Serbia, Hungary, Sweden), but most dominantly iii) in the Polish Kupferschiefer deposits (Lubin, Rudna, Polkowice - Poland).

Nickel is available in the nickel-laterite deposits in SE Europe (out of scope of this study) and in ore deposits related to basic-ultrabasic magmatic rocks (Aguablanca - Spain, Hitura & Stormi - Finland) and volcano-sedimentary ore deposits (Talvivaara - Finland)

The mineralogy of the above mentioned ore deposit types is often characterized by primary sulphide ore (pyrite, chalcopyrite, pyrrhotite sphalerite, galena, etc.) with complex-sulphides, arsenides, sulphosalts, etc.

## 4. Conclusions

The objective of this deliverable DI.3 is to present the selection of mineral resources in Europe that have been retained as targets for BioMinE RTD. The listing is not exclusive as the fast development of the non-ferrous metal market segment in Europe in reply to the actual steep commodity prices influences the administration of mining reserves, project ownership and mine development. Known deposits may become re-evaluated and new deposits may be discovered as more attention for non-ferrous metal exploration is drawn to Europe.

By using pre-existing know-how from BRGM on continent-scale mineral deposit databases and past efforts to start compiling European mineral deposit information the study in this report could query a database hosting over 12000 European metallic and non-metallic mineral deposits all recorded in over 40 fields of information. Following an earlier defined focus on copper, zinc, gold and accompanying commodities, a further selection on available information, and a final evaluation on importance and metal potential about 200 deposits have been retained and summarized in the annex to this report. A similar analysis for secondary resources is impossible due to the heterogeneous spatial coverage and often incomplete availability of the information. Instead the work will focus on existing initiatives, industry information, and case-by-case opportunities.

The analysis has returned that the amount of metal that is economically mineable and expressed in the reserves in domestic European resources presents similar volumes as the amounts historically produced in the past for silver, gold and copper. The reserves have been based on the long-term projections of metal prices that had been established before the drastic price increases over the last years. Extrapolating higher long-term prices could contribute to an increase of reserves by conversion of parts of the resources due to lower cut-off estimates. Additional resources that have been reported as currently non or sub-economic or often more than twice the reserve. In total this means that over 2-3 times of the historic production in Europe of these commodities is still in the ground, but often expressed in lower grades.

The mineral deposit types that contain the resources comply with the worldwide mineral deposit types that host most of these commodities. In addition volcanogenic massive sulphide deposits as omni-present in SW Spain and Portugal (Iberian Pyrite Belt), and Sweden and Finland, add significant importance to the European non-ferrous metal potential. The mineralogy of the above mentioned ore deposit types is often characterized by primary sulphide ore with complex-sulphides, arsenides, sulphosalts, etc.



## **Appendix 1**

### **Initial list of primary mineral deposits that have been used for further evaluations**

(this list includes mining districts, mines, projects under development, dormant deposits, sub-economic deposits, abandoned and exhausted mines, old mine workings, occurrences, prospects, and deposits or occurrences of unknown status)





<b>Albania</b>			
Babje	Kabash	Paluce	Shemri
Derven	Karma	Perlat	Spaç
Fushe Arrez	Krume	Qaf Bari	Thirre
Gjazuj	Kurbnesh	Rehove	Tuci
Gjegjan	Lak Roshi	Rubik	
Golajt	Munella	Ruga e Rinise	
Gurth	Nikoliq	Rupe	
<b>Austria</b>			
Astberg	Jesach Alpe	Mühlbachtal / Pinzgau	Schwemmburg-Ahornlehen
Baierdorf	Johnsbach	Neu-Finkenstein	Seekar
Bärfallspitze	Kareck	Oberdorf-Angern	Seewigtal
<b>Bleiberg</b> <small>GEODE-BASIN10</small>	Klucken	Obojnik- graben	Siflitz
Dornbach	Knappenrinne	Peggau - Hinterberg	Silbersberg bei Gloggnitz
Eichbühel	Kohlberg bei Pottschach	Pernstein	Sinnwell (Kitzbühel)
Farmanger Alpe	Kolm-Saigurn	Perschengraben	Sprinzgasse
Feistergraben	Koprein	Pirkach-Hochstadel	St. Leonhard
Gielach	Krähberg	Pizachalm (Hübalpe)	St. Lorenzen
Goldzeche	Kremser Schloßberg	Radhausberg (Imhof-Stollen)	Stimmelhöhe
Göllalm	Lenggries	Radnig	Tessenberg-Thurnbach
Gößnitz	Lengholz	Röhrebühel	Walchen
Gurina	Leogang	Rötzgraben	Weichselbachgraben
Hangler	Meiselding	Rubland	Weißspitze
Hirzbach	Meißling Mandling	Ruden	Windisch-Bleiberg
Hochtor	Michelgraben-Thumersbach	Sajatmäher (Bolach)	Zell
Hochwurzen	Milagraben	Schellgaden	
Hopfriesen, Bromriesen	Millileiten	Schöllenberg	
Im Firschnitz, Göriacher Röte	Mitterberg	Schurfspitze	
Jauken	Moosenschusteralm	Schwaz	
<b>Belgium</b>			
Bleiberg	Fossey	La Calamine	Schmalgraf
Eschbroich	Herzogen, Hugel; La Helle		
<b>Bosnia &amp; Herzegovina</b>			
Bakovici	Maskara	Milici	Srebrenica
Jabuca Foca			
<b>Bulgaria</b>			
Ada Tepe	Gramatikovo	Papiya	Startsevo
Ai Bounar	Iglika	Paril	Stoikina Chuka
Ardino	Izdremets	Persenk	Studenets
Arkutino	Kamiiski Dol	Petelovo	Surchevo
<b>Assarel</b> <small>GEODE-ABCD7</small>	Kanarata	Pisani Skali	Svetulka
Balikin Preslap	Kapitan Dimitriev	Pismenovo	Svishti Plaz
Belogradchik	Karlievo	Plakalnitsa	Tintyava
Boboshevo	Kiselitsata	Popovo Dere	Tokatchka
Bozhe Ime	Kominsko Chukarche	Popsko	Trapoklovo
Chala	Krasen	Prohorovo	Tsar Asen
Chelopech	Krushevets	Radka	Urta
Chervena Mogila	Lebnitsa	Raev	Varli Bryag
Chuipeitlovo	Luki	Ravnishteto	Varshilo
Davidkovo	Madan	Razdel	Vatiya
Debelets	Madjarovo	Rila	Venetsa
Dolna Kamenitsa	Mali Ruen	Rossen	Vlaikov Vruh

Dolno Lukovo	Medet	Rozino	Vozdol
Elatsite	Mura	Sedmochislenitsi	Zapadno Srednogorie
Elshitsa	Negarshtitsa	Shadiitsa	Zlata
Enyovche	Novo Panicherevo	Simitli	Zlogoch
Fakiya	Obidim	Skrebatno	Zvezdel-Galenite
Gorni Luka	Omarevsko	Sliven	
Gospodintsi	Oridine	Spahievo	
Govezhda	Orlovo Gneздо	Srebren	
		<b>Croatia</b>	
Komiza-Vis			
		<b>Cyprus</b>	
Agrokipia	Kokkinopezoula	Mavrovouni	Platies
Ambelikou	Kokkinoyia	Memi	Sha
Apliki	Kynousa	Mousoulos - Kalavasos	Skouriotissa
Kambia	Limni	Peravasa	Troulli
Kapedhes	Mansoura	Phoenix	
Klirou	Mathiati	Pitharokhoma	
		<b>Czech Republic</b>	
Celina - Mokrsko	Jilove	Kutná Hora	Suchá Rudná
Chvaletice	Kasejovic	Roudný	Tisová
Hojsova Straz	Kasperské Hory	Sedliste	Újezd u Kasejovic
Horní Benesov	Krasna Horo	Sepekov	Vacíkov
Horní Mesto	Krizanovice	Stanislavice	Voltýrov
Horní Vernerovice	Krystofovo Udoli	Staré Ransko	Zlaté Hory
		<b>Finland</b>	
Ahmavaara	Karsikumpu	Lemmenjoki	Savia
Aijala	Kaskela	<b>Luikonlahti</b> <sup>GEODE-FENNO2</sup>	Stormi
Ängeslampi	Keivitsa	Makola	Suurikuusikko
Ängesneva	<b>Keretti</b> <sup>GEODE-FENNO2</sup>	Mullikkoräme	Taivaljärvi
Apajalahti	Kilvenjärvi	Mustavaara 2	Tankavaara
Attu	Kivimaa	Orijärvi	Telkkälä
Enonkoski	Kolmisoppi - Talvivaara	Orivesi	Tervola 2
Hallaperä	Kopsa	Osikonmäki	Tupala zinc deposit
Hammaslahti	Korpilampi	<b>Outokumpu</b> <sup>GEODE-FENNO2</sup>	Valkeasuo
Hangaslampi	Kotalahti	Pahkalampi	Vesiperä
Haveri	Kouervaara	Pahtavaara	<b>Vihanti</b> <sup>GEODE-FENNO4</sup>
Hietajärvi	Kuivisto	Pahtavuoma	Viholanniemi
Hitura	Kurpas	Pampalo	Virtasalmi
Hyvela	Kutuvuoma	Portimo Complex	Vuohtojoki
Jokisivu	Kuuhkamo	<b>Pyhäsalmi</b> <sup>GEODE-FENNO3</sup>	<b>Vuonos</b> <sup>GEODE-FENNO2</sup>
Jouhineva	Kuusijärvi	Rauhala	Ylöjärvi
Juomasuo	Kuusilampi - Talvivaara	Riikonkoski	
Kaapelinkulma	Kylmäkoski	Saattopora	
Kalliosalo	Laivakangas	Salo-Issakka	
		<b>France</b>	
Alloue-Ambernac	Giromagny (Saint Pierre)	Les Avinières	Rochetréjoux
Anglas	Glorianes	Les Bormettes	Rouez
Argut	Heches-Trappes	Les Fouilloux	Saint Félix
Arre	La Baume	Les Malines	Saint Georges d'Hurtières
Banca	La Bellière	Les Renardières	Saint Laurent Le Minier
Baugiraud	La Boissière	Les Vieilles Mines	Saint Romain
Beaune-Les-Mines	La Brette	Loperec	Saint Sauveur-Lendelin
Bentaillou (Sentein)	La Caunette	Mail de Bulard	Sainte Marie-aux-Mines

Bodennec	La Croix de Pallières	Malabau	<b>Saint-Salvy</b> <sup>GEODE-VARISC11</sup>
Bonnac - Scoufour	La Croix-aux-Mines	Maratines	<b>Salsigne</b> <sup>GEODE-VARISC10</sup>
Brette	La Finosa (Ghisoni)	Mas-Vieux	Sigottier
Camarés	La Gardette	Menglon	Teilary
Cap Garonne	La Loubatière	Montjean	Trébas
Carboire	La Porte-aux-Moines	Nouzilléras	Trèves
Champvert (La Porcherie)	La Rabasse	Orpierre	Valauria
Charrier	La Touche	Pale Bidau	Vaucron
Chéni - Douillac	Landas	Pale de Rase	Villardonnel
Chessy les Mines	Largentière	Pech Mijé	Villemagne
Chèze Meyabat	L'Auriéras	Peyrebrune	
Cogolin	Le Bleynard	Pierre Rousse	
Cros Gallet	Le Cèrisier	Pierrefitte	
Deux Jumeaux	Le Châtelet (23)	Plélauff	
Durfort	Le Minier du Viala	Pontpéan	
Fau Marié	Le Pilon	Poullaouen	
Figéac	Le Verger	Renardières - Rochefroide	
		<b>Germany</b>	
Aachen-Stolberg district	Grund	Mühlenbach	Selbeck
Aderstedt, Golditz	Holzappel	Nentershausen-Richelsdorf	Silberberg (Ober-Ramstadt)
Altley	Horbach	Oberharz (Bad Grund)	Silberberg (Wallenfels)
Andreasberg	Horn, Sandebeck	Oberkatz	Sofia Jacoba
Auguste Victoria mine	Hornbühl	Oberpfalz	St Mang-Grube
Bad Grund (Oberharz)	Imsbach (Donnersberg)	Pöhla (Schwarzenberg)	Stahl quarry
Bensberg	Iserlohn, Schwelm	<b>Rammelsberg</b> <sup>GEODE-BASIN8</sup>	Tellig
Brandholz-Goldkronach	Johannes-Zeche (Höllental)	Ramsbeck (district)	Twiste
Carolus Magnus	Kienberg	Ramsberck-Dörnberg	Usingen
Christian Levin mine	Klara vein	Rauschberg	Wallerfanfen
Dahme	Korbach	Rheinbreitbach	Wendershausen
Emser Gangzug	Kupferberg, Wirsberg	Richelsdorf	Werlau
Erbendorf	Littfeld (mine Victoria)	Riedboden	Wesergebiet (Deblinghausen)
Erzgrube (Straußberg)	Lüderich	Rosskopf	Wiesloch
Fischbach (Hosenbach)	Mansfeld	Ruhr (Ruhrgebiet)	Wildsbach mine
Freiberg district	Marsberg (Stadtberge)	Sangershausen	Wittichen
Geismar	<b>Maubach</b> <sup>GEODE-BASIN11</sup>	Sankt Andreasberg	
Gollheim	<b>Meggen</b> <sup>GEODE-BASIN9</sup>	Schauinsland	
		<b>Greece</b>	
Aloron Pellis	Kuklena	Nikisiani Kavalas	Sapes
Antiparos	Lagadas	<b>Olympias</b> <sup>GEODE-ABCD9</sup>	Scarp
Ardas	Lagadi Nigritis	Paleoklissia	Skouries
Aysimi	Lambano	Kranionas	Skyros Cu
Chondro Vouno	Kastorias	Paliokhora	Stratoni
Ermioni	Lavrio	Paliopyrgos	Thermes
Filiuris	Limogardi Lamias	Pefka	Tris Vrises
Fisoka	Madem Lakkos	Penteli Attikis	Virini
Kalamaki Larisis	Marlou	Pephca Alexandroupoleos	Vrinena
Kallianou	Mavres Petres	Perama Hill	Zagora Kissos
Katafiton	Mili	Perivoli Avdella	
Kirki	Milos	Polikastro	
Koumaria	Molai	Pontokerasia	
	Moutoulas	Profitis Ilias	

		<b>Hungary</b>		
Gyöngyösoroszi <b>Lahóca (Cu-Au)</b> <sup>GEODE-ABCD6</sup>	Nagybánya	<b>Recsk</b> <sup>GEODE-ABCD6</sup>		Telkibánya
		<b>Ireland</b>		
Abbeystown (Ballysadare)	Ballyvergin	Liscarton		<b>Silvermines</b> <sup>GEODE-BASIN3</sup>
Aherlow	Bula	<b>Lisheen</b> <sup>GEODE-BASIN4</sup>		Tynagh
Allihies, Bearhaven Mines	Galmoy	Mallow		
Avoca	Garrycam	<b>Navan</b> <sup>GEODE-BASIN2</sup>		
Ballinalack	Gortdrum Oola Mines	Scallanstown		
		<b>Italy</b>		
Argentiera (Veneto)	Gorno	Monteponi - San Giovanni	Salafossa	
Argentiera de Nurra (Sardegna)	Gozzurra - Sos Enattos, Zona di Lula	Montevecchio - Ingurtosu - Gennamari, Arburese	Torrente Valsesia)	Otro (Alagna)
Calabona - Vessus	Iglesiente (district)	Oridda district : Candiazzus, Arenas Tiny	Tripî	
Fenice Capanne - Accesa Serrabottini	Monte Ollasteddu	Osilo	Vigonzano	
Funtana Raminosa	Montecatini (Val di Cécina)	Raibl (Cave del Predil)		
Furtei, Serrenti-Furtei ; Monte Porceddu	Monteneve (Schneeberg)	Rosas, Sa Marchesa, Monte Tamara, Truba Niedda		
		<b>Kosovo</b>		
Ajvalija	Kaltrina	Koporic	Zuta Prlina	
Badovac	Kaludjer	Novo Brdo		
Crnac	Kiseli Potok	Petkovic		
Draznja	Kisnica	<b>Trepca / Stari Trg</b> <sup>GEODE-ABCD2</sup>		
<b>Macedonia (Former Yugoslavian Republic of Macedonia)</b>				
Borov Dol <b>Bucim</b> <sup>GEODE-ABCD14</sup>	Dren Dudica	Sasa Toranica	Zlatica Zletovo	
		<b>Montenegro</b>		
Brskovo	Suplja Stijena	Visnjica	Zuta Prla	
		<b>Norway</b>		
Bidjovagge	Ertelein	Kongsberg	Sulitjelma	
Bimlo	Espedalen	Likken	Svano	
Bindal	Faeoy	Melkedalen	Tverfjellet	
Birtavarre	Flåt	Mofjellets-Grubfr	Ulveryggen-Ariselv	
Bjorkasen	Gruafeltet	Musvik	Vardal	
Bleikvassli	Grubefjell	Nasafjell	Vastveit	
Bleka	Hosanger	Råna	Vigsnes	
Bommeloen	Joma	Riros		
Bruvann	Kåfjord	Skorovass		
Eidsvoll	Killingdal	Smahaugene		
		<b>Poland</b>		
<b>Bytom (district)</b> <sup>GEODE-BASIN1</sup>	<b>Lubin</b> <sup>GEODE-BASIN7</sup>	<b>Olkusz</b> <sup>GEODE-BASIN1</sup>	Zawiercie	
Chrzanów	<b>Lubin (district)</b> <sup>GEODE-BASIN7</sup>	<b>Polkowice</b> <sup>GEODE-BASIN7</sup>	Zlotoryja	
Glogow	Miedziana Góra	<b>Pomorzany</b> <sup>GEODE-BASIN1</sup>	Zloty Stok	
Konrad	Myszkow	<b>Rudna</b> <sup>GEODE-BASIN7</sup>		
Lena	Noway Kosciól	<b>Sierszowice</b> <sup>GEODE-BASIN7</sup>		
Lubichów	Okrzeszyn	Siewierz		

<b>Portugal</b>		
Algares (Portel)	Cerro da Mina e Conceicao	Lousal
<b>Aljustrel (district)</b> <sup>GEODE- VARISC3</sup>	Cova dos Mouros	Montalto
Barreiro	Entrematinhas	Montemor
Barrigao	Escadia Grande (Serra de Lousa)	<b>Neves-Corvo</b> <sup>GEODE-VARISC5</sup>
Braçal	Ficalho	Palhal
Caeirinha	França	<b>Panasqueira</b> <sup>GEODE-VARISC2</sup>
Canal Monte da Fateota	Freixedas	Penesdono
Ceiroco	Gralheira, Tres Minas	Pinheiro
Cerca das Minas	Jales	Preguiças
Cerro da Amendoeirinha	Lagoa Salgada	Sao Domingos
<b>Romania</b>		
Alfîn Tepe	<b>Bucium-Tarnita</b> <sup>GEODE-ABCD3</sup>	Lesu Ursului
Baia Borsa	<b>Cavnic-Boldut</b> <sup>GEODE-ABCD4</sup>	Moldova Nouà
Baia de Arias	<b>Cavnic-Roata</b> <sup>GEODE-ABCD4</sup>	Muncàceasca- Stànija
<b>Baia Sprie</b> <sup>GEODE-ABCD4</sup>	Corabia	Musariu (Vechi & Nou)
Bàita Bihor	Coranda	<b>Nistru</b> <sup>GEODE-ABCD4</sup>
Bàita-Cràciunesti	<b>Deva</b> <sup>GEODE-ABCD3</sup>	<b>Rosia Montanà</b> <sup>GEODE-ABCD3</sup>
Boita-Hateg	Fundu Moldovei	<b>Rosia Poieni</b> <sup>GEODE-ABCD3</sup>
Bolcana-Troita	Gruicul Dumii	Ruschita
Brusturi-Luncsoara	<b>Herja</b> <sup>GEODE-ABCD4</sup>	<b>Sàcàrimb</b> <sup>GEODE-ABCD3</sup>
<b>Bucium - Arama</b> <sup>GEODE-ABCD3</sup>	<b>Ilba-Handal</b> <sup>GEODE-ABCD4</sup>	<b>Sàsar</b> <sup>GEODE-ABCD4</sup>
<b>Serbia</b>		
Avala	Coka Marin	Kosmaj Babe
Bancarevo	Djovolja Varos	Lajkovaca
Belo Brdo	Donje Nevlje	Lece
<b>Bor</b> <sup>GEODE-ABCD1</sup>	Dumitru Potok	Lipa
<b>Borska Reka</b> <sup>GEODE-ABCD1</sup>	Goveda Glava	<b>Majdanpek</b> <sup>GEODE-ABCD1</sup>
Cerovo	Karamanica	Novo Okno
Coka Kuruga	Kizevak	Rudnik
<b>Slovakia</b>		
Ardovo ( Plesivecke)	<b>Kremnica</b> <sup>GEODE-ABCD8</sup>	<b>Pukanec - Rudno</b> <sup>GEODE- ABCD8</sup>
Banská Belá (including Kamenny)	Lubietova-Osrblie (Banska Bystrica)	Roznava (Strieborna, Maria mine).
<b>Banska Stiavnica</b> <sup>GEODE- ABCD8</sup>	Morske oko	Rudnany - Porac
<b>Hodrusa - Rozàlia</b> <sup>GEODE- ABCD8</sup>	<b>Nová Bana</b> <sup>GEODE-ABCD8</sup>	Smolnik
KlokoÈ - Podpolom	Poniky (Banska Bystrica)	Voznica
<b>Slovenia</b>		
Mezica	Skofje	
<b>Spain</b>		
Abenojar, Cabezarado, San Quintin	Corcoesto	Loma de Bas
<b>Aguablanca</b> <sup>GEODE-VARISC8</sup>	Covas	Loma del Chaparral
<b>Aguas Teñidas</b> <sup>GEODE-VARISC6</sup>	Cueva de la Mora	Lomero Poyatos
Ahigal	Cutar (Montas de Malaga)	Los Arcos
Albiol	El Buitrón	Lucena del Cid
Alconchel	El Carpio	Malgrat (2)
Alforja	El Cura	María Luisa
		Sao Joao do Deserto e <b>Algares</b> <sup>GEODE-VARISC3</sup>
		Talhada
		Telhadela
		Tinoca
		Vale Nogueiras
		Varzea de Trevoes
		Vila Velha de Rodao
		Sasca Montanà
		Sipot-Dibarti
		<b>Suior</b> <sup>GEODE-ABCD4</sup>
		Valea Morii
		Valea Rosie
		Vàlisoara
		Vetel
		Voita
		<b>Zlatna-Stanija</b> <sup>GEODE-ABCD3</sup>
		Ruplje
		Tolishnitsa
		<b>Veliki Krivelj</b> <sup>GEODE-ABCD1</sup>
		Veliki Majdan
		Zavlaka
		Zlace
		Zlatá Bana
		San Dioniso (Rio Tinto)
		San Juan de Alcaraz
		San Lucas (Rio Tinto)
		San Miguel
		San Platon
		San Telmo
		Santa Magdalena

Alfredo (Rio Tinto)	El Espinar, San Rafael	Martorell	Santa Marta
Aliva, Mina Aliva	El Perrunal	Mazarron ()	Santiago
Angelita	<b>El Valle</b> <sup>GEODE-VARISC1</sup>	Minas del Molinillo	Santomera
Arinteiro, Fuente Rosas	Ezcurra	Molvizar	Sierra Almijara
Armuna de Almanzora, Seron	Fornalutx	Monte de Toro	Sierra Bullones (Tharsis)
<b>Aznalcollar - Los Frailes (district)</b> <sup>GEODE-VARISC3</sup>	Fornas, Gema	Monte Romero	Sierra de Albarracin (1)
Baget (Rocabruna)	Fresnedilla, Colmenar del Arroyo	Munebrega	Sierra de los Pinos
Banalbufar	Fuente Obejuna	Nava de Jadraque	Sierra de Ortigueta (1)
Banos de la Encina	Fuenteheridos	Nava de Ricomalillo	Sierra de Vicon
Banos de Sierra Alhambilla	Galapagar	Nazaret	Sierra del Cucalon
Bedar	Garganta	Nijar	Sierra del Madronal
Belalcazar	Gava	Noez Mazarambroz	Sierra Mijas
Bellmunt de Gurana-Mola	Gevora (Rio)	Nuestra Senora del Carmen	Sierrecilla
Benabarre	Gloria	Nueva Almagrera	Soller
Benadalid	Godan	Orellana la Vieja	Sonseca
Bercerrea	Granada	Oria	Sorpresa
Betelu	Grupo Malagon	Os de Civis	<b>Sotiel - Migollas</b> <sup>GEODE-VARISC3</sup>
Biel	Guadalmez	Otero de Herreros	<b>Tharsis (district)</b> <sup>GEODE-VARISC3</sup>
Borriol	Guadalmez Alamillo	Palafrugell	Tinto - Santa Rosa
Bosost	Guejar-Sierra Veleta	Pardos Torrubia	Toral de los Vados
Cabezas del Pasto	Herrerias, Las Herrerias	Pedroso de Acim	Torre de Cadella
Cabezos Altos	Hinojosa de Calatrava	Pena de Hierro	Udias
Cabo de Gata	Huerca-Overa	Pena Rubia	Uldemolins
Cala II	Huidobro	Penafior	Valdeazogues
Calcena	Isca Colom	Pino	Valdemosa
Campanario	La Brueva	Planes (Rio Tinto)	Valdovino
Campo de la Lomba	La Carolina, El Centenillo	Plasenzuela	Valquemado II
Canfranc	La Codosera	Poderosa	Valverde (Masa Valverde)
Cantareras	La Esperanza (Angostura)	Posadas	Valverde de la Vera
Cardenchoza	La Joya	Prado Vicioso (Tharsis)	Vanes
Caridad (Py)	La Lapilla	Puebla de la Reina	Velez-Rubio
<b>Carlès - Boinas</b> <sup>GEODE-VARISC1</sup>	La Nava - Paredon	Puebla de los Infantes	Villanueva de Cordoba
Carranza	La Nava de Jadraque	Regil	Villareal de Alava
Cartagena - La Union (district)	La Nava de Ricomalillo	Reinosa	Virgen de la Cabeza
Cartagena-La Union	La Romanera	<b>Reocin</b> <sup>GEODE-BASIN6</sup>	Vuelta Falsa
Castillo Buitron	La Torerera	Ribas de Freser	Vulcano - Cantareras
Castillo de las Guardas	La Troya	Rio Corumbel (Acebuchal)	Zas
Castuera	La Zarza	<b>Rio Tinto</b> <sup>GEODE-VARISC7</sup>	
Cerdido Moeche	Lagunazo	Rio Viar	
Cerro Colorado (Rio Tinto)	Laisquez	Rodalquilar	
Cerro Toro	<b>Las Cruces</b>	<b>Rubiales &amp; Sta Barbara</b> <sup>GEODE-BASIN5</sup>	
Chaparrita	Las Escoriales	Salamon project	
Cheles	Legorreta	<b>Salave</b> <sup>GEODE-VARISC1</sup>	
Concepcion	Leiza	San Antonio (Rio Tinto)	
Confesionarios (Valdelamusa)	Linares de Mora	San Casiano	

<b>Sweden</b>			
Adak	Flatsbo	Liikavaara	Sivakkaharju
<b>Aitik</b> <sup>GEODE-FENNO7</sup>	Froa	Ljusnedal	Sörtärnan
Åkerberg	Garpenberg	Mäkärärova	Stekenjokk
Ankarvattnet	Jormlien	Malanaset	Storliden
Barsele	Kankberg	Meurastuksenaho	Svartliden
Björkdal	Kedträsk	Nautanen	Svärträsk
Bjorkvattnet	Kimheden	Norra Norrliden	Tjater
Bjurfors	Kiskamavaara	Pahtohavare	Unna Gaisartjakko
<b>Boliden</b> <sup>GEODE-FENNO8</sup>	Kristineberg	Petknäs	Vindfall
Bottenbäcken	Kuikkapuro	Pohjasvaara	Viscaria
Brännorna	Kuittila	Rakkejaur	<b>Zinkgruvan</b> <sup>GEODE-FENNO10</sup>
Caningen	Kuotko	Rämespuro	
Dammsjön	Kusa	Ravlidmyran	
Enåsen	Laisvall	Ravlioen	
Ersmark	Långdal	Renström	
<b>Falun</b> <sup>GEODE-FENNO9</sup>	Lappvattnet	Ruotjesacker	
<b>Switzerland</b>			
Brugg	Gondo	Napf	Silberberg
Calanda	Malcantone, Astano	Salanfe	
<b>United Kingdom</b>			
Alderley Edge	Corrie Buie	Mendips	Sandlodge
Alston-Greenhow	Craignure	Middleton Tyas	Scourie
Ardrihaig	Curraghinalt	Mill Close Mine	Shipham (Central Mendips)
Auchtertyre	Devon Great Consols	Mynydd Y Garreg	Skye (Island of)
Ballachulish	Dodington	New Glencrieff	Snail Beach
Bampfylde	Dolacothi mine	Newton St Cyres	Snelston
Belstone Consols	Dolcoath	Northern Pennines district (Alston Block, Askrigg block)	Snowdon area
Ramsley		Ogofau (Central Wales mining field)	South Caradon
Blackcraig	Dolgellau		South Crofty, East Pool and Agar mines
Boltsburn Durham	Foxdale	Paar	Southern Pennines district
Bray	Frongoch	Parc (Llanrwst)	Staunton Harold
Bridge of Allan (Blair Logie)	Gairloch	Parys Mountain, Mona	Stobshiel
Britannia	Glasdir	Pengenna	Strontian
Cavanacaw	Glenhead	Penhawger	Teign Valley Lodes
Central Wales mining field	Goldscope	Pentireglaze	Thorntwhite
Charlestown United	Grinshill	Perran Iron Lode	Tomnadashan
Chewton Warren (Central Mendips)	Gwenap	Powell	Towy, Cystanog
Clogau St Davids	Gwynfynydd	Priestlaw	Tyndrum
Clothister Hill	Halkyn-Llanarmon ; Halkyn-Minera; Haljyn	Prosper United	Tywarnhayle
Clwyd area	Lake district	Ratagain	Van
Coed Y Brenin	Laxey	Red Gill Mine (Roughton Gill, Caldbeck Fells)	Vidlin
Combe Martin	Leadhills - Wanlockhead	Red-A-Ven	Wheal Mary Consols
Comrie	Littlemill	Rhiwnant	White Grit
Coniston	Llandudno	Rhynie	Woodhead
Cononish	Llanengan	Roman Gravels	
Cornwall (Province)	Llansannan area	Roughtongill, Roughten Hill	





## Appendix 2

**Final list of primary mineral deposits that have been used for cumulating past production, reserves, and resources of different contained commodities (Au, Cu, Zn, and Pb+Zn combined, and associated commodities Ag, Co, Ni, Pb).**



<b>Albania</b>			
Babje	Gurth	Paluce	Rupe
Derven	Karma	Perlat	Spaç
Fushe Arrez	Kurbnesh	Qaf Bari	Thirre
Gjazuj	Lak Roshi	Rehove	Tuç
Gjegjan	Munella	Rubik	
Golajt	Nikoliq	Ruga e Rinise	
<b>Austria</b>			
Bleiberg	Obojnik- graben	Radhausberg (Imhof-Stollen)	Walchen
Meiselding	Peggau - Hinterberg	Tessenberg-Thurnbach	Zell
Mitterberg			
<b>Belgium</b>			
Eschbroich	Fossey	Herzogen, Hugel; La Helle	La Calamine
<b>Bosnia &amp; Herzegovina</b>			
Srebrenica			
<b>Bulgaria</b>			
Ada Tepe	Enyovche	Persenk	Svishti Plaz
Ardino	Izdremets	Petelovo	Tsar Asen
Assarel	Karlievo	Plakalnitsa	Varli Bryag
Chala	Kominsko Chukarche	Popovo Dere	Vlaikov Vruh
Chelopech	Krasen	Prohorovo	Vozdol
Chervena Mogila	Luki	Radka	Zlata
Davidkovo	Madan	Raevo	
Dolna Kamenitsa	Madjarovo	Rossen	
Elatsite	Medet	Rozino	
Elshitsa	Orlovo Gnezdo	Sedmochislenitsi	
<b>Cyprus</b>			
Agrokippia	Kokkinopezoula	Mavrovouni	Pitharokhoma
Ambelikou	Kokkinoyia	Memi	Platies
Apliki	Kynousa	Mousoulos - Kalavastos	Sha
Kapedhes	Limni	Peravasa	Skouriotissa
Klirou	Mathiati	Phoenix	Troulli
<b>Czech Republic</b>			
Celina - Mokrsko	Kasperské Hory	Kutná Hora	Roudný
<b>Finland</b>			
Ahmavaara	Kaapelinkulma	Laivakangas	Savia
Aijala	Kaskela	Luikonlahti	Stormi
Ängeslampi	Keivitsa	Makola	Suurikuusikko
Ängesneva	Keretti	Mullikkoräme	Taivaljärvi
Apajalahti	Kilvenjärvi	Orijärvi	Telkkälä
Enonkoski	Kivimaa	Orivesi	Tupala
Hallaperä	Kolmisoppi - Talvivaara	Osikonmäki	Valkeasuo
Hammalahti	Kopsa	Outokumpu	Vesiperä
Hangaslampi	Korpilampi	Pahtavaara	Vihanti
Haveri	Kotalahti	Pahtavuoma	Viholanniemi
Hietajärvi	Kouvervaara	Pampalo	Vuohtojoki
Hitura	Kuivisto	Portimo Complex	Vuonos
Hyvela	Kurpas	Pyhäsalmi	Ylöjärvi
Jokisivu	Kuuhkamo	Rauhala	
Jouhineva	Kuusilampi - Talvivaara	Saattopora	
Juomasuo	Kylmäkoski	Salo-Issakka	
<b>France</b>			
Alloue-Ambernac	Heches-Trappes	Le Pilon	Pierrefitte

Anglas	La Baume	Le Verger	Pontpéan
Argut	La Bellière	Les Avinières	Poullaouen
Arre	La Boissière	Les Bormettes	Rouez
Banca	La Brette	Les Malines	Saint Félix
Bentaillou (Sentein)	La Caunette	Les Renardières	Saint Georges d'Hurtières
Bodennec	La Croix de Pallières	Les Vieilles Mines	Saint Laurent Le Minier
Brette	La Croix-aux-Mines	Loperec	Sainte Marie-aux-Mines
Cap Garonne	La Finosa (Ghisoni)	Mail de Bulard	Saint-Salvy
Carboire	La Loubatière	Malabau	Saint-Yrieix (District)
Charrier	La Porte-aux-Moines	Maratines	Salsigne
Chéni - Douillac	La Rabasse	Mas-Vieux	Sigottier
Chessy les Mines	La Touche	Menglon	Trébas
Chèze Meyabat	Landas	Montjean	Trèves
Cogolin	Largentière	Orpierre	Valauria
Deux Jumeaux	L'Auriéras	Pale Bidau	Vaucron
Durfort	Le Bleymard	Pale de Rase	Villardonnel
Fau Marié	Le Cerisier	Pech Mijé	Villemagne
Figeac	Le Châtelet	Peyrebrune	
Giromagny (Saint Pierre)	Le Minier du Viala	Pierre Rousse	
<b>Germany</b>			
Aachen-Stolberg district	Fischbach (Hosenbach)	Maubach	Selbeck
Altley	Grund	Meggen	Tellig
Andreasberg	Holzappel	Mühlenbach	Werlau
Auguste Victoria mine	Iserlohn, Schwelm	Rammelsberg	Wiesloch
Bad Grund (Oberharz)	Kupferberg, Wirsberg	Ramsbeck (district)	
Christian Levin mine	Lüderich	Richelsdorf	
Emser Gangzug	Marsberg (Stadtberge)	Sangershausen	
<b>Greece</b>			
Aysimi	Kirki	Olympias	Sapes
Chondro Vouno	Lavrio	Paliokhora	Scarp
Ermioni	Madem Lakkos	Perama Hill	Skouries
Filiuris	Milos	Polikastro	Vrinena
Fisoka	Molai	Profitis Ilias	
<b>Hungary</b>			
Lahóca (Cu-Au)	Recsk	Telkibánya	
<b>Ireland</b>			
Abbeytown (Ballysadare)	Ballyvergin	Gortdrum Oola Mines	Navan
Aherlow	Bula	Liscarton	Scallanstown
Allihies, Bearhaven Mines	Galmoy	Lisheen	Silvermines
Avoca	Garrycam	Mallow	Tynagh
<b>Italy</b>			
Argentiera (Veneto)	Gorno	Monteneve (Schneeberg)	Raibl (Cave del Predil)
Calabona - Vessus	Gozzurra - Sos Enattos, Zona di Lula	Monteponi - San Giovanni	Rosas, Sa Marchesa, Monte Tamara, Truba Niedda
Fenice Capanne - Accesa Serrabottini	Iglesiente (district)	Montevecchio - Ingurtosu - Gennamari, Arburese	Salafossa
Funtana Raminosa	Monte Ollasteddu	Oridda district : Candiazzus, Arenas Tiny	Torrente Otro (Alagna Valsesia)
Furtei, Serrenti-Furtei ; Monte Porceddu	Montecatini (Val di Cécina)	Osilo	Tripì
<b>Kosovo</b>			
Ajvalija	Draznja	Kiseli Potok	Novo Brdo
Badovac	Kaltrina	Kisnica	Trepca / Stari Trg
Crnac	Kaludjer	Koporic	Zuta Prlina

<b>Macedonia (Former Yugoslavian Republic of Macedonia)</b>			
Bucim	Sasa	Toranica	Zletovo
<b>Montenegro</b>			
Brskovo	Suplja Stijena	Visnjica	Zuta Prla
<b>Norway</b>			
Bidjovagge	Ertelein	Kongsberg	Sulitjelma
Bindal	Espedalen	Likken	Tverrfjellet
Birtavarre	Flåt	Mofjellets-Grubfr	Ulveryggen-Ariselv
Bjørkasen	Hosanger	Råna	Vigsnes
Bleikvassli	Joma	Riros	
Bruvann	Killingdal	Skorovass	
<b>Poland</b>			
Bytom (district)	Lubichów	Olkusz	Siewierz
Glogow	Lubin	Polkowice	Zawiercie
Konrad	Lubin (district)	Pomorzany	Zloty Stok
Lena	Noway Kosciól	Rudna	
<b>Portugal</b>			
Algares (Portel)	Lousal	Panasqueira	Sao Joao do Deserto e Algares
Aljustrel (distr.)	Montemor	Preguiças	
Jales	Neves-Corvo	Sao Domingos	
<b>Romania</b>			
Baia Borsa	Bucium-Tarnita	Moldova Noua	Sasar
Baia de Aries	Cavnic-Boldut	Musariu (Vechi & Nou)	Sasca Montanà
Baia Sprie	Deva	Nistru	Suitor
Băita Bihor	Fundu Moldovei	Rosia Montanà	Valea Morii
Băita-Crăciunesti	Herja	Rosia Poieni	Vetel
Boita-Hateg	Ilba-Handal	Ruschita	Voita
Brusturi-Luncsoara	Lesu Ursului	Săcărîmb	
<b>Serbia</b>			
Avala	Coka Kuruga	Kosmaj Babe	Rudnik
Belo Brdo	Coka Marin	Lajkovaca	Tolishnitsa
Bor	Dumitru Potok	Lece	Veliki Krivelj
Borska Reka	Karamanica	Lipa	
Cerovo	Kizevak	Majdanpek	
<b>Slovakia</b>			
Banská Belá (including Kamenny)	Kremnica	Pukanec - Rudno	Zlatá Bana
Banska Stiavnica	Lubietova-Osrblie (Banska Bystrica)	Roznava (Strieborna, Maria mine).	
Hodrusa - Rozália	Nová Bana	Smolnik	
Klokoč - Podpolom	Poniky (Banska Bystrica)	Voznica	
<b>Slovenia</b>			
Mezica	Skofje		
<b>Spain</b>			
Aguablanca	El Cura	Lomero Poyatos	San Platon
Aguas Teñidas	El Valle	Maria Luisa	San Telmo
Alfredo (Rio Tinto)	Fornas, Gema	Mazarron ()	Santiago
Aliva, Mina Aliva	Fuenteheridos	Monte Romero	Sierra Bullones (Tharsis)
Angelita	Godan	Nuestra Senora del Carmen	Sierrecilla
Arinteiro, Fuente Rosas	Grupo Malagon	Nueva Almagrera	Sorpresa
Aznalcollar - Los Frailes (district)	Herrerias, Las Herrerias	Otero de Herrerros	Sotiel - Migollas
Cabo de Gata	La Brueva	Pena de Hierro	Tharsis (district)

Cala II	La Carolina, El Centenillo	Poderosa	Tinto - Santa Rosa
Campanario	La Esperanza (Angostura)	Prado Vicioso (Tharsis)	Toral de los Vados
Cantareras	La Joya	Reocin	Valverde (Masa Valverde)
Carlès - Boinas	La Lapilla	Rio Tinto	Vuelta Falsa
Cartagena - La Union (district)	La Nava - Paredon	Rodalquilar	Vulcano - Cantareras
Castillo Buitron	La Romanera	Rubiales & Sta Barbara	
Castillo de las Guardas	La Torerera	Salamon project	
Cerro Colorado (Rio Tinto)	La Troya	Salave	
Concepcion	La Zarza	San Antonio (Rio Tinto)	
Corcoesto	Lagunazo	San Dioniso (Rio Tinto)	
Cueva de la Mora	Las Cruces	San Lucas (Rio Tinto)	
El Carpio	Linares de Mora	San Miguel	
<b>Sweden</b>			
Adak	Ersmark	Långdal	Svartliden
Aitik	Falun	Lappvattnet	Svärträsk
Åkerberg	Garpenberg	Liikavaara	Tjater
Barsele	Kankberg	Nautanen	Vindfall
Björkdal	Kedträsk	Norra Norrliden	Viscaria
Bjurfors	Kiskamavaara	Pahtohavare	Zinkgruvan
Boliden	Kristineberg	Petiknäs	
Bottenbäcken	Kuikkapuro	Rakkejaur	
Brännorna	Kuittila	Renström	
Dammsjön	Kuotko	Sörtärnan	
Enåsen	Laisvall	Storliden	
<b>United Kingdom</b>			
Alderley Edge	Coniston	Laxey	Sandlodge
Alston-Greenhow	Cononish	Leadhills - Wanlockhead	Skye (Island of)
Bampfylde	Cornwall (Province)	Llandudno	Snail Beach
Belstone Consols - Ramsley	Curraghinalt	Llanengan	Snowdon area
Blackcraig	Devon Great Consols	Mendips	South Crofty, East Pool and Agar mines
Britannia	Dolcoath	Mill Close Mine	Southern Pennines district (Derbyshire)
Cavanacaw	Dolgellau	New Glencrieff	Strontian
Central Wales mining field	Gairloch	Northern Pennines district (Alston Block, Askrigg block)	Tyndrum
Charlestown United	Glasdir	Parc (Llanrwst)	
Clwyd area	Halkyn-Llanarmon ; Halkyn-Minera; Haljyn	Parys Mountain, Mona	
Coed Y Brenin	Lake district	Perran Iron Lode	

## **Appendix 3**

### **Final list of primary mineral deposits that have been retained for detailed descriptions.**





Derven	Lak Roshi	<b>Albania</b>	Qaf Bari	Tuç
Golajt	Munella		Rehove	
Gurth	Nikoliq		Rubik	
Karma	Perlat		Spaç	
		<b>Bulgaria</b>		
Ada Tepe - Krumovgrad	Davidkovo		Madjarovo	Svishti Plaz
Assarel	Elatsite		Orlovo Gnezdo	Vozdol
Chala - Spahievo	Karlievo		Popovo Dere	Zlata - Trun
Chelopech	Luki		Prohorovo	
		<b>Cyprus</b>		
Agrokippia	Kynousa		Mavrovouni	Skouriotissa
Apliki	Limni		Mousoulos - Kalavassos	
Kokkinoyia	Mathiati		Phoenix	
		<b>Czech Republic</b>		
Celina - Mokrsko	Kasperské Hory			
		<b>Finland</b>		
Hallaperä	Korpilampi		Pampalo	Taivaljärvi
Hammaslahti	Kuivisto		Pyhäsalmi	Talvivaara (Kolmisoppi & Kuusilampi)
Haveri	Laivakangas		Rauhala	Tupala
Hitura	Osikonmäki		Salo-Issakka	Valkeasuo
Jokisivu	Outokumpu (Keretti)		Säviä	Vuonos
Keivitsa	Pahtavaara		Stormi	
Kopsa	Pahtavuoma		Suurikuusikko - Kittila	
		<b>France</b>		
Bodennec	La Porte-aux-Moines		Les Malines	Salsigne
Carboire	Le Bleynard		Rouez	Villemagne
Chessy les Mines	Le Châtelet		Saint-Salvy	
La Loubatière	Le Verger		Saint-Yrieix (District)	
		<b>Greece</b>		
Chondro Vouno	Molai		Polikastro	Sapes
Fisoka	Olympias		Profitis Ilias (Milos)	Skouries
Madem Lakkos	Perama Hill			
		<b>Hungary</b>		
Recsk- Lahóca (district)				
		<b>Ireland</b>		
Aherlow	Garrycam		Navan - Tara	
Avoca	Lisheen		Silvermines (Mogul)	
Galmoy	Mallow		Tynagh	
		<b>Italy</b>		
Furtei (Serrenti-Furtei; Monte Porceddu)	Iglesiente		Monte Ollasteddu	Osilo
		<b>Kosovo</b>		
Ajvalija	Belo Brdo		Draznja	Novo Brdo
Badovac	Crnac		Kaltrina	Trepca / Stari Trg
		<b>Macedonia (Former Yugoslavian Republic of Macedonia)</b>		
Bucim	Sasa		Toranica	Zletovo
		<b>Montenegro</b>		
Brskovo	Suplja Stijena			
		<b>Norway</b>		
Birtavarre	Ulveryggen-Ariselv			
		<b>Poland</b>		

Glogow Konrad	Lubin Olkusz, Pomorzany	Polkowice	Rudna
		<b>Portugal</b>	
Aljustrel Jales	Lousal Montemor	Neves-Corvo	Preguiças
		<b>Romania</b>	
Baia Borsa Baia Sprie Bucium-Tarnita Cavnic-Boldut	Deva Herja Ilba-Handal Moldova Nouà	Nistru Rosia Montanà Rosia Poieni Săcărîmb	Suior Valea Morii
		<b>Serbia</b>	
Borska Reka Cerovo	Coka Marin Dumitru Potok	Kizevak Majdanpek	Veliki Krivelj
		<b>Slovakia</b>	
Banska Stiavnica Kremnica	Lubietova-Osrblie Roznava - Strieborna	Voznica	Zlatá Bana
		<b>Spain</b>	
Aguablanca Agua Teñidas Arinteiro, Fuente Rosas Aznalcollar - Los Frailes Carles - Boinas Castillo Buitron Corcoesto Cueva de la Mora El Carpio	El Valle Fuenteherdos Grupo Malagon La Esperanza (Angostura) La Romanera La Troya La Zarza Lagunazo Las Cruces	Lomero Poyatos Mazarron Monte Romero Poderosa Reocin Rodalquilar Rubiales & Sta Barbara Salave San Miguel	San Telmo Sierrecilla Sotiel - Migollas Tharsis (district) Toral de los Vados Valverde (Masa Valverde) Vuelta Falsa
		<b>Sweden</b>	
Adak Aitik Barsele Björkdal Boliden	Garpenberg Kankberg Kristineberg Långdal Norra Norrliden	Petiknäs Rakkejaur Renström Storliden	Svartliden Svärtrräsk Viscaria Zinkgruvan
		<b>United Kingdom</b>	
Cavanacaw	Gairloch	Parys Mountain, Mona	

## **Appendix 4**

### **Deposit description files - top 200 of European non-ferrous metal deposits**



ALBANIA	Derven	ALB-00008
Commodities: Cu - Ag - Au		Long: 19,883 - Lat: 41,750
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 2,6 Mt@0,94 %	

ALBANIA	Golajt	ALB-00047
Commodities: Cu - Ag - Au		Long: 20,367 - Lat: 42,233
Mining Company	state	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	(no data)	
Ore deposit type	Ore deposits related to basic-ultrabasic magmatic rocks	
Past production	Cu: 0,046 Mt@1,23 %	
Reserves	(no data)	
Resources	Cu: 1,6 Mt@1,23 %	

ALBANIA	Gurth	ALB-00050
Commodities: Cu - Au		Long: 20,067 - Lat: 41,917
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Au: 0,65 Mt@1,15 g/t Cu: 0,65 Mt@2,34 %	
Reserves	(no data)	
Resources	Au: 1,0 Mt@1,15 g/t Cu: 1,0 Mt@2,34 %	

ALBANIA	Karma	ALB-00057
Commodities: Cu - Au - Ag		Long: 19,783 - Lat: 42,067
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Cu: 1,3 Mt@3,71 %	
Reserves	(no data)	
Resources	Au: 2,3 Mt@0,2 g/t Cu: 0,97 Mt@3,71 %	

ALBANIA	Lak Roshi	ALB-00167
Commodities: Cu - Au		Long: 20,088 - Lat: 42,052
Mining Company		
url		
Status	UNKNOWN STATUS	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Cu: 0,064 Mt@1 %	
Reserves	(no data)	
Resources	Cu: 3,8 Mt@1 %	

ALBANIA	Munella	ALB-00049
Commodities: Cu - Zn - Au		Long: 20,100 - Lat: 41,967
Mining Company	Nebex Resources	
url		
Status	Producing deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite, Galena, Arsenopyrite, Pyrrhotite, Pyrargyrite, Bornite, Tennantite, Bournonite, Geocronite, Gold, Electrum	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Au: 3,3 Mt@0,708 g/t Cu: 3,3 Mt@0,97 % Zn: 3,3 Mt@0,68 %	
Reserves	(no data)	
Resources	Au: 8,8 Mt@0,708 g/t Cu: 9,8 Mt@0,97 % Zn: 8,8 Mt@0,68 %	

ALBANIA	Nikoliq	ALB-00051
Commodities: Cu - Au		Long: 20,400 - Lat: 42,250
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unkown	
Mineralogy	(no data)	
Ore deposit type	Ore deposits related to basic-ultrabasic magmatic rocks	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 1,1 Mt@0,49 g/t Cu: 2,7 Mt@1,68 %	

ALBANIA	Perlat	ALB-00059
Commodities: Cu - Ag - Au		Long: 19,967 - Lat: 41,733
Mining Company	Albaker (state)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 4,3 Mt@1,2 g/t Cu: 4,3 Mt@2,2 %	

ALBANIA	Qaf Bari	ALB-00056
Commodities: Cu - Au		Long: 0,000 - Lat: 0,000
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Au: 1,8 Mt@0,9 g/t Cu: 1,8 Mt@2,14 %	
Reserves	(no data)	
Resources	Au: 1,1 Mt@0,9 g/t Cu: 1,1 Mt@2,14 %	



ALBANIA	Rehove	ALB-00030
Commodities: Cu - Ag - Au		Long: 20,633 - Lat: 40,483
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 3,3 Mt@2,2 %	

ALBANIA	Rubik	ALB-00058
Commodities: Cu - Ag - Au		Long: 19,783 - Lat: 41,767
Mining Company	Albaker (state)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Bornite, Sphalerite, Hematite, Magnetite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 1,3 Mt@0,49 g/t Cu: 1,3 Mt@2,44 %	

ALBANIA	Spaç	ALB-00034
Commodities: Cu - Ag - Au		Long: 20,050 - Lat: 41,967
Mining Company	Albaker (state)	
url		
Status	Producing deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Cu: 2,4 Mt@1 %	
Reserves	(no data)	
Resources	Cu: 6,4 Mt@1 %	

ALBANIA	Tuç	ALB-00168
Commodities: Cu - Au		Long: 20,050 - Lat: 42,033
Mining Company		
url		
Status	Unkown status	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Au: 1,3 Mt@0,11 g/t Cu: 1,3 Mt@2,03 %	
Reserves	(no data)	
Resources	Au: 3,1 Mt@0,11 g/t Cu: 3,1 Mt@2,03 %	

BULGARIA	Ada Tepe - Krumovgrad	BGR-00317
Commodities: Au - Ag		Long: 25,654 - Lat: 41,439
Mining Company	Dundee Precious Metals Inc.	
url	<a href="http://www.dundeeprecious.com/adatepeproject.asp">http://www.dundeeprecious.com/adatepeproject.asp</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Gold, Pyrite, Magnetite, Marcasite	
Ore deposit type	Fault and shear-zone controlled low sulphidation epithermal veins: Au, Ag, (Mn)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 4,6 Mt@2,5 g/t Au: 4,6 Mt@5,8 g/t	

BULGARIA	Assarel	BGR-00039
Commodities: Cu - Au		Long: 24,136 - Lat: 42,547
Mining Company	Assarel-Medet Co	
url	<a href="http://www.asarel.com/AboutUs.jsp?language=en">http://www.asarel.com/AboutUs.jsp?language=en</a>	
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Silver, Bornite, Chalcocite, Chalcopyrite, Covellite, Grey copper, Electrum, Galena, Goethite, Hematite, Magnetite, Malachite, Molybdenite, Gold, Pyrite, Sphalerite, Goldfieldite, Colusite, Sulvanite, Aikinite, Wittichenite, Hessite, Tetradymite, Enargite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Cu: 133 Mt@0,53 %	
Reserves	Au: 260 Mt@0,2 g/t Cu: 260 Mt@0,41 %	
Resources	(no data)	

BULGARIA	Chala gold deposit - Spahievo	BGR-00322
Commodities: Au - Ag - Cu		Long: 25,368 - Lat: 41,939
Mining Company	(no data)	
url		
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	Tennantite, Chalcocite, Acanthite, Bornite, Enargite, Chalcopyrite, Pyrite, Galena	
Ore deposit type	High-sulphidation (acid-sulphate) epithermal deposits: Au, Cu, (Hg, As, S)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 1,6 Mt@20 g/t	

BULGARIA	Chelopech	BGR-00037
Commodities: Au - Cu - Ag - Zn (- In - Ge)		Long: 24,079 - Lat: 42,703
Mining Company	Dundee Precious Metals Inc.	
url	<a href="http://www.dundeeprecious.com/chelopechmine.asp">http://www.dundeeprecious.com/chelopechmine.asp</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Aikinite, Bismuthinite, Bornite, Chalcocite, Chalcopyrite, Colusite, Covellite, Enargite, Famatinite, Galena, Luzonite, Gold, Pyrite, Sphalerite, Tennantite, In-sphalerite, In-tennantite-tetrahedrite, In-enargite, In-chalcopyrite, Electrum, K�esterite, Marcasite, Melnicovite, Nagyagite, Renierite, Stannoidite, Sylvanite, Tellurium	
Ore deposit type	High-sulphidation (acid-sulphate) epithermal deposits: Au, Cu, (Hg, As, S)	
Past production	Au: 8,6 Mt@2,9 g/t Cu: 8,6 Mt@0,97 %	
Reserves	Au: 26 Mt@3,56 g/t Cu: 26 Mt@1,62 %	
Resources	Au: 17 Mt@1,92 g/t Cu: 17 Mt@0,72 %	

BULGARIA	Davidkovo	BGR-00069
Commodities: Ag - Pb - Zn - Cu		Long: 24,944 - Lat: 41,675
Mining Company	(no data)	
url		
Status	PROVINCE- DISTRICT	
Exploitation type	Unworked	
Mineralogy	Anglesite, Silver, Argentite, Arsenopyrite, Azurite, Bornite, Cerussite, Chalcopyrite, Enargite, Galena, Goethite, Hematite, Jarosite, Goethite (limonite), Malachite, Melanterite, Molybdenite, Polybasite, Pyrite, Pyromorphite, Sphalerite, Tennantite, Wulfenite	
Ore deposit type	Polymetallic peribatholithic veins: Pb-Zn-Cu, (Ag, Ge, U)	
Past production	(no data)	
Reserves	Cu: 8,3 Mt@0,12 % Pb: 8,3 Mt@1,94 % Zn: 8,3 Mt@1,8 %	
Resources	Cu: 4,1 Mt@0,17 % Pb: 4,1 Mt@1,67 % Zn: 4,1 Mt@1,6 %	

BULGARIA	Elatsite	BGR-00036
Commodities: Cu - Ag - Au - Mo (- PGE - Re)		Long: 24,038 - Lat: 42,752
Mining Company	Elatsite Med	
url		
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Azurite, Bornite, Chalcocite, Chalcopyrite, Covellite, Galena, Magnetite, Malachite, Molybdenite, Electrum, Pyrite, Sphalerite, Merenskyite, Clausthalite, Hematite, Hessite, Marcasite, Pyrrhotite, Rammelsbergite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Au: 115 Mt@0,13 g/t Cu: 115 Mt@0,37 %	
Reserves	Ag: 184 Mt@1,3 g/t Au: 185 Mt@0,3 g/t Cu: 185 Mt@0,45 % Mo: 185 Mt@0,0046 % Pltd: 184 Mt@0,025 g/t Re: 185 Mt@375 g/t	
Resources	(no data)	

BULGARIA	Karlievo	BGR-00105
Commodities: Cu - Mo - Au		Long: 24,123 - Lat: 42,695
Mining Company	(no data)	
url		
Status	Subeconomic deposit	
Exploitation type	Unworked	
Mineralogy	Azurite, Bornite, Chalcocite, Chalcopyrite, Covellite, Copper, Galena, Goethite, Goethite (limonite), Magnetite, Malachite, Molybdenite, Pyrite, Sphalerite	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 61 Mt@0,05 g/t Cu: 61 Mt@0,21 % Mo: 61 Mt@0,005 %	

BULGARIA	Luki - Drujba	BGR-00068
Commodities: Ag - Pb - Zn - Cu		Long: 24,818 - Lat: 41,769
Mining Company	Luki Invest Plc	
url		
Status	PROVINCE- DISTRICT	
Exploitation type	Underground mining	
Mineralogy	Acanthite, Anglesite, Silver, Arsenopyrite, Azurite, Calamine, Cerussite, Chalcocite, Chalcopyrite, Covellite, Famatinite, Galena, Goethite, Hematite, Jarosite, Goethite (limonite), Magnetite, Malachite, Molybdenite, Polybasite, Proustite, Pyrite, Sphalerite, Tennantite, Tetrahedrite, Wulfenite, Wurtzite	
Ore deposit type	Polymetallic peribatholithic veins: Pb-Zn-Cu, (Ag, Ge, U)	
Past production	Pb: 14 Mt@2,9 % Zn: 14 Mt@2,16 %	
Reserves	Cu: 4,5 Mt@0,33 % Pb: 4,5 Mt@3,87 % Zn: 4,5 Mt@3,82 %	
Resources	Cu: 3,2 Mt@0,27 % Pb: 3,2 Mt@3,31 % Zn: 3,2 Mt@3,99 %	

BULGARIA	Madjarovo	BGR-00083
Commodities: Pb - Zn - Ag - Au		Long: 25,864 - Lat: 41,636
Mining Company	Central Asia Minerals Ltd	
url		
Status	Old mine workings	
Exploitation type	Underground mining	
Mineralogy	Anglesite, Arsenolite, Aurichalcite, Azurite, Bornite, Boulangerite, Cerussite, Chalcanthite, Chalcopyrite, Covellite, Cuprite, Epsomite, Galena, Goethite, Hematite, Hydrozincite, Jarosite, Magnetite, Malachite, Marcasite, Massicot, Mimetite, Minium, Gold, Pyrargyrite, Pyrite, Pyromorphite, Smithsonite, Sphalerite, Tennantite, Tenorite, Wurtzite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	Ag: 0,36 Mt@19,7 g/t Au: 0,36 Mt@2,5 g/t Pb: 11 Mt@1,27 % Zn: 11 Mt@0,66 %	
Reserves	Ag: 3,7 Mt@6 g/t Au: 3,7 Mt@3,6 g/t	
Resources	(no data)	

BULGARIA	Orlovo Gnezdo	BGR-00103
Commodities: Cu - Au		Long: 24,128 - Lat: 42,539
Mining Company	Ministry of Environment and Water	
url		
Status	Subeconomic deposit	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Galena, Hematite, Magnetite, Molybdenite, Pyrite, Sphalerite, Malachite, Chalcocite, Covellite, Bornite, Goethite (limonite)	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 36 Mt@0,14 g/t Cu: 36 Mt@0,32 %	

BULGARIA	Popovo Dere	BGR-00099
Commodities: Cu		Long: 24,155 - Lat: 42,371
Mining Company	(no data)	
url		
Status	Subeconomic deposit	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 75 Mt@0,2 %	

BULGARIA	Prohorovo	BGR-00048
Commodities: Cu - Mo - Re		Long: 26,253 - Lat: 42,374
Mining Company	(no data)	
url		
Status	Unexploited deposit	
Exploitation type	Unworked - past mining	
Mineralogy	Chalcopyrite, Galena, Hematite, Magnetite, Molybdenite, Pyrite, Sphalerite, Bornite	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	Cu: 249 Mt@0,25 % Mo: 249 Mt@0,005 %	
Resources	Cu: 11 Mt@0,22 %	

BULGARIA	Svishti Plaz	BGR-00034
Commodities: Au - Ag - Cu - Pb - Bi		Long: 24,113 - Lat: 42,772
Mining Company	(no data)	
url		
Status	Unexploited deposit	
Exploitation type	Unworked - past mining	
Mineralogy	Arsenopyrite, Bismuth, Bismuthinite, Chalcocopyrite, Galena, Hematite, Magnetite, Marcasite, Gold, Pyrite, Pyrrhotite, Sphalerite, Tennantite	
Ore deposit type	Brittle-fault related vein and silicified breccia ore deposits: Zn, Pb, Ag, Cu ("BPGC") and/or F, Ba	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 1,4 Mt@7,01 g/t	

BULGARIA	Vozdol	BGR-00104
Commodities: Au - Cu - Ag - Zn - Pb		Long: 24,080 - Lat: 42,713
Mining Company	(no data)	
url		
Status	Subeconomic deposit	
Exploitation type	Unworked	
Mineralogy	Aikinite, Bismuth, Bismuthinite, Bornite, Chalcocite, Chalcocopyrite, Chalcostibite, Covellite, Emplectite, Galena, Magnetite, Marcasite, Millerite, Molybdenite, Gold, Pyrite, Pyrrhotite, Sphalerite, Tennantite, Tetradymite, Tetrahedrite, Guanajuatite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 42 Mt@6,87 g/t Au: 42 Mt@1,67 g/t Cu: 42 Mt@0,42 % Pb: 42 Mt@0,24 % Zn: 42 Mt@0,39 %	

BULGARIA	Zlata - Trun	BGR-00017
Commodities: Au - Ag		Long: 22,711 - Lat: 42,770
Mining Company	Euromax resources Ltd	
url	<a href="http://www.euromaxresources.com/index.php?id=95">http://www.euromaxresources.com/index.php?id=95</a>	
Status	Project under evaluation (Trun licence)	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Galena, Gold, Pyrite	
Ore deposit type	Intrusion related Au deposit	
Past production	Ag: 1,5 Mt@49 g/t Au: 1,5 Mt@1,8 g/t	
Reserves	(no data)	
Resources	(no data)	

<b>CYPRUS</b>	Agrokippia	CYP-00001
Commodities: Cu - Zn		Long: 33,165 - Lat: 35,042
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 5,3 Mt@0,56 % Zn: 5,5 Mt@0,16 %	

<b>CYPRUS</b>	Apliki	CYP-00004
Commodities: Cu - Zn - Ag		Long: 32,850 - Lat: 35,100
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,7 Mt@5 g/t Cu: 1,7 Mt@1,8 % Zn: 1,7 Mt@0,2 %	

<b>CYPRUS</b>	Kokkinoyia	CYP-00008
Commodities: Cu - Zn		Long: 33,125 - Lat: 35,046
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	Cu: 1,0 Mt@1,5 % Zn: 1,0 Mt@0,2 %	
Resources	Cu: 0,50 Mt@3,8 %	



CYPRUS	Kynousa	CYP-00009
Commodities: Cu - Zn		Long: 32,513 - Lat: 35,033
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	Cu: 4,0 Mt@1,5 %	
Resources	Cu: 0,52 Mt@2,3 % Zn: 0,52 Mt@2,38 %	

CYPRUS	Limni	CYP-00010
Commodities: Cu - Zn - Ag - Au		Long: 32,492 - Lat: 35,045
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 0,42 Mt@3 g/t Au: 0,42 Mt@3,4 g/t Cu: 17 Mt@1 % Zn: 16 Mt@0,2 %	

CYPRUS	Mathiati	CYP-00011
Commodities: Zn - Cu		Long: 33,341 - Lat: 34,955
Mining Company	Eastern Mediterranean Resources	
url	<a href="http://www.emed-resources.com/site/index.php?option=content&amp;task=view&amp;id=58&amp;Itemid=53">http://www.emed-resources.com/site/index.php?option=content&amp;task=view&amp;id=58&amp;Itemid=53</a>	
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 2,8 Mt@0,2 % Zn: 2,8 Mt@1 %	

CYPRUS	Mavrovouni	CYP-00012
Commodities: Cu - Zn - Ag - Au		Long: 32,848 - Lat: 35,107
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 15 Mt@39 g/t Au: 15 Mt@0,3 g/t Cu: 15 Mt@3,8 % Zn: 15 Mt@0,5 %	

CYPRUS	Mousoulos - Kalavasos	CYP-00013
Commodities: Cu - Zn - Pb - Ag - Au		Long: 33,248 - Lat: 34,794
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 6,9 Mt@6 g/t Au: 6,9 Mt@1,7 g/t Cu: 6,9 Mt@1 % Pb: 6,9 Mt@0,01 % Zn: 6,9 Mt@0,5 %	

CYPRUS	Phoenix	CYP-00024
Commodities: Cu		Long: 32,859 - Lat: 35,071
Mining Company	Hellenic Copper Mines Ltd (Trafalgar Corporate & Iacovou Brothers)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 15 Mt@0,5 %	

<b>CYPRUS</b>	<b>Skouriotissa</b>	<b>CYP-00019</b>
Commodities: Cu - Zn - Ag - Au		Long: 32,859 - Lat: 35,071
Mining Company	Hellenic Copper Mines Ltd (Trafalgar Corporate & Iacovou Brothers)	
url		
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 5,4 Mt@69 g/t Au: 35 Mt@0,38 g/t Cu: 5,4 Mt@2,3 % Zn: 5,4 Mt@0,06 %	

<b>CZECH REPUBLIC</b>	<b>Celina - Mokrsko</b>	<b>CZE-00003</b>
Commodities: Au		Long: 14,333 - Lat: 49,740
Mining Company		
url	<a href="http://www.geofond.cz/">http://www.geofond.cz/</a>	
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Gold, Mispickel (Arsenopyrite), Pyrite, Scheelite, Molybdenite, Pyrrhotite, Maldonite	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 50 Mt@2 g/t	

<b>CZECH REPUBLIC</b>	<b>Kasperské Hory</b>	<b>CZE-00013</b>
Commodities: Au - W		Long: 13,555 - Lat: 49,145
Mining Company	Czech Government (TVX Gold inc 2001)	
url		
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Gold, Scheelite, Bismuthinite, Maldonite, Galena, Bismuth, Greenockite, Mispickel (Arsenopyrite), Cobaltite, Gersdorffite, Pyrite, Molybdenite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	Au: 3,3 Mt@9,27 g/t	
Resources	Au: 5,1 Mt@9,3 g/t	

<b>FINLAND</b>	Hallaperä	FIN-00137
Commodities: Zn - Cu		Long: 26,505 - Lat: 63,677
Mining Company	Pyhäsalmi Mining Oy (InMet)	
url		
Status	Prospect	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 3,1 Mt@0,47 % Zn: 3,1 Mt@1 %	

<b>FINLAND</b>	Hammaslahti	FIN-00074
Commodities: Cu - Ag - Au - Zn		Long: 30,017 - Lat: 62,450
Mining Company	Open for acquisition	
url	<a href="http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/hammaslahti.html">http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/hammaslahti.html</a>	
Status	Old industrial mine, exhausted deposit	
Exploitation type	Mining method unknown	
Mineralogy	Silver, Arsenopyrite, Cassiterite, Chalcopyrite, Cubanite, Galena, Hematite, Ilmenite, Mackayite, Magnetite, Gold, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Sedimentary-exhalative to volcano-sedimentary sulphide and silicate deposits: Pb-Zn-Ag, Ni-PGE, Au-B	
Past production	Ag: 0,28 Mt@5,2 g/t Au: 0,28 Mt@0,59 g/t Cu: 7,3 Mt@1,13 % Zn: 0,28 Mt@1,55 %	
Reserves	(no data)	
Resources	(no data)	

<b>FINLAND</b>	Haveri	FIN-00004
Commodities: Au - Co - Cu - Ag		Long: 23,250 - Lat: 61,710
Mining Company	Northern Lion Gold Corp	
url	<a href="http://www.northernliongold.com/s/HaveriProject.asp">http://www.northernliongold.com/s/HaveriProject.asp</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Arsenopyrite, Chalcopyrite, Cobaltite, Cubanite, Gersdorffite, Glauconite, Hessite, Ilmenite, Magnetite, Molybdenite, Gold, Pyrite, Pyrrhotite, Scheelite, Sphalerite, Tellurobismuthite, Valleriite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	Au: 1,5 Mt@2,8 g/t Cu: 1,5 Mt@0,37 %	
Reserves	(no data)	
Resources	Au: 6,6 Mt@3,5 g/t Cu: 6,6 Mt@0,5 %	

FINLAND	Jokisivu	FIN-00087
Commodities: Au		Long: 22,660 - Lat: 61,130
Mining Company	Polar Mining (Dragon Mining NL)	
url	<a href="http://www.dragon-mining.com.au/pages/projects/finland/finland.htm">http://www.dragon-mining.com.au/pages/projects/finland/finland.htm</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Altaite, Arsenopyrite, Aurostibite, Chalcopyrite, Galena, Ilmenite, Joseite, Loellingite, Magnetite, Maldonite, Marcasite, Gold, Pyrite, Pyrrhotite, Sphalerite, Tellurobismuthite, Tetradymite, Ullmannite	
Ore deposit type	Ductile shear-zone related mesothermal gold deposits (amphibolite to granulite facies): Au ( As, Cu, Ag, W)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 1,2 Mt@7,7 g/t	

FINLAND	Keivitsa	FIN-00114
Commodities: Cu - Ni - Au - PGE - Co		Long: 29,967 - Lat: 67,700
Mining Company	Scandinavian Minerals Limited	
url	<a href="http://www.scandinavianminerals.com/keivitsa/index.htm">http://www.scandinavianminerals.com/keivitsa/index.htm</a>	
Status	Prospect	
Exploitation type	Unworked	
Mineralogy	Braggite (Vysotskyite), Chalcopyrite, Cooperite, Gersdorffite, Geversite, Kotulskite, Maucherite, Melonite, Merenskyite, Michenerite, Millerite, Moncheite, Niccolite, Pentlandite, Pyrite, Pyrrhotite, Sperrylite, Stibiopalladinite	
Ore deposit type	Sulfide deposits hosted by ultrabasic rocks: PGE, Ni, Cu, (Co)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 287 Mt@0,09 g/t Co: 287 Mt@0,01 Cu: 287 Mt@0,29 % Ni: 287 Mt@0,22 % Pltd: 287 Mt@0,13 g/t Pt: 287 Mt@0,2 g/t	

FINLAND	Kolmisoppi - Talvivaara	FIN-00098
Commodities: Zn - Cu - Ni		Long: 28,550 - Lat: 62,970
Mining Company	Talvivaara Oy	
url	<a href="http://www.talvivaara.com/index.html">http://www.talvivaara.com/index.html</a>	
Status	Industrial project under development	
Exploitation type	Mining method unknown	
Mineralogy	Alabandite, Chalcopyrite, Molybdenite, Pentlandite, Pyrite, Pyrrhotite, Sphalerite, Stannite, Ullmannite	
Ore deposit type	Volcano-sedimentary and sedimentary-exhalative ore deposits	
Past production	Cu: 0,037 Mt@0,14 % Ni: 0,037 Mt@0,35 % Zn: 0,037 Mt@0,54 %	
Reserves	(no data)	
Resources	Cu: 81 Mt@0,14 % Ni: 81 Mt@0,27 % Zn: 81 Mt@0,54 %	

FINLAND	Kopsa	FIN-00090
Commodities: Au - Cu - Ag		Long: 25,300 - Lat: 63,780
Mining Company	Belvedere Resources	
url	<a href="http://www.belvedere-resources.com/">http://www.belvedere-resources.com/</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Arsenopyrite, Bismuth, Bornite, Chalcopyrite, Cubanite, Loellingite, Marcasite, Molybdenite, Gold, Pyrite, Pyrrhotite, Sphalerite, Stannite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,1 Mt@4 g/t Au: 25 Mt@0,57 g/t Cu: 25 Mt@0,18 %	

FINLAND	Korpilampi	FIN-00148
Commodities: Au		Long: 31,222 - Lat: 63,024
Mining Company	Endomines	
url	<a href="http://www.gtk.fi/explor/gold/korpilampi.htm">http://www.gtk.fi/explor/gold/korpilampi.htm</a>	
Status	Prospect	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 1,6 Mt@4 g/t	

FINLAND	Kuivisto	FIN-00149
Commodities: Au		Long: 31,195 - Lat: 63,034
Mining Company	Endomines	
url	<a href="http://www.gtk.fi/explor/gold/kuivisto.htm">http://www.gtk.fi/explor/gold/kuivisto.htm</a>	
Status	Prospect	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 0,10 Mt@4 g/t	

FINLAND	Kuusilampi - Talvivaara	FIN-00099
Commodities: Zn - Cu - Ni		Long: 28,550 - Lat: 62,960
Mining Company	Talvivaara Oy	
url	<a href="http://www.talvivaara.com/index.html">http://www.talvivaara.com/index.html</a>	
Status	Unexploited deposit	
Exploitation type	Mining method unknown	
Mineralogy	Alabandite, Chalcopyrite, Molybdenite, Pentlandite, Pyrite, Pyrrhotite, Sphalerite, Stannite, Ullmannite, Violarite	
Ore deposit type	Volcano-sedimentary and sedimentary-exhalative ore deposits	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 221 Mt@0,14 % Ni: 221 Mt@0,26 % Zn: 221 Mt@0,53 %	

FINLAND	Laivakangas	FIN-00091
Commodities: Au		Long: 24,580 - Lat: 64,550
Mining Company	Nordic Mines	
url	<a href="http://www.nordicmines.se/laiva.php">http://www.nordicmines.se/laiva.php</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Arsenopyrite, Bismuth, Chalcopyrite, Cubanite, Loellingite, Maldonite, Marcasite, Molybdenite, Gold, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	(no data)	
Reserves	Au: 2,1 Mt@4	
Resources	(no data)	

FINLAND	Osikonmäki	FIN-00092
Commodities: Au		Long: 28,255 - Lat: 62,020
Mining Company	Belvedere Resources	
url	<a href="http://www.belvedere-resources.com/">http://www.belvedere-resources.com/</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Antimony, Arsenopyrite, Bismuth, Chalcopyrite, Covellite, Cubanite, Dyscrasite, Electrum, Galena, Ilmenite, Loellingite, Maldonite, Marcasite, Molybdenite, Gold, Pyrrhotite, Rutile, Sphalerite, Stannite, Tetrahedrite	
Ore deposit type	Ductile shear-zone related mesothermal gold deposits (amphibolite to granulite facies): Au (As, Cu, Ag, W)	
Past production	(no data)	
Reserves	(no data)	
Resources	(no data)	

FINLAND	Outokumpu (Keretti)	FIN-00067
Commodities: Cu - Co - Zn		Long: 28,961 - Lat: 62,752
Mining Company	Outokumpu Mining Oy	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Cubanite, Mackinawite, Pentlandite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Ag: 253,6 t Ag metal Au: 22,8 t Au metal Zn: 300 kt Zn metal Cu: 1 Mt Cu metal Ni: 34 kt Ni metal Co: 68 kt Co metal	
Reserves	(no data)	
Resources	Co: 30 Mt@0,31 % Cu: 30 Mt@3,8 % Zn: 30 Mt@1 %	

FINLAND	Pahtavaara	FIN-00080
Commodities: Au - PGE		Long: 26,500 - Lat: 67,600
Mining Company	ScanMining	
url	<a href="http://www.scanmining.se/">http://www.scanmining.se/</a>	
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Chromite, Clausthalite, Cubanite, Hematite, Magnetite, Millerite, Gold, Pentlandite, Pyrite, Pyrrhotite, Rutile, Merenskyite, Violarite	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	Au: 1,7 Mt@1,9 g/t	
Reserves	Au: 1,1 Mt@4,7 g/t	
Resources	(no data)	



FINLAND	Pahtavuoma	FIN-00035
Commodities: Zn - Ag - Cu - U		Long: 24,250 - Lat: 67,783
Mining Company	Belvedere Resources	
url	<a href="http://www.belvedere-resources.com/">http://www.belvedere-resources.com/</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Arsenopyrite, Chalcopyrite, Cobaltite, Galena, Gersdorffite, Graphite, Ilmenite, Mackinawite, Magnetite, Marcasite, Molybdenite, Gold, Pentlandite, Pyrite, Pyrrhotite, Sphalerite, Uraninite, Niccolite (Nickeline)	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	Cu: 0,30 Mt@1,07 %	
Reserves	Ag: 6,5 Mt@21 g/t Cu: 17 Mt@0,1 % U: 0,14 Mt@0,39 % Zn: 17 Mt@0,81 %	
Resources	Ag: 4,1 Mt@21 g/t Cu: 4,1 Mt@0,84 % Zn: 4,1 Mt@1,5 %	

FINLAND	Pampalo	FIN-00084
Commodities: Au		Long: 31,280 - Lat: 62,970
Mining Company	Polar Mining (Dragon Mining)	
url	<a href="http://www.dragon-mining.com.au/pages/projects/exploration/exploration.htm">http://www.dragon-mining.com.au/pages/projects/exploration/exploration.htm</a>	
Status	Dormant deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Altaite, Aurostibite, Bismuth, Calaverite, Chalcopyrite, Chromite, Cubanite, Electrum, Galena, Hematite, Hessite, Ilmenite, Mackinawite, Magnetite, Molybdenite, Gold, Pentlandite, Petzite, Pyrite, Pyrrhotite, Rutile, Sphalerite, Tellurium, Tellurobismuthite, Tetrahedrite, Frobergite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 0,90 Mt@6,8 g/t	

FINLAND	Pyhäsalmi	FIN-00059
Commodities: Zn - Ag - Au - Cu		Long: 26,071 - Lat: 63,662
Mining Company	Inmet Mining Co	
url	<a href="http://www.inmetmining.com/operations_pyhasalmi_qfact.html">http://www.inmetmining.com/operations_pyhasalmi_qfact.html</a>	
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Silver, Arsenopyrite, Chalcopyrite, Galena, Magnetite, Gold, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Au: 6,6 Mt@0,4 g/t Cu: 16 Mt@0,8 % Zn: 12 Mt@2,48 %	
Reserves	Cu: 20 Mt@1,16 % Zn: 20 Mt@2,25 %	
Resources	Cu: 4,1 Mt@1,3 % Zn: 4,1 Mt@2,1 %	

FINLAND	Rauhala	FIN-00138
Commodities: Zn - Au - Ag - Cu - Pb		Long: 24,790 - Lat: 64,058
Mining Company	Pyhäsalmi Oy (Inmet Mining Co)	
url		
Status	Prospect	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,2 Mt@67 g/t Au: 1,2 Mt@0,5 g/t Cu: 1,2 Mt@1,59 % Pb: 1,2 Mt@1,2 % Zn: 1,2 Mt@6,7 %	

FINLAND	Salo-Issakka	FIN-00101
Commodities: Zn - Ag - Cu		Long: 28,720 - Lat: 61,060
Mining Company	SES Finland	
url	<a href="http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/salo-issakka.html">http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/salo-issakka.html</a>	
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	Silver, Arsenopyrite, Chalcopyrite, Gahnite, Galena, Ilmenite, Magnetite, Molybdenite, Pyrite, Pyrrhotite, Sphalerite, Stannite	
Ore deposit type	Sedimentary-exhalative to volcano-sedimentary sulphide and silicate deposits: Pb-Zn-Ag, Ni-PGE, Au-B	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,8 Mt@14 g/t Cu: 1,8 Mt@0,33 % Zn: 1,8 Mt@1,7 %	

FINLAND	Säviä	FIN-00062
Commodities: Zn - Cu		Long: 26,667 - Lat: 63,250
Mining Company	SES Finland	
url	<a href="http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/savia.html">http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/savia.html</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Pyrite, Sphalerite	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 1,0 Mt@0,23 % Zn: 1,0 Mt@2 %	

FINLAND	Stormi	FIN-00012
Commodities: Ni - Cu		Long: 24,900 - Lat: 61,333
Mining Company	Polar Mining (Dragon Mining)	
url	<a href="http://en.gtk.fi/ExplorationFinland/Commodities/Nickel/stormi.html">http://en.gtk.fi/ExplorationFinland/Commodities/Nickel/stormi.html</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Chalcopyrite, Pentlandite, Pyrrhotite	
Ore deposit type	Ore deposits related to basic-ultrabasic magmatic rocks	
Past production	Cu: 7,6 Mt@0,42 % Ni: 7,6 Mt@0,67 %	
Reserves	(no data)	
Resources	Cu: 21 Mt@0,3 % Ni: 21 Mt@0,48 %	

FINLAND	Suurikuusikko - Kittila	FIN-00094
Commodities: Au		Long: 25,500 - Lat: 68,000
Mining Company	Agnico Eagle	
url	<a href="http://www.agnico-eagle.com/index.php?fa=c_content.dspPage&amp;pageMasterID=72">http://www.agnico-eagle.com/index.php?fa=c_content.dspPage&amp;pageMasterID=72</a>	
Status	Industrial project under development	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Arsenopyrite, Bismuth, Bournonite, Electrum, Galena, Gersdorffite, Graphite, Maldonite, Gold, Pyrite, Pyrrhotite, Rutile, Sphalerite, Tetrahedrite	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	(no data)	
Reserves	Au: 14 Mt@5,2 g/t	
Resources	Au: 8,7 Mt@4,2 g/t	

FINLAND	Taivaljärvi	FIN-00100
Commodities: Zn - Ag - Au - Pb		Long: 29,050 - Lat: 63,950
Mining Company	Hentilä & Lindborg Oy	
url	<a href="http://weppi.gsf.fi/explor/zinc/taivaljarvi.htm">http://weppi.gsf.fi/explor/zinc/taivaljarvi.htm</a>	
Status	Unexploited deposit	
Exploitation type	Mining method unkown	
Mineralogy	Acanthite, Antimony, Silver, Arsenopyrite, Bismuth, Bournonite, Chalcopyrite, Dyscrasite, Electrum, Freibergite, Freieslebenite, Galena, Gudmundite, Gold, Pyrargyrite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Ore deposits related to volcanic systems and shallow intrusions	
Past production	Ag: 0,010 Mt@1700 g/t	
Reserves	(no data)	
Resources	Ag: 3,5 Mt@160 g/t Au: 3,5 Mt@0,37 g/t Pb: 3,5 Mt@0,57 % Zn: 3,5 Mt@1,27 %	

FINLAND	Tupala zinc deposit	FIN-00136
Commodities: Zn - Ag - Pb		Long: 23,547 - Lat: 60,613
Mining Company	SES Finland	
url	<a href="http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/tupala.html">http://en.gtk.fi/ExplorationFinland/Commodities/Zinc/tupala.html</a>	
Status	Prospect	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 0,76 Mt@39 g/t Pb: 0,76 Mt@0,7 % Zn: 0,76 Mt@3,9 %	

FINLAND	Valkeasuo	FIN-00086
Commodities: Au		Long: 31,150 - Lat: 63,080
Mining Company	Endomines Oy	
url	<a href="http://www.gtk.fi/explor/gold/valkeasuo.htm">http://www.gtk.fi/explor/gold/valkeasuo.htm</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Arsenopyrite, Chalcopyrite, Magnetite, Marcasite, Gold, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 4,8 Mt@3,7 g/t	

<b>FINLAND</b>	Vuonos	FIN-00068
Commodities: Cu - Co - Ni - Zn		Long: 29,100 - Lat: 62,750
Mining Company	Mondo Minerals	
url	<a href="http://www.mondominerals.com/locations.asp#">http://www.mondominerals.com/locations.asp#</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Bismuth, Cassiterite, Chalcopyrite, Chromite, Cobaltite, Cubanite, Gersdorffite, Mackinawite, Magnetite, Marcasite, Molybdenite, Gold, Pentlandite, Pyrite, Pyrrhotite, Siegenite, Sphalerite, Stannite, Uraninite, Violarite	
Ore deposit type	Ophiolitic volcanogenic massive sulfide VMS Cu-Zn +/- Co deposits (Cyprus-Oman, Outokumpu): Cu, Zn, Co, (Au, Ag, Sn, Cd)	
Past production	Co: 5,5 Mt@0,13 % Cu: 0,60 Mt@2,1 % Ni: 5,5 Mt@0,44 % Zn: 5,5 Mt@0,1 %	
Reserves	(no data)	
Resources	(no data)	

<b>FRANCE</b>	Bodenec	FRA-00228
Commodities: Zn - Ag - Cu - Pb		Long: -3,611 - Lat: 48,468
Mining Company	Old concession BRGM	
url		
Status	Old prospect	
Exploitation type	Unworked	
Mineralogy	Sphalerite, Pyrrhotite, Pyrite, Galena, Arsenopyrite, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 2,1 Mt@55,8 g/t Cu: 2,1 Mt@1,16 % Pb: 2,1 Mt@0,7 % Zn: 2,1 Mt@2,89 %	

FRANCE	Carboire	FRA-00068
Commodities: Zn - Ga - Pb - Ge - Ag - Co - Cd		Long: 1,275 - Lat: 42,752
Mining Company	(no data)	
url		
Status	Old prospect	
Exploitation type	Underground mining	
Mineralogy	Cobaltite, Argentite, Arsenopyrite, Cassiterite, Grey copper, Galena, Gersdorffite, Pentlandite, Pyrargyrite, Pyrite, Sphalerite, Chalcopyrite, Argutite, Briartite, Brunogeierite, Ga-Ge-magnetite, Carboirite, Ge-zoisite	
Ore deposit type	Atypical volcano-sedimentary and sedimentary-exhalative ore deposits: metamorphosed VMS or Sedex deposits, etc.	
Past production	Pb: 0,030 Mt@1 % Zn: 0,007 Mt@7 %	
Reserves	(no data)	
Resources	Pb: 1,7 Mt@0,9 % Zn: 1,6 Mt@6,9 %	

FRANCE	Chessy les Mines	FRA-00238
Commodities: Zn - Cu - Pb - Ag		Long: 4,610 - Lat: 45,893
Mining Company	Société Minière de Chessy	
url		
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	Pyrite, Pyrrhotite, Gold, Molybdenite, Galena, Cubanite, Chalcopyrite, Arsenopyrite, Sphalerite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 5,4 Mt@22 g/t Cu: 5,4 Mt@2,3 % Pb: 5,4 Mt@0,35 % Zn: 5,4 Mt@9 %	

FRANCE	La Loubatière	FRA-00044
Commodities: Pb - Zn - Ag		Long: 2,255 - Lat: 43,405
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Wolframite, Barite, Chalcopyrite, Galena, Pyrite, Pyrrhotite, Sphalerite, Niccolite (Nickeline)	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	Ag: 0,43 Mt@150 g/t Pb: 0,74 Mt@6,5 % Zn: 0,51 Mt@1,5 %	
Reserves	(no data)	
Resources	(no data)	

FRANCE	La Porte-aux-Moines	FRA-00266
Commodities: Zn - Ag - Cu - Pb		Long: -2,933 - Lat: 48,293
Mining Company	(no data)	
url		
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Sphalerite, Pyrrhotite, Pyrite, Grey copper, Arsenopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,8 Mt@97 g/t Cu: 1,9 Mt@0,76 % Pb: 1,8 Mt@1,68 % Zn: 1,9 Mt@7,83 %	

FRANCE	Le Bleymard	FRA-00049
Commodities: Zn - Pb - Ag		Long: 3,731 - Lat: 44,472
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Greenockite, Galena, Anglesite, Gypsum, Hemimorphite (Calamine), Hydrozincite, Goethite (limonite), Marcasite, Pyrite, Smithsonite, Sphalerite, Chalcopyrite, Cerussite	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	Pb: 0,91 Mt@2,2 % Zn: 0,69 Mt@6,5 %	
Reserves	(no data)	
Resources	(no data)	

FRANCE	Le Châtelet (23)	FRA-00056
Commodities: Au		Long: 2,469 - Lat: 46,194
Mining Company		
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Arsenopyrite, Chalcopyrite, Graphite, Loellingite, Gold, Pyrite, Stibnite	
Ore deposit type	Brittle-fault related ore deposits (very low grade metamorphic facies): Au and/or Sb (Cu, As, Bi, Te, W, B, F, Sb, Hg, Ag)	
Past production	Au: 0,45 Mt@24 g/t	
Reserves	(no data)	
Resources	Au: 0,75 Mt@10 g/t	

FRANCE	Le Verger	FRA-00086
Commodities: Zn - Pb - Cu - Sb		Long: 6,197 - Lat: 43,182
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Grey copper, Covellite, Bournonite, Stibnite, Sphalerite, Galena, Pyrite, Chalcopyrite, Chalcocite	
Ore deposit type	Brittle-fault related vein and silicified breccia ore deposits: Zn, Pb, Ag, Cu ("BPGC") and/or F, Ba	
Past production	Pb: 0,16 Mt@3,1 % Zn: 0,15 Mt@14,2 %	
Reserves	(no data)	
Resources	Pb: 0,35 Mt@2 % Zn: 0,33 Mt@10 %	

FRANCE	Les Malines	FRA-00006
Commodities: Zn - Pb - Ag		Long: 3,623 - Lat: 43,924
Mining Company	S. Min. des Malines (1885-1940); SMMP (1941-1991)	
url		
Status	Old industrial mine, exhausted deposit	
Exploitation type	Room and pillar mining, room and pillar working (flat, inclined, step)	
Mineralogy	Sphalerite, Galena, Pyrite, Barite, Fluorite, Marcasite, Bournonite	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	(no data)	
Reserves	(no data)	
Resources	Pb: 1,0 Mt@1 % Zn: 1,0 Mt@6 %	

FRANCE	Rouez	FRA-00007
Commodities: Au - Ag - Zn - Cu - Pb		Long: -0,091 - Lat: 48,129
Mining Company	Parmines (Sofimines)	
url		
Status	Old industrial mine, exhausted deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Pyrrhotite, Sphalerite, Siderite, Chalcopyrite, Galena, Arsenopyrite, Cassiterite, Magnetite, Electrum, Proustite	
Ore deposit type	Besshi-type deposits (Kieslager): Zn, Cu, (Co, Ag, Ni, Cr, Au)	
Past production	Ag: 0,30 Mt@30 g/t Au: 0,32 Mt@8,48 g/t	
Reserves	(no data)	
Resources	Ag: 180 Mt@21 g/t Au: 180 Mt@1,5 g/t Cu: 100 Mt@0,6 % Pb: 100 Mt@0,3 % Zn: 100 Mt@1,5 %	



FRANCE	Saint-Salvy (Noailhac-Saint-Salvy)	FRA-00008
Commodities: Ge - Zn - Ag - Cd - Ga		Long: 2,366 - Lat: 43,600
Mining Company	BRGM-SMMP(1968-1975); SMMP (1975-1993), METALEUROP	
url		
Status	Old industrial mine, exhausted deposit	
Exploitation type	Cut and fill	
Mineralogy	Sphalerite, Galena, Chalcopyrite, Pyrite, Bismuth, Pyrrhotite, Bismuthinite, Pentlandite, Millerite, Goethite, Hematite, Bornite, Boulangerite, Goethite (limonite), Ge-sphalerite, Pyromorphite, Anglesite, Arsenopyrite, Cerussite, Digenite, Wulfenite, Greenockite, Chalcocite, Marcasite, Ga-sphalerite	
Ore deposit type	Brittle-fault related vein and silicified breccia ore deposits: Zn, Pb, Ag, Cu ("BPGC") and/or F, Ba	
Past production	Ag: 3,2 Mt@87 g/t Ge: 3,2 Mt@156 g/t Zn: 3,2 Mt@11 %	
Reserves	(no data)	
Resources	(no data)	

FRANCE	Saint-Yrieix (District)	FRA-04322
Commodities: Au - As		Long: 1,241 - Lat: 45,567
Mining Company	COGEMA	
url		
Status	Old industrial mine, abandoned deposit (2004)	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Arsenopyrite, Boulangerite, Gold, Sphalerite, Pyrite, Galena, Jamesonite, Tetrahedrite, Electrum	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	Au: 3,7 Mt@10 g/t	
Reserves	(no data)	
Resources	(no data)	

FRANCE	Salsigne	FRA-00010
Commodities: Au - As - Bi - Ag - Cu		Long: 2,355 - Lat: 43,339
Mining Company	Sté des Mines d'Or de Salsigne (depuis 1912); SEPS	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Arsenopyrite, Pyrite, Pyrrhotite, Chalcopyrite, Sphalerite, Bismuthinite, Galena, Bismuth, Gold, Silver, Kobellite, Magnetite, Wolframite, Scheelite	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	Ag: 8,0 Mt@32 g/t Au: 9,8 Mt@10 g/t Bi: 4,7 Mt@425 g/t Cu: 12 Mt@0,25 %	
Reserves	Au: 3,0 Mt@8 g/t	
Resources	(no data)	

FRANCE	Villemagne	FRA-00048
Commodities: Pb - Zn - Ag		Long: 3,440 - Lat: 44,122
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Pyrite, Bornite, Bournonite, Chalcopyrite, Covellite, Galena, Sphalerite	
Ore deposit type	Brittle-fault related vein and silicified breccia ore deposits: Zn, Pb, Ag, Cu ("BPGC") and/or F, Ba	
Past production	Pb: 0,70 Mt@3,4 % Zn: 0,007 Mt@604 %	
Reserves	(no data)	
Resources	(no data)	

GREECE	Chondro Vouno	GRC-00267
Commodities: Au		Long: 24,331 - Lat: 36,693
Mining Company	S&B Industrial Minerals SA; Aegean Int. Gold Inc; Royal Gold Inc	
url	www.royalgold.com	
Status	Prospect under (upstream) reconnaissance	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 8,6 Mt@2,43 g/t	

GREECE	Fisoka	GRC-00238
Commodities: Cu - Au		Long: 23,795 - Lat: 40,498
Mining Company	Hellas Gold (European goldfiels)	
url	http://www.egoldfields.com/goldfields/projects.jsp?ref=7	
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	(no data)	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	Au: 20 Mt@0,16 g/t Cu: 20 Mt@0,47 %	
Resources	(no data)	

GREECE	Madem Lakkos - Mavres Petres	GRC-00057
Commodities: Pb - Zn - Ag		Long: 23,813 - Lat: 40,540
Mining Company	Hellas Gold (European goldfiels)	
url	<a href="http://www.egoldfields.com/goldfields/projects.jsp?ref=4">http://www.egoldfields.com/goldfields/projects.jsp?ref=4</a>	
Status	Dormant deposit	
Exploitation type	Underground mining	
Mineralogy	Arsenopyrite, Galena, Pyrite, Sphalerite	
Ore deposit type	Replacement deposits (skarns, mantos): Au, Cu, Pb, Zn, Ag, W, Mo, Sn, Fe	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 2,7 Mt@200 g/t Pb: 2,7 Mt@8,1 % Zn: 2,7 Mt@10,7 %	

GREECE	Molai	GRC-00222
Commodities: Zn - Ag - Pb		Long: 22,856 - Lat: 36,791
Mining Company	(no data)	
url		
Status	Dormant deposit	
Exploitation type	Unworked	
Mineralogy	Anglesite, Arsenopyrite, Bornite, Boulangerite, Cerussite, Chalcocite, Chalcopyrite, Covellite, Grey copper, Diaphorite, Enargite, Famatinite, Freibergite, Galena, Geocronite, Goethite, Hematite, Magnetite, Marcasite, Pyrargyrite, Pyrite, Pyrrhotite, Smithsonite, Sphalerite, Stephanite, Seligmannite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	Ag: 2,3 Mt@50 g/t Pb: 2,3 Mt@1,8 % Zn: 2,3 Mt@9 %	
Resources	(no data)	

GREECE	Olympias	GRC-00055
Commodities: Au - Ag - Pb - Zn		Long: 23,767 - Lat: 40,605
Mining Company	Hellas Gold (European goldfields)	
url	<a href="http://www.egoldfields.com/goldfields/projects.jsp?ref=7">http://www.egoldfields.com/goldfields/projects.jsp?ref=7</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Unworked	
Mineralogy	Arsenopyrite, Galena, Pyrite, Sphalerite	
Ore deposit type	Pb-Zn-Ag skarns and stratiform mantos: Pb, Zn, Ag, (Au)	
Past production	Ag: 3,7 Mt@120 g/t Au: 3,6 Mt@5,5 g/t Pb: 3,7 Mt@3,5 % Zn: 3,5 Mt@5 %	
Reserves	Ag: 13 Mt@120 g/t Au: 22 Mt@5,5 g/t Pb: 15 Mt@3,5 % Zn: 14 Mt@5 %	
Resources	Ag: 13 Mt@138 g/t Au: 12 Mt@8,89 g/t Pb: 13 Mt@4,6 % Zn: 13 Mt@6,2 %	

GREECE	Perama Hill	GRC-00263
Commodities: Au - Ag		Long: 25,602 - Lat: 40,924
Mining Company	Frontier Pacific Mining Corp	
url	<a href="http://www.frontierpacific.com/perama.php">http://www.frontierpacific.com/perama.php</a>	
Status	Deposit under development - project	
Exploitation type	Mining method unkown	
Mineralogy	Marcasite, Pyrite, Pyrrhotite	
Ore deposit type	High-sulphidation (acid-sulphate) epithermal deposits: Au, Cu, (Hg, As, S)	
Past production	(no data)	
Reserves	Au: 9,2 Mt@3,8 g/t	
Resources	Ag: 12 Mt@8,2 g/t Au: 12 Mt@3,62 g/t	

GREECE	Polikastro	GRC-00247
Commodities: Zn - Pb - Cu		Long: 22,577 - Lat: 40,987
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Mining method unkown	
Mineralogy	Chalcopyrite, Galena, Pyrite, Sphalerite	
Ore deposit type	Unspecified volcano-sedimentary and sedimentary-exhalative deposits	
Past production	(no data)	
Reserves	Cu: 0,50 Mt@0,35 % Pb+Zn: 0,50 Mt@6 %	
Resources	(no data)	

GREECE	Profitis Ilias (Milos)	GRC-00264
Commodities: Au - Ag		Long: 24,339 - Lat: 36,682
Mining Company	No actual data (formerly Midas SA, S&B, Royal Gold and Aegean Gold)	
url		
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	Silver, Bornite, Cerussite, Chalcopyrite, Grey copper, Electrum, Galena, Lepidocrocite, Goethite (limonite), Marcasite, Gold, Pyrite, Sphalerite, Tenorite, Tetrahedrite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 5,0 Mt@43 g/t Au: 5,0 Mt@4,4 g/t	
Resources	(no data)	

GREECE	Sapes	GRC-00262
Commodities: Au		Long: 25,730 - Lat: 41,029
Mining Company	Greenwich Resources Plc.	
url	<a href="http://www.greenwichresourcesplc.com/">http://www.greenwichresourcesplc.com/</a>	
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	Gold, Pyrite, Enargite, Galena, Chalcopyrite, Sphalerite, Grey copper, Goldfieldite, Altaite, Tetradyomite, Hessite	
Ore deposit type	High-sulphidation (acid-sulphate) epithermal deposits: Au, Cu, (Hg, As, S)	
Past production	(no data)	
Reserves	Au: 1,5 Mt@15,8 g/t	
Resources	(no data)	

GREECE	Skouries	GRC-00060
Commodities: Au - Ag - Cu - Pd		Long: 23,732 - Lat: 40,465
Mining Company	Hellas Gold (European Goldfields Ltd)	
url	<a href="http://www.egoldfields.com/goldfields/projects.jsp?ref=6">http://www.egoldfields.com/goldfields/projects.jsp?ref=6</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Azurite, Bornite, Chalcocite, Chalcopyrite, Covellite, Hessite, Magnetite, Malachite, Gold, Pyrite, Stromeyerite, Sylvanite, Tellurobismuthite, Merenskyite, Cuprite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	Au: 130 Mt@0,9 g/t Cu: 130 Mt@0,6 %	
Resources	(no data)	

<b>HUNGARY</b>	Recsk-Lahóca (Cu-Au)	HUN-00026
Commodities: Au - Cu - Ag - Zn - Pb		Long: 20,087 - Lat: 47,955
Mining Company	Magyar Mining	
url	<a href="http://www.magyarmining.com/hungary_recsk.htm">http://www.magyarmining.com/hungary_recsk.htm</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Bornite, Chalcocite, Chalcopyrite, Covellite, Electrum, Emplectite, Enargite, Famatinite, Galena, Luzonite, Pyrite, Sphalerite, Wittichenite, Melnicovite	
Ore deposit type	High-sulphidation (acid-sulphate) epithermal deposits: Au, Cu, (Hg, As, S)	
Past production	Au: 3,0 Mt@2 g/t Cu: 146 Mt@1,26 % Pb: 38 Mt@1,52 % Zn: 48 Mt@3,78 %	
Reserves	(no data)	
Resources	Au: 37 Mt@1,4 g/t	

<b>HUNGARY</b>	Recsk (Cu-Au-Pb-Zn)	HUN-00039
Commodities: Cu - Ag - Au - Mo - Pb - Zn (- Re)		Long: 20,053 - Lat: 47,947
Mining Company	Magyar Mining	
url	<a href="http://www.magyarmining.com/hungary_recsk.htm">http://www.magyarmining.com/hungary_recsk.htm</a>	
Status	Dormant deposit	
Exploitation type	Unworked	
Mineralogy	Bornite, Chalcopyrite, Molybdenite, Pyrite, Pyrrhotite, Sphalerite, Enargite, Gold, Magnetite, Luzonite, Tetrahedrite, Tennantite, Remolybdenite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 159 Mt@1,62 g/t Au: 37 Mt@1,4 g/t Cu: 159 Mt@1,14 % Mo: 159 Mt@0,01 % Pb: 37 Mt@1,56 % Zn: 37 Mt@3,4 %	

<b>IRELAND</b>	Aherlow	IRL-00004
Commodities: Cu - Ag - Au - Zn - Pb		Long: -8,244 - Lat: 52,419
Mining Company	(no data)	
url		
Status	Dormant deposit	
Exploitation type	Mining method unknown	
Mineralogy	Chalcopyrite, Chalcocite, Bornite, Silver, Stromeyerite, Sphalerite, Galena, Pyrite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	Ag: 5,4 Mt@41 g/t Cu: 5,4 Mt@0,89 %	
Resources	(no data)	

IRELAND	Avoca	IRL-00008
Commodities: Cu - Pb - Zn - Au		Long: -6,183 - Lat: 52,867
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Pyrite, Sphalerite, Magnetite, Galena, Arsenopyrite, Bismuthinite, Gold, Pyrrhotite, Bismuth, Cobaltite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	Au: 16 Mt@0,3 g/t Cu: 16 Mt@0,6 %	
Reserves	Cu: 19 Mt@0,62 %	
Resources	Cu: 43 Mt@0,44 % Pb: 98 900 Mt@0,23 Zn: 430 000 Mt@0,37	

IRELAND	Galmoy (CW + G orebodies)	IRL-00050
Commodities: Zn - Pb - Ag		Long: -7,583 - Lat: 52,833
Mining Company	Lundin Mining	
url	<a href="http://www.lundinmining.com/galmoy/index.php">http://www.lundinmining.com/galmoy/index.php</a>	
Status	Producing industrial mine	
Exploitation type	Room and pillar mining, room and pillar working (flat, inclined, step)	
Mineralogy	Sphalerite, Galena, Pyrite, Marcasite, Chalcopyrite, Tennantite, Tetrahedrite	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	Pb: 4,4 Mt@0,6 % Zn: 3,9 Mt@10,3 %	
Reserves	Ag: 4,2 Mt@46,4 g/t Pb: 4,2 Mt@4,4 % Zn: 4,2 Mt@14,2 %	
Resources	Pb: 6,2 Mt@1,1 % Zn: 6,2 Mt@11,3 %	

IRELAND	Garrycam	IRL-00051
Commodities: Zn - Pb - Ag		Long: -7,736 - Lat: 53,649
Mining Company	Lundin Mining	
url		
Status	Deposit or prospect of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,4 Mt@10 g/t Br: 13 500 Mt@36,1 Pb: 1,4 Mt@0,18 % Zn: 1,4 Mt@2,67 %	

IRELAND	Lisheen	IRL-00001
Commodities: Zn - Pb - Ag		Long: -7,800 - Lat: 52,700
Mining Company	Anglo American	
url	<a href="http://www.lisheenmine.ie/">http://www.lisheenmine.ie/</a>	
Status	Producing industrial mine	
Exploitation type	Room and pillar mining, room and pillar working (flat, inclined, step)	
Mineralogy	Sphalerite, Galena, Pyrite	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	Pb: 8,0 Mt@2,22 % Zn: 8,0 Mt@11,69 %	
Reserves	Ag: 22 Mt@26 g/t Fe: 22 Mt@16 % Pb: 11 Mt@2,16 % Zn: 11 Mt@14,04 %	
Resources	Pb: 4,0 Mt@2,23 % Zn: 4,0 Mt@13,71 %	

IRELAND	Mallow	IRL-00083
Commodities: Cu - Ag		Long: -8,747 - Lat: 52,203
Mining Company	(no data)	
url		
Status	Deposit or prospect of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Chalcopyrite, Bornite, Chalcocite, Tennantite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 4,0 Mt@20 g/t Cu: 4,0 Mt@0,7 %	

IRELAND	Navan - Tara	IRL-00002
Commodities: Zn - Pb - Ag		Long: -6,667 - Lat: 53,650
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Producing industrial mine	
Exploitation type	Open stoping	
Mineralogy	Sphalerite, Galena, Pyrite, Barite	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	Pb: 62 Mt@2,02 % Zn: 62 Mt@8,39 %	
Reserves	Pb: 16 Mt@1,9 % Zn: 16 Mt@8,7 %	
Resources	Ag: 80 Mt@15 g/t Pb: 20 Mt@2,1 % Zn: 20 Mt@7,2 %	



IRELAND	Silvermines (Mogul mine)	IRL-00003
Commodities: Zn - Pb - Ag (- Ge)		Long: -8,300 - Lat: 52,800
Mining Company	Mogul of Ireland Ltd. & Magcobar Barite Ltd.	
url	<a href="http://www.dcmnr.gov.ie/Home/Natural+Resources/Exploration+and+Mining+Division/General+Publications/Silvermines+Report">http://www.dcmnr.gov.ie/Home/Natural+Resources/Exploration+and+Mining+Division/General+Publications/Silvermines+Report</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open stoping	
Mineralogy	Sphalerite, Galena, Pyrite, Barite, Tetrahedrite, Tennantite, Proustite, Pyrargyrite, Argyrodite, Boulangerite, Bournonite, Chalcopyrite, Freibergite, Hemimorphite (Calamine), Jordanite, Smithsonite, Acanthite, Anglesite, Arsenopyrite, Erythrite, Gersdorffite, Goethite, Myargyrite, Pyromorphite, Azurite, Cerussite, Chalcocite, Coronadite, Covellite, Gudmundite, Hematite, Goethite (limonite), Linarite, Loellingite, Malachite, Marcasite, Pyrrhotite, Silver, Smythite, Xanthoconite (Rittingerite)	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	Ag: 18 Mt@23 g/t Pb: 15 Mt@3 % Zn: 17 Mt@7 %	
Reserves	(no data)	
Resources	(no data)	

IRELAND	Tynagh	IRL-00108
Commodities: Zn - Pb - Cu - Ag		Long: -8,383 - Lat: 53,167
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Sphalerite, Galena, Chalcopyrite, Tennantite, Tetrahedrite, Bornite, Pyrite, Arsenopyrite, Cerussite, Smithsonite, Azurite, Malachite, Hemimorphite (Calamine), Enargite, Bournonite, Jordanite, Geocronite, Marcasite, Siegenite, Millerite	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	Ag: 14 Mt@47 g/t Cu: 14 Mt@0,4 % Pb: 14 Mt@4,8 % Zn: 14 Mt@4,5 %	
Reserves	Ag: 9,4 Mt@30,6 g/t Cu: 9,4 Mt@0,3 % Pb: 9,4 Mt@3 % Zn: 9,4 Mt@3,2 %	
Resources	(no data)	

ITALY	Furtei, Serrenti-Furtei ; Monte Porceddu	ITA-00115
Commodities: Au - Cu - Ag		Long: 8,971 - Lat: 39,500
Mining Company	Sargold Resource Corporation,	
url	<a href="http://www.sargold.com/news/">http://www.sargold.com/news/</a>	
Status	Deposit of unknown status	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Gold, Sphalerite, Pyrite, Enargite	
Ore deposit type	High-sulphidation epithermal replacement silica deposit: Au, (Hg, Cu)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 9,3 Mt@2,08 g/t	

ITALY	Iglesiente	ITA-00140
Commodities: Zn - Pb - Ag		Long: 8,550 - Lat: 39,280
Mining Company	(no data)	
url		
Status	Dormant district	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Galena, Sphalerite, Pyrite, Anglesite, Phosgenite, Smithsonite, Goethite (limonite), Cerussite, Hemimorphite (Calamine)	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	(no data)	
Reserves	(no data)	
Resources	Pb: 30 Mt@1,6 % Zn: 30 Mt@4,5 %	

ITALY	Monte Ollasteddu	ITA-00395
Commodities: Au		Long: 9,503 - Lat: 39,559
Mining Company	Medoro Resources Ltd + Sargold	
url	<a href="http://www.chacopl.com/gms/exploration.html">http://www.chacopl.com/gms/exploration.html</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Arsenopyrite, Pyrite, Galena, Stibnite, Gold, Electrum	
Ore deposit type	Brittle-fault related ore deposits (very low grade metamorphic facies): Au and/or Sb (Cu, As, Bi, Te, W, B, F, Sb, Hg, Ag)	
Past production	(no data)	
Reserves	(no data)	
Resources	(no data)	

ITALY	Osilo	ITA-00394
Commodities: Au - Ag - Pb - Zn - Cu		Long: 8,738 - Lat: 40,818
Mining Company	Sargold	
url	<a href="http://www.sargold.com/projects/italy/osilo/">http://www.sargold.com/projects/italy/osilo/</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Unspecified Sulphide	
Ore deposit type	Fault and shear-zone controlled low sulphidation epithermal veins: Au, Ag, (Mn)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,7 Mt@30 g/t Au: 1,7 Mt@7,6 g/t	

KOSOVO	Ajvalija	YUG-00178
Commodities: Ag - Pb - Zn - Au		Long: 21,201 - Lat: 42,622
Mining Company	TREPICA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Dormant deposit	
Exploitation type	Underground mining	
Mineralogy	Sphalerite, Galena, Pyrite, Marcasite, Magnetite, Pyrrhotite, Chalcopyrite, Arsenopyrite, Grey copper, Gold, Cubanite, Stannite, Bournonite	
Ore deposit type	Pb-Zn-Ag skarns and stratiform mantos: Pb, Zn, Ag, (Au)	
Past production	Ag: 2,6 Mt@65 g/t Pb: 2,6 Mt@5 % Zn: 2,6 Mt@7,3 %	
Reserves	Ag: 0,7 Mt@126 g/t Pb: 0,7 Mt@9,7 % Zn: 0,7 Mt@18,6 %	
Resources	(no data)	

KOSOVO	Badovac	YUG-00188
Commodities: Pb - Zn - Ag		Long: 21,230 - Lat: 42,597
Mining Company	TREPICA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Dormant deposit	
Exploitation type	Underground mining	
Mineralogy	Galena, Sphalerite, Pyrite	
Ore deposit type	Low-sulphidation epi- to mesothermal polymetallic-Ag veins: Pb, Zn, Ag, Mn, Cu, (As, Sb)	
Past production	Ag: 1,5 Mt@47 g/t Pb: 1,4 Mt@3,4 % Zn: 1,5 Mt@2,6 %	
Reserves	(no data)	
Resources	Ag: 2,6 Mt@75 g/t Pb: 2,6 Mt@5,4 % Zn: 2,7 Mt@3,6 %	

KOSOVO	Belo Brdo	YUG-00075
Commodities: Ag - Au - Pb - Zn		Long: 20,843 - Lat: 43,230
Mining Company	TREPICA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Dormant deposit	
Exploitation type	Underground mining	
Mineralogy	Galena, Sphalerite, Pyrite, Arsenopyrite, Chalcopyrite, Pyrrhotite, Grey copper, Proustite, Pyrargyrite, Bismuth, Gold	
Ore deposit type	Pb-Zn-Ag skarns and stratiform mantos: Pb, Zn, Ag, (Au)	
Past production	Ag: 3,8 Mt@76 g/t Pb: 3,8 Mt@5,3 % Zn: 3,9 Mt@3,9 %	
Reserves	Ag: 1,34 Mt@97,4 g/t Pb: 1,34 Mt@6,6 % Zn: 1,34 Mt@5,7 %	
Resources	(no data)	

KOSOVO	Crnac	YUG-00112
Commodities: Pb - Zn - Ag		Long: 20,693 - Lat: 43,083
Mining Company	TREPICA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Dormant deposit	
Exploitation type	Sublevel stoping	
Mineralogy	Galena, Sphalerite, Pyrite, Arsenopyrite, Chalcopyrite, Grey copper, Pyrrhotite	
Ore deposit type	Low-sulphidation epi- to mesothermal polymetallic-Ag veins: Pb, Zn, Ag, Mn, Cu, (As, Sb)	
Past production	Ag: 2,1 Mt@53 g/t Pb: 2,1 Mt@4,3 % Zn: 2,0 Mt@2,2 %	
Reserves	Ag: 1,6 Mt@102 g/t Pb: 1,6 Mt@7,57 % Zn: 1,6 Mt@2,93 %	
Resources	(no data)	

KOSOVO	Draznja	YUG-00190
Commodities: Pb - Zn - Ag - Au		Long: 21,317 - Lat: 42,845
Mining Company	(no data)	
url		
Status	Dormant deposit	
Exploitation type	Unworked	
Mineralogy	Pyrite, Galena, Sphalerite, Psilomelane, Pyrolusite (Polianite), Iron Oxydes(unspecified)	
Ore deposit type	Low-sulphidation epi- to mesothermal polymetallic-Ag veins: Pb, Zn, Ag, Mn, Cu, (As, Sb)	
Past production	(no data)	
Reserves	Ag: 4,7 Mt@45 g/t Pb: 4,7 Mt@2,44 % Zn: 4,7 Mt@4,29 %	
Resources	(no data)	

KOSOVO	Kaltrina	YUG-00185
Commodities: Pb - Zn - Ag		Long: 21,442 - Lat: 42,608
Mining Company	TREPICA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	Galena, Sphalerite, Pyrite	
Ore deposit type	Replacement deposits (skarns, mantos): Au, Cu, Pb, Zn, Ag, W, Mo, Sn, Fe	
Past production	(no data)	
Reserves	Ag: 1,4 Mt@129 g/t Pb: 1,3 Mt@4,4 % Zn: 1,4 Mt@4,5 %	
Resources	(no data)	

KOSOVO	Novo Brdo	YUG-00031
Commodities: Pb - Zn - Ag - Au		Long: 21,432 - Lat: 42,616
Mining Company	TREPICA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Dormant deposit	
Exploitation type	Underground mining	
Mineralogy	Sphalerite, Galena, Pyrite, Pyrrhotite, Arsenopyrite, Chalcopyrite, Marcasite, Bournonite, Grey copper	
Ore deposit type	Replacement deposits (skarns, mantos): Au, Cu, Pb, Zn, Ag, W, Mo, Sn, Fe	
Past production	Ag: 3,4 Mt@105 g/t Pb: 3,6 Mt@2,9 % Zn: 3,4 Mt@3,2 %	
Reserves	Ag: 2,7 Mt@137 g/t Au: 2,6 Mt@1,1 g/t Pb: 2,7 Mt@4,4 % Zn: 2,7 Mt@4,9 %	
Resources	Ag: 4,3 Mt@58 g/t Au: 4,3 Mt@1 g/t Pb: 4,3 Mt@0,8 % Zn: 4,3 Mt@0,4 %	

<b>KOSOVO</b>	<b>Trepça - Stari Trg</b>	<b>YUG-00023</b>
Commodities: Pb - Zn - Ag - Au (-In, Ge, Ga, Tl, Se, Te)		Long: 20,917 - Lat: 42,938
Mining Company	TREPÇA Mining and Metallurgical Complex	
url	<a href="http://www.mining-journal.com/file/supplements/kosovo(scr).pdf">http://www.mining-journal.com/file/supplements/kosovo(scr).pdf</a>	
Status	Dormant district	
Exploitation type	Underground mining	
Mineralogy	Galena, Sphalerite, Pyrrhotite, Pyrite, Chalcopyrite, Arsenopyrite, Stibnite, Jamesonite, Boulangerite, Magnetite, Scheelite, Cubanite, Bismuth, Anglesite, Bornite, Bournonite, Cerussite, Chalcantinite, Chalcophanite, Childrenite, Coronadite, Cosalite, Crandallite, Covellite, Enargite, Gold, Hematite, Native In, Goethite (limonite), Ludlamite, Loellingite, Marcasite, Melanterite, Melnicovite, Plumosite, Psilomelane, Pyrargyrite, Smithsonite, Stannite, Tennantite, Tetrahedrite, Valleriite, Vivianite	
Ore deposit type	Pb-Zn-Ag skarns and stratiform mantos: Pb, Zn, Ag, (Au)	
Past production	Ag: 34 Mt@75 g/t Bi: 40 Mt@102 g/t Pb: 34 Mt@6 % Zn: 34 Mt@4 %	
Reserves	Ag: 0,4 Mt@80 g/t Pb: 0,4 Mt@5,1 % Zn: 0,4Mt@2,2 %	
Resources	(no data)	

<b>MACEDONIA</b>	<b>Bucim</b>	<b>MKD-00016</b>
Commodities: Cu - Ag - Au		Long: 22,358 - Lat: 41,667
Mining Company	ROMTRADE	
url		
Status	Producing industrial mine	
Exploitation type	Surface mining	
Mineralogy	Chalcopyrite, Grey copper, Hematite, Molybdenite, Pyrite, Tellurite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Ag: 60 Mt@1 g/t Au: 60 Mt@0,35 g/t Cu: 60 Mt@0,44 %	
Reserves	Ag: 45 Mt@1 g/t Au: 45 Mt@0,3 g/t Cu: 45 Mt@0,3 %	
Resources	(no data)	

MACEDONIA	Sasa	MKD-00033
Commodities: Pb - Zn		Long: 22,515 - Lat: 42,129
Mining Company	ROMTRADE	
url		
Status	Producing industrial mine	
Exploitation type	Sublevel stoping	
Mineralogy	Chalcopyrite, Galena, Magnetite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Pb-Zn-Ag skarns and stratiform mantos: Pb, Zn, Ag, (Au)	
Past production	(no data)	
Reserves	Pb: 14 Mt@3,3 % Zn: 14 Mt@2,4 %	
Resources	(no data)	

MACEDONIA	Toranica	MKD-00005
Commodities: Ag - Pb - Zn		Long: 22,500 - Lat: 42,162
Mining Company	Indo Minerals & Metals	
url		
Status	Deposit of unknown status	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Galena, Graphite, Hematite, Magnetite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Unspecified syn- to late orogenic ore deposits	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 16 Mt@37 g/t Pb: 16 Mt@3,8 % Zn: 16 Mt@2,4 %	

MACEDONIA	Zletovo	MKD-00007
Commodities: Pb - Zn - Ag		Long: 22,200 - Lat: 42,027
Mining Company	Indo Minerals & Metals	
url		
Status	Producing industrial mine	
Exploitation type	Resue stoping	
Mineralogy	Arsenopyrite, Chalcocite, Grey copper, Enargite, Galena, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Low-sulphidation epi- to mesothermal polymetallic-Ag veins: Pb, Zn, Ag, Mn, Cu, (As, Sb)	
Past production	(no data)	
Reserves	Ag: 9,8 Mt@50 g/t Pb: 9,8 Mt@7,59 % Zn: 9,8 Mt@2,44 %	
Resources	Ag: 10 Mt@50 g/t Pb: 10 Mt@6,2 % Zn: 10 Mt@2,2 %	

<b>MONTENEGRO</b>	Brskovo	YUG-00004
Commodities: Ag - Cu - Pb - Zn		Long: 19,626 - Lat: 42,949
Mining Company	Zorka - Brskovo - Ro Za Proizvodnju Rude ....	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Surface mining	
Mineralogy	Arsenopyrite, Bismuthinite, Bornite, Chalcopyrite, Cinnabar, Grey copper, Galena, Marcasite, Pyrite, Pyrrhotite, Sphalerite, Stibnite, Tetrahedrite	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	(no data)	
Reserves	Ag: 3,5 Mt@20 g/t Cu: 3,5 Mt@0,22 % Pb: 3,5 Mt@2,97 % Zn: 3,5 Mt@3,09 %	
Resources	(no data)	

<b>MONTENEGRO</b>	Suplja Stijena	YUG-00001
Commodities: Pb - Zn		Long: 19,043 - Lat: 43,383
Mining Company	Radna Organiz. Rudnik i Flotacija Suplja Stijena	
url		
Status	Dormant deposit	
Exploitation type	Surface mining	
Mineralogy	Arsenopyrite, Chalcopyrite, Grey copper, Galena, Hematite, Magnetite, Marcasite, Pyrite, Pyrrhotite, Sphalerite, Stannite, Vallerite	
Ore deposit type	Pb-Zn-Ag skarns and stratiform mantos: Pb, Zn, Ag, (Au)	
Past production	(no data)	
Reserves	(no data)	
Resources	Pb: 22 Mt@3 % Zn: 22 Mt@7 %	

<b>NORWAY</b>	Birtavarre	NOR-00015
Commodities: Cu - Zn		Long: 21,000 - Lat: 69,450
Mining Company	(no data)	
url		
Status	Unkown status	
Exploitation type	Mining method unkown	
Mineralogy	Chalcopyrite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	Cu: 2,0 Mt@1,9 % Zn: 2,0 Mt@0,8 %	
Resources	(no data)	



<b>NORWAY</b>	Ulveryggen-Ariselv	NOR-00007
Commodities: Cu		Long: 24,233 - Lat: 70,417
Mining Company	(no data)	
url		
Status	Unkown status	
Exploitation type	Mining method unkown	
Mineralogy	Bornite, Chalcocite, Chalcopyrite	
Ore deposit type	Red Bed hosted copper deposits: Cu, (Ag)	
Past production	(no data)	
Reserves	Cu: 4,5 Mt@0,67 %	
Resources	(no data)	

<b>POLAND</b>	Glogow	POL-00324
Commodities: Cu - Ag		Long: 0,000 - Lat: 0,000
Mining Company	KGHM Polska Miedz SA	
url	<a href="http://www.kghm.pl/en/firma05-2.php">http://www.kghm.pl/en/firma05-2.php</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Kupferschiefer (or Cu shale) deposits: Cu, Co, (PGE, Ag, Au, U, etc)	
Past production	(no data)	
Reserves	Ag: 293 Mt@79 g/t Cu: 293 Mt@2,4 %	
Resources	(no data)	

<b>POLAND</b>	Konrad	POL-00003
Commodities: Cu - Ag		Long: 15,733 - Lat: 51,194
Mining Company	KGHM Polska Miedz SA	
url		
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Chalcocite, Chalcopyrite, Bornite, Sphalerite, Pyrite, Galena, Tetrahedrite, Loellingite, Garnierite, Silver, Smaltite, Cobaltite	
Ore deposit type	Kupferschiefer (or Cu shale) deposits: Cu, Co, (PGE, Ag, Au, U, etc)	
Past production	Cu: 38 Mt@0,87 %	
Reserves	(no data)	
Resources	Cu: 183 Mt@0,7 %	

POLAND	Lubin	POL-00006
Commodities: Cu - Ag - Au - Pb		Long: 16,159 - Lat: 51,442
Mining Company	KGHM Polska Miedz SA (64% State of Poland)	
url	<a href="http://www.kghm.pl/en/firma05-2.php">http://www.kghm.pl/en/firma05-2.php</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Silver, Bornite, Chalcocite, Enargite, Galena, Sphalerite, Pyrite, Tetrahedrite, Cobaltite, Smaltite, Loellingite	
Ore deposit type	Kupferschiefer (or Cu shale) deposits: Cu, Co, (PGE, Ag, Au, U, etc)	
Past production	Cu: 1314 Mt@1,5 % Ag: 1314 Mt@70 g/t	
Reserves	Ag: 212 Mt@74 g/t Cu: 212 Mt@1,42 %	
Resources	Cu: 180 Mt@ 1,27 % Ag: 180 Mt@ 60 g/t	

POLAND	Olkusz-Pomorzany	POL-00045
Commodities: Zn - Pb ( Ge)		Long: 19,528 - Lat: 50,286
Mining Company	Zaklady Gornicze Hutnicze Boleslaw (St. of Poland)	
url		
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Galena, Blende (Sphalerite)	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	Pb: 21 Mt@1,3 % Zn: 21 Mt@4,2 %	
Reserves	Pb: 24 Mt@1,4 % Zn: 24 Mt@4,2 %	
Resources	(no data)	

POLAND	Polkowice	POL-00007
Commodities: Cu - Ag - Au ( Ge - Re)		Long: 16,039 - Lat: 51,510
Mining Company	KGHM Polska Miedz SA	
url		
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Chalcocite, Chalcopyrite, Bornite, Pyrite, Galena, Tetrahedrite, Sphalerite, Enargite, Silver, Cobaltite, Smaltite, Loellingite, Polkovicite, Morozeviczite, Marcasite, Tennantite	
Ore deposit type	Kupferschiefer (or Cu shale) deposits: Cu, Co, (PGE, Ag, Au, U, etc)	
Past production	Ag: 37 Mt@80 g/t Cu: 37 Mt@1,8 %	
Reserves	Ag: 302 Mt@59 g/t Cu: 302 Mt@2,88%	
Resources	Ag: 136 Mt@55 g/t Cu: 136 Mt@1,99 %	

<b>POLAND</b>	Rudna	POL-00009
Commodities: Cu - Ag		Long: 16,111 - Lat: 51,543
Mining Company	KGHM Polska Miedz SA (64% State of Poland)	
url	<a href="http://www.kghm.pl/en/firma05-2.php">http://www.kghm.pl/en/firma05-2.php</a>	
Status	Producing industrial mine	
Exploitation type	Room and pillar mining, room and pillar working (flat, inclined, step)	
Mineralogy	Chalcocite, Chalcopyrite, Bornite, Pyrite, Sphalerite, Galena, Tetrahedrite, Enargite, Loellingite, Silver, Smaltite, Cobaltite	
Ore deposit type	Kupferschiefer (or Cu shale) deposits: Cu, Co, (PGE, Ag, Au, U, etc)	
Past production	Cu: 15 Mt@1,8 %	
Reserves	Ag: 280 Mt@46 g/t Cu: 280 Mt@2,21 %	
Resources	Ag: 302 Mt@42 g/t Cu: 302 Mt@1,81 %	

<b>PORTUGAL</b>	Aljustrel (district)	PRT-00001
Commodities: Zn - Pb - Cu - Au - Ag		Long: -8,150 - Lat: 37,917
Mining Company	EuroZinc Ltd-Lundin Mining	
url	<a href="http://www.eurozinc.com">http://www.eurozinc.com</a>	
Status	Dormant deposit	
Exploitation type	Drift and fill	
Mineralogy	Pyrite, Sphalerite, Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	Cu: 1,6 Mt@2,16 % Pb: 15 Mt@1,8 % Zn: 14 Mt@5,49 % Ag: 14 Mt@62 g/t	
Resources	Ag: 24,8 Mt@60 g/t Cu: 8,9 Mt@2,1 % Pb: 24,8 Mt@1,80 % Zn: 24,8 Mt@5,70 %	

<b>PORTUGAL</b>	Jales	PRT-00113
Commodities: Au - Ag - As		Long: -7,583 - Lat: 41,467
Mining Company	St. Elias Mines Ltd.	
url	<a href="http://www.steliasmines.com/">http://www.steliasmines.com/</a>	
Status	Deposit of unknown status	
Exploitation type	Mining method unknown	
Mineralogy	Arsenopyrite, Blende (Sphalerite), Pyrite, Chalcopyrite, Marcasite, Tetrahedrite, Jamesonite, Galena, Argentite	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	Au: 2,0 Mt@12,9 g/t 100 t Ag metal	
Reserves	(no data)	
Resources	Au: 3,6 Mt@7 g/t	

PORTUGAL	Lousal	PRT-00121
Commodities: Cu - Zn - Pb		Long: -8,467 - Lat: 38,067
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 50 Mt@0,7 % Pb: 50 Mt@0,8 % Zn: 50 Mt@1,4 %	

PORTUGAL	Montemor	PRT-00229
Commodities: Au		Long: -8,167 - Lat: 38,533
Mining Company	Iberian Resources	
url	<a href="http://www.iberianresources.com/">http://www.iberianresources.com/</a>	
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Brittle-ductile shear-zone related mesothermal gold deposit (greenschist facies): Au (Ag, W, As, Sb, Cu, Ni, Co, Bi, Te)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 8.72 Mt@2,18 g/t	

PORTUGAL	Neves-Corvo	PRT-00002
Commodities: Cu - Sn - Zn - Pb - Ag - In		Long: -7,950 - Lat: 37,567
Mining Company	EuroZinc	
url	<a href="http://www.eurozinc.com/s/NevesCorvo.asp">http://www.eurozinc.com/s/NevesCorvo.asp</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Cassiterite, Chalcopyrite, Pyrite, Sphalerite, Galena, Tetrahedrite, Tennantite, Stannite, Arsenopyrite, Bornite, Mawsonite, Tiemannite, Roquesite, K�esterite, Pyrrhotite, Marcasite, Bournonite, Meneghinite, Berthierite, Boulangerite, Gudmundite, Cobaltite, Cosalite, Glaucodot, Kobellite, Aikinite, Bismuthinite, Bismuth, Electrum, Betekhtinite, Enargite, Hematite, Rutile, Allocasite, Tetradyrite, Joseite, Galenobismutite, In-cassiterite, In-stannite, In-sphalerite, In-chalcopyrite, In-stannoidite, In-tennantite-tetrahedrite, Sakuraiite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	Cu: 436 Mt@7 % Sn: 248 Mt@1,74 %	
Reserves	Cu: 16,8 Mt@5,47 % Zn: 10,6 Mt@7,98 %	
Resources	Cu: 26 Mt@5 % Zn: 50,4 Mt@6 %	

<b>PORTUGAL</b>	Preguiças	PRT-00165
Commodities: Zn - Pb		Long: -7,333 - Lat: 38,083
Mining Company	(no data)	
url		
Status	Deposit of unknown status	
Exploitation type	Unworked	
Mineralogy	Sphalerite, Galena, Chalcopyrite, Hydrozincite, Smithsonite	
Ore deposit type	Volcano-sedimentary and sedimentary-exhalative ore deposits	
Past production	(no data)	
Reserves	Pb: 0,80 Mt@2 % Zn: 0,80 Mt@8 %	
Resources	(no data)	

<b>ROMANIA</b>	Baia Borsa	ROM-00030
Commodities: Zn - Cu - Pb - Ag - Au		Long: 24,801 - Lat: 47,706
Mining Company	REMIN SA	
url		
Status	Abandoned industrial mining district	
Exploitation type	Underground mining	
Mineralogy	Bournonite, Cassiterite, Chalcopyrite, Galena, Jamesonite, Mispickel (Arsenopyrite), Sphalerite, Stannite, Tetrahedrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	Ag: 18 Mt@42 g/t Au: 18 Mt@0,5 g/t Cu: 18 Mt@0,6 % Pb: 18 Mt@1,1 % Zn: 18 Mt@2,3 %	
Resources	(no data)	

<b>ROMANIA</b>	Baia Sprie	ROM-00020
Commodities: Zn - Pb - Cu - Ag - Au ( Sc)		Long: 23,742 - Lat: 47,682
Mining Company	MAXMIN (75%Carpathian Gold Inc, 25% REMIN SA.)	
url	<a href="http://www.carpathiangold.com/site06/Default.aspx?tabid=69#">http://www.carpathiangold.com/site06/Default.aspx?tabid=69#</a>	
Status	Producing district	
Exploitation type	Underground mining	
Mineralogy	Andorite, Chalcopyrite, Diaphorite, Galena, Semseyite, Sphalerite, Stibnite, Tetrahedrite, Wolframite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 4,3 Mt@29 g/t Au: 4,3 Mt@0,4 g/t Cu: 4,3 Mt@0,6 % Pb: 4,3 Mt@1 % Zn: 4,3 Mt@1,2 %	
Resources	Au: 0,41 Mt@3,4 g/t	

ROMANIA	Bucium-Tarnita	ROM-00092
Commodities: Cu - Au - Ag		Long: 23,127 - Lat: 46,242
Mining Company	Gabriel Resources	
url	<a href="http://www.gabrielresources.com/prj-bucium.htm">http://www.gabrielresources.com/prj-bucium.htm</a>	
Status	Prospect under (downstream) evaluation	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Pyrite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 500 Mt@0,32 %	

ROMANIA	Cavnic-Boldut	ROM-00022
Commodities: Zn - Pb - Ag - Au		Long: 23,886 - Lat: 47,685
Mining Company	Remin SA	
url		
Status	Producing district	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Galena, Gold, Sphalerite, Tetrahedrite	
Ore deposit type	Low-sulphidation epi- to mesothermal polymetallic-Ag veins: Pb, Zn, Ag, Mn, Cu, (As, Sb)	
Past production	(no data)	
Reserves	Ag: 5,9 Mt@27 g/t Au: 5,9 Mt@0,4 g/t Pb: 5,9 Mt@1,5 % Zn: 5,9 Mt@2 %	
Resources	(no data)	

ROMANIA	Deva	ROM-00080
Commodities: Cu - Au - Ag - Mo - Se		Long: 22,887 - Lat: 45,919
Mining Company	Minvest SA	
url	<a href="http://www.minvest.hd.ro/company.htm">http://www.minvest.hd.ro/company.htm</a>	
Status	Old industrial mine, exhausted deposit	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Molybdenite, Pyrite, Bornite, Chalcocite, Galena, Gold, Magnetite, Sphalerite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	Cu: 2,4 Mt@0,26 %	
Resources	Ag: 34 Mt@10 g/t Au: 34 Mt@1,7 g/t	

ROMANIA	Herja	ROM-00019
Commodities: Zn - Pb - Ag - Au		Long: 23,250 - Lat: 47,500
Mining Company	Remin SA	
url		
Status	Producing district	
Exploitation type	Underground mining	
Mineralogy	Berthierite, Chalcopyrite, Galena, Semseyite, Sphalerite, Stibnite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 1,0 Mt@47 g/t Au: 1,0 Mt@0,4 g/t Pb: 1,0 Mt@3,5 % Zn: 1,0 Mt@5,2 %	
Resources	(no data)	

ROMANIA	Ilba-Handal	ROM-00013
Commodities: Zn - Pb - Cu - Ag - Au		Long: 23,431 - Lat: 47,783
Mining Company	Remin SA	
url		
Status	Producing province	
Exploitation type	Underground mining	
Mineralogy	Bournonite, Chalcopyrite, Galena, Sphalerite, Tetrahedrite, Wurtzite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 2,4 Mt@22,4 g/t Au: 2,4 Mt@0,475 g/t Cu: 0,30 Mt@0,6 % Pb: 2,1 Mt@0,8 %	
Resources	(no data)	

ROMANIA	Moldova Nouà (open cast)	ROM-00071
Commodities: Cu		Long: 21,666 - Lat: 44,725
Mining Company	MoldoMin	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Molybdenite, Pyrite	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	Cu: 247 Mt@0,25 %	
Resources	(no data)	

ROMANIA	Moldova Nouà (skarns- underground)	ROM-00070
Commodities: Cu		Long: 21,686 - Lat: 44,757
Mining Company	MoldoMin	
url		
Status	Producing district	
Exploitation type	Underground mining	
Mineralogy	Bornite, Chalcopyrite, Galena, Molybdenite, Pyrite, Sphalerite	
Ore deposit type	Cu skarns: Cu, (Au)	
Past production	(no data)	
Reserves	Cu: 73 Mt@0,77 %	
Resources	(no data)	

ROMANIA	Nistru	ROM-00014
Commodities: Zn - Pb - Ag - Au		Long: 23,440 - Lat: 47,750
Mining Company	Remin SA	
url		
Status	Producing province	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Galena, Pyrargyrite, Sphalerite, Tetrahedrite, Vivianite, Wurtzite, Telluride	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 1,5 Mt@28 g/t Au: 1,5 Mt@0,6 g/t Pb: 1,5 Mt@0,8 %	
Resources	(no data)	

ROMANIA	Rosia Montanà	ROM-00095
Commodities: Au - Ag (- Ge)		Long: 23,131 - Lat: 46,320
Mining Company	Gabriel resources	
url	<a href="http://www.gabrielresources.com/home.htm">http://www.gabrielresources.com/home.htm</a>	
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	Alabandite, Argentite, Chalcopyrite, Galena, Marcasite, Mispickel (Arsenopyrite), Gold, Pearceite, Polybasite, Proustite, Pyrite, Sphalerite, Tetrahedrite, Argyrodite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 217 Mt@7,5 g/t Au: 218 Mt@1,52 g/t	
Resources	Ag: 349 Mt@6 g/t Au: 349 Mt@1,3 g/t	



ROMANIA	Rosia Poieni	ROM-00096
Commodities: Cu		Long: 23,187 - Lat: 46,316
Mining Company	Minvest SA	
url	<a href="http://www.minvest.hd.ro/company.htm">http://www.minvest.hd.ro/company.htm</a>	
Status	Producing deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Bornite, Chalcocite, Chalcopyrite, Covellite, Enargite, Galena, Molybdenite, Pyrite, Sphalerite, Tetrahedrite	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	Cu: 360 Mt@0,35 %	
Resources	(no data)	

ROMANIA	Săcărîmb-Certej	ROM-00081
Commodities: Au - Ag (- Te)		Long: 22,736 - Lat: 46,124
Mining Company	European Goldfields (& Minvest)	
url	<a href="http://www.egoldfields.com/goldfields/projects.jsp?ref=8">http://www.egoldfields.com/goldfields/projects.jsp?ref=8</a>	
Status	Old industrial mine, exhausted deposit	
Exploitation type	Underground mining	
Mineralogy	Altaite, Bournonite, Chalcopyrite, Galena, Hessite, Krennerite, Nagyagite, Gold, Petzite, Pyrite, Sphalerite, Stibnite, Sylvanite, Tetrahedrite, Frohbergite, Marcasite, Arsenopyrite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 39 Mt@15 g/t Au: 39 Mt@2 g/t	

ROMANIA	Suior	ROM-00021
Commodities: Zn - Pb - Ag - Au		Long: 23,821 - Lat: 47,704
Mining Company	MAXMIN (75%Carpathian Gold Inc, 25% REMIN SA.)	
url	<a href="http://www.carpathiangold.com/site06/Default.aspx?tabid=69#">http://www.carpathiangold.com/site06/Default.aspx?tabid=69#</a>	
Status	Producing deposit	
Exploitation type	Underground mining	
Mineralogy	Silver, Arsenopyrite, Boulangerite, Chalcopyrite, Galena, Gold, Sphalerite, Tetrahedrite, Wurtzite	
Ore deposit type	Low-sulphidation (adularia - sericite) epithermal deposits: Au, Ag, Pb, Zn, Cu, Sb, (Hg, As, Mn, Tl)	
Past production	(no data)	
Reserves	Ag: 9,3 Mt@36 g/t Au: 9,3 Mt@3 g/t Pb: 9,3 Mt@1,4 % Zn: 9,3 Mt@2,3 %	
Resources	(no data)	

ROMANIA	Valea Morii	ROM-00087
Commodities: Au - Cu		Long: 22,919 - Lat: 46,119
Mining Company	Minvest SA	
url	<a href="http://www.minvest.hd.ro/company.htm">http://www.minvest.hd.ro/company.htm</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Surface mining	
Mineralogy	Chalcopyrite, Pyrite, Bornite, Tetrahedrite, Sphalerite, Galena	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	Au: 27 Mt@1 g/t Cu: 27 Mt@0,26 %	
Resources	(no data)	

SERBIA	Borska Reka	YUG-00134
Commodities: Cu - Au - Ag - Mo		Long: 22,088 - Lat: 44,082
Mining Company	Rudarsko Topionicarski Basen BOR	
url		
Status	Dormant deposit	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Pyrite, Magnetite, Telluride, Molybdenite, Chalcocite, Covellite, Bornite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	Ag: 320 Mt@1,62 g/t Au: 320 Mt@0,2 g/t Cu: 320 Mt@0,5 % Mo: 320 Mt@35,8 ct/t	
Resources	Ag: 235 Mt@1,62 g/t Au: 235 Mt@0,2 g/t Cu: 235 Mt@0,5 % Mo: 235 Mt@35,8 ct/t	

SERBIA	Cerovo	YUG-00124
Commodities: Cu - Au		Long: 22,038 - Lat: 44,178
Mining Company	Rudarsko Topionicarski Basen BOR	
url		
Status	Industrial project under development	
Exploitation type	Surface mining	
Mineralogy	Pyrite, Chalcopyrite, Chalcocite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	(no data)	
Reserves	Au: 240 Mt@0,1 g/t Cu: 240 Mt@0,38 %	
Resources	Au: 80 Mt@0,1 g/t Cu: 80 Mt@0,38 %	

SERBIA	Coka Marin	YUG-00135
Commodities: Cu - Au - Ag - Zn - Pb		Long: 22,013 - Lat: 44,284
Mining Company	Rudarsko Topioninarski Basen Majdanpek	
url		
Status	Dormant deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Pyrrhotite, Marcasite, Enargite, Luzonite, Chalcopyrite, Bornite, Sphalerite, Galena, Grey copper, Gold, Stannite, Cassiterite, Bravoite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 2,4 Mt@40 g/t Au: 2,4 Mt@4,2 g/t Cu: 2,4 Mt@1,04 % Pb+Zn: 0,28 Mt@11,7 %	

SERBIA	Dumitru Potok	YUG-00123
Commodities: Cu		Long: 21,931 - Lat: 44,201
Mining Company	Rudarsko Topioninarski Basen BOR	
url		
Status	Dormant deposit	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Pyrite, Magnetite, Molybdenite, Galena, Sphalerite	
Ore deposit type	Porphyry copper deposits: Cu, (Mo, Se, Au, Ag)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 790 Mt@0,2 %	

SERBIA	Kizevak	YUG-00212
Commodities: Pb - Zn		Long: 20,701 - Lat: 43,291
Mining Company		
url		
Status	Producing industrial mine	
Exploitation type	Surface mining	
Mineralogy	Pyrite, Arsenopyrite, Sphalerite, Galena, Boulangerite, Antimonite, Chalcopyrite, Marcasite	
Ore deposit type	Unspecified ore deposits related to volcanic systems and shallow intrusives	
Past production	(no data)	
Reserves	Pb: 2,2 Mt@2,14 % Zn: 2,2 Mt@4,76 %	
Resources	(no data)	

SERBIA	Majdanpek	YUG-00058
Commodities: Cu - Mo - Ag - Au - (PGE)		Long: 21,950 - Lat: 44,376
Mining Company	Rudarsko Topionicarski Basen Majdanpek	
url		
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Bornite, Molybdenite, Telluride, Gold, Pyrite, Magnetite, Tellurite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Ag: 500 Mt@1,5 g/t Au: 500 Mt@0,2 g/t Cu: 500 Mt@0,31 %	
Reserves	Ag: 245 Mt@1,57 g/t Au: 245 Mt@0,2 g/t Cu: 245 Mt@0,326 % Mo: 245 Mt@0,005 %	
Resources	Ag: 584 Mt@1,57 g/t Au: 584 Mt@0,2 g/t Cu: 584 Mt@0,326 %	

SERBIA	Veliki Krivelj	YUG-00076
Commodities: Cu - Ag - Au		Long: 22,097 - Lat: 44,131
Mining Company	Rudarsko Topionicarski Basen (RTB) BOR	
url		
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Molybdenite, Pyrite, Magnetite, Scheelite, Fluorite, Chalcocite, Covellite, Cubanite, Enargite, Galena, Hematite, Pyrrhotite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Ag: 150 Mt@0,4 g/t Au: 143 Mt@0,07 g/t Cu: 82 Mt@0,34 %	
Reserves	Ag: 465 Mt@0,4 g/t Au: 465 Mt@0,07 g/t Cu: 465 Mt@0,335 %	
Resources	Ag: 100 Mt@0,4 g/t Au: 100 Mt@0,07 g/t Cu: 100 Mt@0,335 %	

<b>SLOVAKIA</b>	Banská Stiaavnica (including Na Sobove)	SVK-00050
Commodities: Ag - Au - Cu - Pb - Zn		Long: 18,900 - Lat: 48,450
Mining Company	(no data)	
url		
Status	Abandoned industrial mining district	
Exploitation type	Underground mining	
Mineralogy	Barite, Chalcopyrite, Electrum, Epidote, Galena, Rhodonite, Scheelite, Sphalerite, Tourmaline	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Ag: 80 Mt@25 g/t Au: 80 Mt@0,5 g/t Cu: 2,7 Mt@0,3 % Pb: 3,7 Mt@1,5 % Zn: 3,5 Mt@2 %	
Reserves	(no data)	
Resources	(no data)	

<b>SLOVAKIA</b>	Banska Stiaavnica 3 (Slovinky)	SVK-00002
Commodities: Au - Ag - Pb - Zn - Cu		Long: 18,950 - Lat: 48,467
Mining Company	Rudne Bane SP (100% State of Slovakia)	
url		
Status	Abandoned industrial mining district	
Exploitation type	Mining method unknown	
Mineralogy	Galena	
Ore deposit type	Unspecified ore deposit type	
Past production	Ag: 3,5 Mt@25 g/t Au: 3,5 Mt@0,5 g/t Cu: 3,5 Mt@0,3 % Pb: 3,5 Mt@1,5 % Zn: 3,5 Mt@2 %	
Reserves	(no data)	
Resources	Ag: 0,60 Mt@20 g/t Au: 0,60 Mt@3,5 g/t Cu: 0,60 Mt@0,1 % Pb: 0,60 Mt@1,7 % Zn: 0,60 Mt@3,5 %	

SLOVAKIA	Kremnica	SVK-00008
Commodities: Au - Ag		Long: 18,950 - Lat: 48,750
Mining Company	Tournigan Gold	
url	<a href="http://www.tournigan.com/s/Kremnica.asp">http://www.tournigan.com/s/Kremnica.asp</a>	
Status	Old mining district	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Altaite, Arsenopyrite, Chalcopyrite, Electrum, Galena, Gold, Polybasite, Pyrite, Sphalerite, Tetrahedrite	
Ore deposit type	Porphyry and porphyry-related ore deposits: Cu, Au, Mo, Sn, Ag, (W, Pb, Zn, etc.)	
Past production	(no data)	
Reserves	Ag: 18,8 Mt@12,8 g/t Au: 18,8 Mt@1,6 g/t	
Resources	Ag: 6,4 Mt@7,4 g/t Au: 6,4 Mt@1,3 g/t	

SLOVAKIA	Lubietova-Osrblie (Banska Bystrica)	SVK-00118
Commodities: Cu - Au - Co		Long: 19,367 - Lat: 48,750
Mining Company	(no data)	
url		
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Pyrite, Siderite, Tetrahedrite	
Ore deposit type	Volcano-sedimentary and sedimentary-exhalative ore deposits	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 8,0 Mt@1 g/t Co: 2,3 Mt@500 g/t Cu: 29 Mt@1 %	

SLOVAKIA	Roznava 2 (Strieborna, Maria mine).	SVK-00017
Commodities: Ag - Cu - Fe		Long: 20,600 - Lat: 48,700
Mining Company	(no data)	
url		
Status	Dormant deposit	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Quartz, Tetrahedrite	
Ore deposit type	Syn- to late-orogenic ore deposits	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,3 Mt@400 g/t Cu: 1,3 Mt@1,7 %	

SLOVAKIA	Voznica (Hodrusa District)	SVK-00133
Commodities: Cu - Au		Long: 18,780 - Lat: 48,430
Mining Company	(no data)	
url		
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	Gold, Chalcopyrite, Pyrrhotite, Molybdenite	
Ore deposit type	Porphyry and porphyry-related ore deposits: Cu, Au, Mo, Sn, Ag, (W, Pb, Zn, etc.)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 18 Mt@0,6 g/t Cu: 18 Mt@0,6 %	

SLOVAKIA	Zlatá Bana	SVK-00020
Commodities: Au - Ag - Pb - Zn		Long: 21,467 - Lat: 48,883
Mining Company	(no data)	
url		
Status	Old mining district	
Exploitation type	Underground mining	
Mineralogy	Antimonite, Barite, Bournonite, Chalcopyrite, Cinnabar, Fluorite, Galena, Pyrite, Sphalerite, Tetrahedrite	
Ore deposit type	Residually enriched ore deposits: Fe, Mn, Ni-Co, Au, Pt, P, U, corundum, etc.	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,6 Mt@40 g/t Au: 1,6 Mt@1,4 g/t Pb: 1,6 Mt@1,4 % Zn: 1,6 Mt@3,6 %	

SPAIN	Aguablanca	ESP-00001
Commodities: Ni - Cu - PGE - Co - Au		Long: -6,185 - Lat: 37,963
Mining Company	Rio Narcea Gold Mines Ltd	
url	<a href="http://www.rionarcea.com/s/Aguablanca.asp">http://www.rionarcea.com/s/Aguablanca.asp</a>	
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pentlandite, Chalcopyrite, Violarite, Bravoite, Pyrite, Pyrrhotite, Chromite	
Ore deposit type	Ore deposits hosted by basic-ultrabasic magmatic complexes: PGE, Cr, Ni, Cu, Au	
Past production	Cu: 0,40 Mt@0,52 % Ni: 0,40 Mt@0,66 %	
Reserves	Au: 16 Mt@0,13 g/t Cu: 16 Mt@0,5 % Ni: 16 Mt@0,7 % Pltd: 16 Mt@0,5 g/t	
Resources	Au: 4,0 Mt@0,14 g/t Co: 4,0 Mt@0,01 % Cu: 4,0 Mt@0,54 % Ni: 4,0 Mt@0,67 % Pltd: 4,0 Mt@0,51 g/t	

SPAIN	Aguas Teñidas	ESP-00002
Commodities: Zn - Cu - Pb - Au - Ag		Long: -6,855 - Lat: 37,780
Mining Company	PGM Ventures Corp.	
url	<a href="http://www.pgm-ventures.com/">http://www.pgm-ventures.com/</a>	
Status	Industrial project under development	
Exploitation type	Underground mining	
Mineralogy	Pyrite, Sphalerite, Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 41 Mt@1,3 % Pb: 41 Mt@0,9 % Zn: 41 Mt@3,1 % Ag: 41 Mt@37 g/t Au: 41 Mt@0,5 g/t	

SPAIN	Arinteiro, Fuente Rosas	ESP-00125
Commodities: Cu		Long: -8,313 - Lat: 42,908
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Pyrrhotite, Chalcopyrite	
Ore deposit type	Besshi-type deposits (Kieslager): Zn, Cu, (Co, Ag, Ni, Cr, Au)	
Past production	(no data)	
Reserves	Cu: 2,4 Mt@0,625 %	
Resources	Cu: 15 Mt@0,79 %	



SPAIN	Aznalcollar-Los Frailes	ESP-00529
Commodities: Zn - Ag - Au - Pb - Cu		Long: -6,250 - Lat: 37,515
Mining Company	Boliden Apirsa SL (in the process of liquidation dd 2005)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Sphalerite, Galena, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	Ag: 90 Mt@47 g/t Cu: 90 Mt@0,4 % Pb: 90 Mt@1,43 % Zn: 90 Mt@2,7 % Au: 90 Mt@0,3 g/t	
Reserves	Ag: 43 Mt@58 g/t Cu: 43 Mt@0,3 % Pb: 43 Mt@2,1 % Zn: 43 Mt@3,7 %	
Resources	Ag: 30 Mt@58 g/t Au: 30 Mt@0,48 g/t Cu: 30 Mt@0,3 % Pb: 30 Mt@2,1 % Zn: 30 Mt@3,7 %	

SPAIN	Carlès - Boinas	ESP-00009
Commodities: Au - Cu		Long: -5,650 - Lat: 43,281
Mining Company	Rio Narcea Gold Mines S.A.	
url		
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Gold, Goethite, Sphalerite, Galena	
Ore deposit type	Au-Cu skarns: Au, Cu, (Ag, As, Bi, Te)	
Past production	(no data)	
Reserves	Au: 1,2 Mt@4,26 g/t Cu: 0,80 Mt@0,62 %	
Resources	Au: 2,4 Mt@4,46 g/t Cu: 0,30 Mt@0,45 %	

SPAIN	Castillo Buitron	ESP-00534
Commodities: Cu - Zn - Pb - Ag		Long: -6,768 - Lat: 37,635
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopryrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,5 Mt@30 g/t Cu: 1,5 Mt@0,487 % Pb: 1,5 Mt@1,03 % Zn: 1,5 Mt@3,43 %	

SPAIN	Corcoesto	ESP-00817
Commodities: Au		Long: -8,833 - Lat: 43,225
Mining Company	Kinbauri Gold Corporation	
url	<a href="http://www.kinbauri-gold.com/projects/corcoesto.htm">http://www.kinbauri-gold.com/projects/corcoesto.htm</a>	
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	Pyrite, Arsenopyrite, Stibnite	
Ore deposit type	Granitoid-controlled ore deposits: Au, Ag, Cu, Sn, W, Sb, gemstones	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 7,7 Mt@1,5 g/t	

SPAIN	Cueva de la Mora	ESP-00540
Commodities: Cu - Zn - Pb		Long: -6,833 - Lat: 37,783
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopryrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 4,2 Mt@1,45 % Pb: 4,2 Mt@0,26 % Zn: 4,2 Mt@0,73 %	

SPAIN	El Carpio	ESP-00541
Commodities: Cu - Zn - Pb		Long: -6,982 - Lat: 37,813
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite)	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 3,4 Mt@0,5 % Pb: 3,4 Mt@0,12 % Zn: 3,4 Mt@2,77 %	

SPAIN	El Valle	ESP-00004
Commodities: Au - Cu - (Te - Se)		Long: -5,817 - Lat: 43,117
Mining Company	Rio Narcea Gold Mines S.A.	
url	www.rionarcea.com	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Gold, Bornite, Chalcocite, Digenite	
Ore deposit type	Au-Cu skarns: Au, Cu, (Ag, As, Bi, Te)	
Past production	Au: 2,2 Mt@6,53 g/t	
Reserves	Au: 3,5 Mt@6,24 g/t Cu: 0,90 Mt@1,3 %	
Resources	Au: 6,2 Mt@6,38 g/t Cu: 1,1 Mt@0,8 %	

SPAIN	Fuenteheridos	ESP-00800
Commodities: Zn - Pb - Au - Ag		Long: -4,844 - Lat: 42,790
Mining Company	(no data)	
url		
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Sedimentary-exhalative massive sulphide deposits (Sedex): Pb, Zn, (Ag, Ba)	
Past production	(no data)	
Reserves	(no data)	
Resources	Pb: 100 Mt@0,2 % Zn: 100 Mt@2 %	

SPAIN	Grupo Malagon	ESP-00550
Commodities: Cu - Zn - Pb		Long: -3,853 - Lat: 39,167
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 1,0 Mt@1,85 % Pb: 1,0 Mt@2 % Zn: 1,0 Mt@4 %	

SPAIN	La Esperanza (Angostura)	ESP-00552
Commodities: Cu		Long: -6,687 - Lat: 37,760
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Chalcopyrite, Sphalerite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 1,9 Mt@1,5 %	

SPAIN	La Romanera	ESP-00555
Commodities: Zn - Cu - Pb - Au - Ag		Long: -7,337 - Lat: 37,686
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Blende (Sphalerite), Sphalerite, Galena, Arsenopyrite, Tetrahedrite, Covellite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	Ag: 1,8 Mt@121 g/t Au: 1,8 Mt@2,5 g/t	
Resources	Ag: 34 Mt@44 g/t Au: 34 Mt@0,8 g/t Cu: 34 Mt@0,42 % Pb: 34 Mt@1,18 % Zn: 34 Mt@2,3 %	

SPAIN	La Troya	ESP-00802
Commodities: Zn - Pb - Ag - Cu		Long: -2,218 - Lat: 43,070
Mining Company	Exminesa	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Carbonate-hosted base metals deposits: Pb-Zn-Ag, Ba, F, Fe	
Past production	(no data)	
Reserves	Zn: 5,0 Mt@12 %	
Resources	(no data)	

SPAIN	La Zarza	ESP-00557
Commodities: Cu - Ag - Au - Zn - Pb		Long: -6,850 - Lat: 37,710
Mining Company	Compania Espanola de Minas de Tharsis, Nueva Tharsis	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite, Arsenopyrite, Barite, Grey copper, Electrum	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Au-rich Zn-Pb-(Cu) deposits: Zn, Pb, Au, Ag, (Cu, As, Sb, Ba)	
Past production	(no data)	
Reserves	Au: 7,9 Mt@4,34 g/t Cu: 7,9 Mt@2,77 %	
Resources	Ag: 150 Mt@24 g/t Au: 150 Mt@0,85 g/t Cu: 150 Mt@0,7 % Pb: 150 Mt@0,6 % Zn: 150 Mt@1,5 %	

SPAIN	Lagunazo	ESP-00558
Commodities: Cu - Zn - Pb - Au - Ag		Long: -7,163 - Lat: 37,630
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 6,0 Mt@65 g/t Au: 6,0 Mt@1,1 g/t Cu: 6,0 Mt@0,57 % Pb: 6,0 Mt@1,1 % Zn: 6,0 Mt@1,5 %	

SPAIN	Las Cruces	ESP-00005
Commodities: Cu - Zn - Pb - Au - Ag		Long: -6,089 - Lat: 37,554
Mining Company	Cobre Las Cruces S.A (MKGold Ltd)	
url	<a href="http://www.mkgold.com/">http://www.mkgold.com/</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Chalcopyrite, Chalcocite	
Ore deposit type	Secondary Cu sulphide (cementation) deposits: Cu	
Past production	(no data)	
Reserves	Au: 1,0 Mt@6,5 g/t Cu: 16 Mt@6 % Pb: 43 Mt@1 % Zn: 43 Mt@2,14 %	
Resources	(no data)	

SPAIN	Lomero Poyatos	ESP-00559
Commodities: Au - Cu - Ag - Zn - Pb		Long: -6,927 - Lat: 37,807
Mining Company	Cambridge Mineral Resources plc (Rec. Metalicos SL)	
url	<a href="http://www.cambmin.co.uk/?page=lomero_poyatos_overview">http://www.cambmin.co.uk/?page=lomero_poyatos_overview</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Blende (Sphalerite)	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 3 Mt@78 g/t Au: 3 Mt@2,6 g/t Cu: 3 Mt@0,85 % Pb: 3 Mt@2,93 % Zn: 3 Mt@4,88 %	

SPAIN	Mazarron	ESP-01049
Commodities: Zn - Pb		Long: -3,054 - Lat: 43,309
Mining Company	(no data)	
url		
Status	Dormant deposit	
Exploitation type	Mining method unknown	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	(no data)	
Resources	Pb: 16 Mt@0,6 % Zn: 16 Mt@2,5 %	

SPAIN	Monte Romero	ESP-00561
Commodities: Zn - Cu - Pb		Long: -6,793 - Lat: 37,780
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 3,0 Mt@1,1 % Pb: 3,0 Mt@5,1 % Zn: 3,0 Mt@8,7 %	

SPAIN	Poderosa	ESP-00567
Commodities: Cu - Zn - Pb		Long: -6,567 - Lat: 37,745
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite), Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 0,65 Mt@3,5 %	

SPAIN	Reocin	ESP-00006
Commodities: Zn - Pb		Long: -4,050 - Lat: 43,352
Mining Company	Asturiana de Zinc SA (XStrata)	
url	<a href="http://www.azsa.es/">http://www.azsa.es/</a>	
Status	Exhausted industrial mine	
Exploitation type	Underground mining	
Mineralogy	Sphalerite, Galena, Marcasite, Wurtzite, Melnicovite, Hydrozincite	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	Pb: 60 Mt@1 % Zn: 60 Mt@9 %	
Reserves	Pb: 2,5 Mt@0,9 % Zn: 2,5 Mt@8,5 %	
Resources	(no data)	

SPAIN	Rodalquilar	ESP-00052
Commodities: Au - Ag - Pb (- Te)		Long: -2,067 - Lat: 36,833
Mining Company	Adaro; St Joe minerals	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Gold, Pyrite	
Ore deposit type	High-sulphidation (acid-sulphate) epithermal deposits: Au, Cu, (Hg, As, S)	
Past production	Au: 0,71 Mt@7 g/t	
Reserves	(no data)	
Resources	Au: 0,50 Mt@2 g/t	

SPAIN	Rubiales	ESP-00808
Commodities: Zn - Pb - Ag		Long: -7,074 - Lat: 42,742
Mining Company	EXMINESA	
url		
Status	Deposit of unknown status	
Exploitation type	Room and pillar mining, room and pillar working (flat, inclined, step)	
Mineralogy	Sphalerite, Barite, Galena, Fluorite, Chalcopyrite	
Ore deposit type	Carbonate-hosted stratabound and vein Pb-Zn deposits (Mississippi Valley, MVT): Pb, Zn, Ag, (Ba, F, Cd, U)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 12 Mt@63 g/t Pb: 12 Mt@1,4 % Zn: 12 Mt@7,7 %	

SPAIN	Salave	ESP-00053
Commodities: Au - Mo		Long: -6,817 - Lat: 43,550
Mining Company	Rio Narcea Gold Mines Ltd	
url	<a href="http://www.rionarcea.com/s/Salave.asp">http://www.rionarcea.com/s/Salave.asp</a>	
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	Pyrite, Arsenopyrite, Stibnite, Molybdenite	
Ore deposit type	Granitoid-controlled ore deposits: Au, Ag, Cu, Sn, W, Sb, gemstones	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 20 Mt@4 g/t	

SPAIN	San Miguel	ESP-00573
Commodities: Cu - Pb - Zn		Long: -6,750 - Lat: 37,762
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Blende (Sphalerite), Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Cu: 1,3 Mt@3 %	



SPAIN	San Telmo	ESP-00575
Commodities: Zn - Cu - Pb - Au - Ag		Long: -6,963 - Lat: 37,802
Mining Company	Cambridge Mineral Resources plc	
url	<a href="http://www.cambmin.co.uk/?page=spain">http://www.cambmin.co.uk/?page=spain</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 4,0 Mt@60 g/t Au: 4,0 Mt@0,8 g/t Cu: 4,0 Mt@1,2 % Pb: 4,0 Mt@0,4 % Zn: 4,0 Mt@12 %	

SPAIN	Sierrecilla	ESP-00577
Commodities: Zn - Cu - Pb - Ag - Au (- In)		Long: -7,258 - Lat: 37,676
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unkown	
Mineralogy	Pyrite, Blende (Sphalerite), Galena, Chalcopyrite, Tetrahedrite, Enargite, Covellite, Bournonite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,0 Mt@500 g/t Cu: 1,0 Mt@1,5 % Pb: 1,0 Mt@5 % Zn: 1,0 Mt@12 %	

SPAIN	Sotiel - Migollas	ESP-00011
Commodities: Zn - Pb - Cu - Au - Ag		Long: -6,858 - Lat: 37,600
Mining Company	Mina Almagrera S.A.	
url		
Status	Abandoned industrial mining district	
Exploitation type	Drift and fill	
Mineralogy	Pyrite, Sphalerite, Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	Ag: 75 Mt@24 g/t Au: 75 Mt@0,21 g/t Cu: 133 Mt@0,7 % Pb: 133 Mt@1,24 % Zn: 133 Mt@2,76 %	
Resources	(no data)	

SPAIN	Tharsis (district)	ESP-00010
Commodities: Zn - Pb - Cu - Au - Ag		Long: -7,100 - Lat: 37,583
Mining Company	Minas de Tharsis S.A.L.	
url		
Status	Abandoned industrial mining district	
Exploitation type	Drift and fill	
Mineralogy	Pyrite, Sphalerite, Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	Ag: 23.7 t Ag metal Au: 2.57 t Au metal	
Reserves	(no data)	
Resources	Ag: 115 Mt@47 g/t Au: 115 Mt@0,75 g/t Cu: 115 Mt@0,5 % Pb: 115 Mt@0,6 % Zn: 115 Mt@2,7 %	

SPAIN	Toral de los Vados	ESP-00810
Commodities: Zn - Pb - Ag		Long: -6,834 - Lat: 42,609
Mining Company	(no data)	
url		
Status	Old prospect	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Unspecified ore deposit type	
Past production	(no data)	
Reserves	Ag: 5,4 Mt@45 g/t Pb: 5,4 Mt@6,6 % Zn: 5,4 Mt@8,6 %	
Resources	(no data)	

SPAIN	Valverde (Masa Valverde)	ESP-00581
Commodities: Cu - Pb - Zn - Ag - Au		Long: -6,838 - Lat: 37,538
Mining Company	Cambridge Mineral Resources	
url	<a href="http://www.cambmin.co.uk/?page=press_releases&amp;num=46">http://www.cambmin.co.uk/?page=press_releases&amp;num=46</a>	
Status	Unexploited deposit	
Exploitation type	Unworked	
Mineralogy	Pyrite, Blende (Sphalerite), Chalcopyrite, Galena	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 100 Mt@57 g/t Au: 100 Mt@1 g/t Cu: 100 Mt@0,6 % Pb: 100 Mt@1,9 % Zn: 100 Mt@5,2 %	

<b>SPAIN</b>	Vuelta Falsa	ESP-00582
Commodities: Zn - Cu - Pb - Au - Ag		Long: -7,430 - Lat: 37,698
Mining Company	(no data)	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Pyrite, Blende (Sphalerite)	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,0 Mt@307 g/t Au: 1,0 Mt@9 g/t Cu: 1,0 Mt@1,27 % Pb: 1,0 Mt@8,8 % Zn: 1,0 Mt@20,7 %	

<b>SWEDEN</b>	Adak	SWE-00056
Commodities: Zn - Ag - Au - Cu		Long: 18,633 - Lat: 65,367
Mining Company	Returned to Swedish government (before Boliden)	
url	<a href="http://www.boliden.se/www/en/BolidenEN.nsf/951b4d7cbfc58bc6c1256df80037d8f3/d71d4e2002dd54a5c1256dfa002c8cac?OpenDocument">http://www.boliden.se/www/en/BolidenEN.nsf/951b4d7cbfc58bc6c1256df80037d8f3/d71d4e2002dd54a5c1256dfa002c8cac?OpenDocument</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Mining method unknown	
Mineralogy	Chalcopyrite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production		
Reserves	(no data)	
Resources	Ag: 7,5 Mt@10 g/t Au: 7,5 Mt@0,3 g/t Cu: 7,5 Mt@0,9 % Zn: 7,5 Mt@2,9 %	

SWEDEN	Aitik	SWE-00023
Commodities: Cu - Ag - Au		Long: 20,573 - Lat: 67,418
Mining Company	Boliden AB	
url	<a href="http://www.boliden.se/www/en/BolidenEN.nsf/(WebPagesByID)/B36B74B026017415C1256DBE00295BFB?OpenDocument&amp;CategoryNr=03">http://www.boliden.se/www/en/BolidenEN.nsf/(WebPagesByID)/B36B74B026017415C1256DBE00295BFB?OpenDocument&amp;CategoryNr=03</a>	
Status	Producing industrial mine	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Magnetite, Molybdenite, Pyrite, Pyrrhotite	
Ore deposit type	Porphyry Cu-Au deposits: Cu, Au, (Ag, Bi, Te)	
Past production	Ag: 322 Mt@4 g/t Au: 322 Mt@0,2 g/t Cu: 322 Mt@0,4 %	
Reserves	Ag: 240 Mt@3 g/t Au: 240 Mt@0,2 g/t Cu: 240 Mt@0,38 %	
Resources	Ag: 1 050 Mt@2 g/t Au: 1 050 Mt@0,2 g/t Cu: 1 050 Mt@0,32 %	

SWEDEN	Barsele	SWE-00189
Commodities: Au		Long: 17,500 - Lat: 65,083
Mining Company	Northland Resources Inc	
url	<a href="http://www.northamgold.com/s/Barsele.asp">http://www.northamgold.com/s/Barsele.asp</a>	
Status	Deposit under development - project	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 17 Mt@1,55 g/t	

SWEDEN	Björkdal	SWE-00160
Commodities: Au		Long: 20,592 - Lat: 64,931
Mining Company	Gold-Ore Resources Ltd	
url	<a href="http://www.goldorerresources.com/s/Bjorkdal.asp">http://www.goldorerresources.com/s/Bjorkdal.asp</a>	
Status	Producing deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Chalcopyrite, Galena, Gold, Pyrite, Pyrrhotite, Scheelite, Telluride	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	Au: 14 Mt@2,02 g/t	
Reserves	Au: 1,6 Mt@1,94 g/t	
Resources	Au: 9,9 Mt@1,64 g/t	

SWEDEN	Boliden	SWE-00042
Commodities: Cu - Ag - Au - Pb - Zn		Long: 20,223 - Lat: 64,522
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Producing industrial mines	
Exploitation type	Underground mining	
Mineralogy	Arsenopyrite, Chalcopyrite, Electrum, Pyrite, Pyrrhotite	
Ore deposit type	Volcanogenic massive and disseminated Cu-Au sulphide deposits: Cu, Au, (Zn, Co, Mo, Bi)	
Past production	Ag: 8,3 Mt@50 g/t As: 8,3 Mt@6,83 % Au: 8,3 Mt@15,5 g/t Cu: 8,3 Mt@1,43 % Pb: 8,3 Mt@0,27 % Zn: 8,3 Mt@0,92 %	
Reserves	Ag: 3,6 Mt@128 g/t Au: 3,6 Mt@1,8 g/t Cu: 3,6 Mt@0,6 % Pb: 3,6 Mt@1 % Zn: 3,6 Mt@7 %	
Resources	Ag: 6,2 Mt@105 g/t Au: 6,2 Mt@2,59 g/t Cu: 6,2 Mt@0,68 % Pb: 6,2 Mt@0,8 % Zn: 6,2 Mt@5,9 %	

SWEDEN	Garpenberg	SWE-00092
Commodities: Ag - Au - Cu - Pb - Zn		Long: 16,167 - Lat: 60,317
Mining Company	Boliden AB	
url	<a href="http://www.boliden.se/www/en/BolidenEN.nsf/(WebPagesByID)/8D385C5BD1941000C1256DDC00611020?OpenDocument&amp;CategoryNr=03">http://www.boliden.se/www/en/BolidenEN.nsf/(WebPagesByID)/8D385C5BD1941000C1256DDC00611020?OpenDocument&amp;CategoryNr=03</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Galena, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Ag: 14 Mt@153 g/t Au: 14 Mt@0,4 g/t Cu: 14 Mt@0,1 % Pb: 14 Mt@1,8 % Zn: 14 Mt@4 %	
Reserves	Ag: 4,0 Mt@143 g/t Au: 4,0 Mt@0,4 g/t Cu: 4,0 Mt@0,1 % Pb: 4,0 Mt@1,9 % Zn: 4,0 Mt@3,7 %	
Resources	Ag: 8,5 Mt@121 g/t Au: 8,5 Mt@0,4 g/t Cu: 8,5 Mt@0,1 % Pb: 8,5 Mt@1,7 % Zn: 8,5 Mt@3,7 %	

SWEDEN	Kankberg	SWE-00158
Commodities: Zn - Ag - Au - Cu - Pb		Long: 20,283 - Lat: 64,933
Mining Company	Boliden AB	
url		
Status	Closed industrial mine	
Exploitation type	Underground mining	
Mineralogy	(no data)	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,0 Mt@45 g/t Au: 1,0 Mt@2,4 g/t Cu: 1,0 Mt@0,3 % Pb: 1,0 Mt@0,4 % Zn: 1,0 Mt@2,9 %	

SWEDEN	Kristineberg	SWE-00051
Commodities: Ag - Au - Cu - Pb - Zn		Long: 18,550 - Lat: 65,067
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Pyrite, Sphalerite	
Ore deposit type	Volcanogenic massive and disseminated Cu-Au sulphide deposits: Cu, Au, (Zn, Co, Mo, Bi)	
Past production	Ag: 68 Mt@23 g/t Au: 52 Mt@0,9 g/t Cu: 21 Mt@1 % Pb: 30 Mt@0,3 % Zn: 60 Mt@2,4 %	
Reserves	Ag: 3,6 Mt@128 g/t Au: 3,6 Mt@1,28 g/t Cu: 3,6 Mt@0,6 % Pb: 3,6 Mt@1 % Zn: 3,6 Mt@7 %	
Resources	Ag: 6,2@45 g/t Au: 6,2 Mt@2,59 g/t Cu: 6,2 Mt@0,68 % Pb: 6,2 Mt@0,8 % Zn: 6,2 Mt@5,9 %	

SWEDEN	Långdal	SWE-00159
Commodities: Ag - Au - Cu - Pb - Zn		Long: 20,400 - Lat: 64,650
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 4,3 Mt@149 g/t Au: 4,3 Mt@1,9 g/t Cu: 4,3 Mt@0,1 % Pb: 4,3 Mt@1,5 % Zn: 4,3 Mt@5,9 %	

SWEDEN	Norra Norrliiden	SWE-00230
Commodities: Zn - Pb - Ag - Cu - Au		Long: 19,511 - Lat: 65,039
Mining Company	Lundin Mining	
url	<a href="http://www.lundinmining.com/index.php">http://www.lundinmining.com/index.php</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	(no data)	
Reserves	(no data)	
Resources	Ag: 1,5 Mt@59,4 g/t Au: 1,5 Mt@0,8 g/t Cu: 1,5 Mt@0,8 % Pb: 1,5 Mt@0,4 % Zn: 1,5 Mt@4,34 %	

SWEDEN	Petiknäs	SWE-00157
Commodities: Cu - Ag - Au - Pb - Zn		Long: 20,050 - Lat: 64,933
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	(no data)	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	(no data)	
Reserves	Ag: 0,59 Mt@110 g/t Au: 0,59 Mt@2,5 g/t Cu: 0,59 Mt@0,7 % Pb: 0,59 Mt@1 % Zn: 0,59 Mt@5,3 %	
Resources	Ag: 2,7 Mt@52 g/t Au: 2,7 Mt@3,65 g/t Cu: 2,7 Mt@1,5 % Pb: 2,7 Mt@0,24 % Zn: 2,7 Mt@2,5 %	

SWEDEN	Rakkejaur	SWE-00048
Commodities: Ag - Au - Cu -Zn		Long: 19,117 - Lat: 65,050
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Old industrial mine, abandoned deposit	
Exploitation type	Open cast (open pit) mining	
Mineralogy	Arsenopyrite, Chalcopyrite, Pyrite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Ag: 19 Mt@45 g/t As: 19 Mt@1,6 % Au: 19 Mt@1 g/t Cu: 19 Mt@0,3 % Zn: 19 Mt@2,3 %	
Reserves	(no data)	
Resources	Ag: 17 Mt@50 g/t Au: 17 Mt@1 g/t Cu: 17 Mt@0,3 % Zn: 17 Mt@2,5 %	



SWEDEN	Renström	SWE-00044
Commodities: Au - Cu - Pb - Zn		Long: 20,100 - Lat: 64,933
Mining Company	Boliden AB	
url	<a href="http://www.boliden.com/">http://www.boliden.com/</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Galena, Pyrite, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	(no data)	
Reserves	Au: 0,72 Mt@3,9 g/t Cu: 0,72 Mt@0,8 %	
Resources	Au: 3,1 Mt@3,04 g/t Cu: 3,1 Mt@0,9 %	

SWEDEN	Storliden	SWE-00163
Commodities: Zn - Ag - Au - Cu		Long: 18,900 - Lat: 65,220
Mining Company	Lundin Mining	
url	<a href="http://www.lundinmining.com/storliden/index.php">http://www.lundinmining.com/storliden/index.php</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Arsenopyrite, Chalcopyrite, Galena, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Cu: 1,0 Mt@3,5 % Zn: 1,0 Mt@9 %	
Reserves	Ag: 0,84 Mt@24,9 g/t Au: 0,84 Mt@0,3 g/t Cu: 0,84 Mt@3,6 % Zn: 0,84 Mt@10 %	
Resources	Ag: 0,36 Mt@31,4 g/t Au: 0,36 Mt@0,4 g/t Cu: 0,36 Mt@2,2 % Zn: 0,36 Mt@3 %	

SWEDEN	Svartliden	SWE-00237
Commodities: Au		Long: 17,607 - Lat: 64,798
Mining Company	Dragon Mining	
url	<a href="http://www.dragon-mining.com.au/pages/projects/svartliden/svartliden.htm">http://www.dragon-mining.com.au/pages/projects/svartliden/svartliden.htm</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Brittle-fault related ore deposits (very low grade metamorphic facies): Au and/or Sb (Cu, As, Bi, Te, W, B, F, Sb, Hg, Ag)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 2,8 Mt@4,5 g/t	

SWEDEN	Svärtrräsk	SWE-00229
Commodities: Zn - Pb - Ag		Long: 17,217 - Lat: 65,167
Mining Company	ScanMining	
url	<a href="http://www.scanmining.se/">http://www.scanmining.se/</a>	
Status	Prospect	
Exploitation type	Unworked	
Mineralogy	(no data)	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	Ag: 2,8 Mt@5,18 g/t Pb: 2,8 Mt@0,288 % Zn: 28 Mt@2,68 %	
Resources	(no data)	

SWEDEN	Viscaria	SWE-00156
Commodities: Cu - Au - Zn		Long: 20,083 - Lat: 67,917
Mining Company	Viscaria AB	
url		
Status	Old industrial mine, abandoned deposit	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Cu: 13 Mt@2,25 %	
Reserves	Au: 14 Mt@0,3 g/t Cu: 14 Mt@3,54 % Zn: 14 Mt@0,7 %	
Resources	(no data)	

SWEDEN	Zinkgruvan	SWE-00155
Commodities: Zn - Ag - Cu - Pb		Long: 15,413 - Lat: 58,800
Mining Company	Lundin Mining	
url	<a href="http://www.lundinmining.com/zinkgruvan/index.php">http://www.lundinmining.com/zinkgruvan/index.php</a>	
Status	Producing industrial mine	
Exploitation type	Underground mining	
Mineralogy	Chalcopyrite, Galena, Pyrrhotite, Sphalerite	
Ore deposit type	Volcanogenic massive sulphides (VMS) deposits: Cu, Pb, Zn +/- Au-Ag, (Sn, S, As, Cd, Bi, etc.)	
Past production	Zn: 3,9 Mt@9,1 %	
Reserves	Ag: 8,8 Mt@97 g/t Pb: 8,8 Mt@4,8 % Zn: 8,8 Mt@9,9 %	
Resources	Ag: 14 Mt@82,6 g/t Cu: 3,5 Mt@3,07 % Pb: 10 Mt@3,77 % Zn: 10 Mt@9,5 %	

<b>UNITED KINGDOM</b>	Cavanacaw - Omagh	GBR-00076
Commodities: Au - Ag - Pb		Long: -7,372 - Lat: 54,601
Mining Company	Galantas Gold Corporation	
url	<a href="http://www.galantas.com/corporate/s/Omagh.html">http://www.galantas.com/corporate/s/Omagh.html</a>	
Status	Industrial mine in development	
Exploitation type	Open cast (open pit) mining	
Mineralogy	(no data)	
Ore deposit type	Fault-related syn- to late-orogenic ore deposits : Au, Zn, As, Sb, Cu, Ni, Co	
Past production	(no data)	
Reserves	Au: 0,37 Mt@7,52 g/t	
Resources	Au: 2,0 Mt@6,9 g/t	

<b>UNITED KINGDOM</b>	Gairloch	GBR-00158
Commodities: Cu - Zn - Au		Long: -5,863 - Lat: 57,682
Mining Company	(no data)	
url		
Status	Dormant deposit	
Exploitation type	Unworked	
Mineralogy	Pyrite, Pyrrhotite, Chalcopyrite, Sphalerite	
Ore deposit type	Besshi-type deposits (Kieslager): Zn, Cu, (Co, Ag, Ni, Cr, Au)	
Past production	(no data)	
Reserves	(no data)	
Resources	Au: 0,50 Mt@1 g/t Cu: 0,50 Mt@1 % Zn: 0,50 Mt@0,5 %	

<b>UNITED KINGDOM</b>	Parys Mountain, Mona	GBR-00289
Commodities: Zn - Pb - Ag - Cu - Au		Long: -4,333 - Lat: 53,383
Mining Company	Anglesey Mining plc	
url	<a href="http://www.angleseymining.co.uk/">http://www.angleseymining.co.uk/</a>	
Status	Industrial project under development	
Exploitation type	Unworked	
Mineralogy	Pyrite, Chalcopyrite, Galena, Sphalerite	
Ore deposit type	Phanerozoic-type volcanogenic massive sulphide (VMS) Zn-Pb-Cu deposits (Kuroko): Zn, Pb, Cu, (Au, Ag, Sn, Sb, Bi)	
Past production	Cu: 0.3 Mt Cu metal	
Reserves	Ag: 2,0 Mt@75 g/t Au: 2,0 Mt@0,51 g/t Cu: 2,0 Mt@1,3 % Pb: 2,0 Mt@3,3 % Zn: 2,0 Mt@6,4 %	
Resources	Cu: 30 Mt@0,76 %	



**Scientific and Technical Centre  
Mineral Resources Division**  
3, avenue Claude-Guillemain - BP 6009  
45060 Orléans Cedex 2 – France – Tel.: +33 (0)2 38 64 34 34