



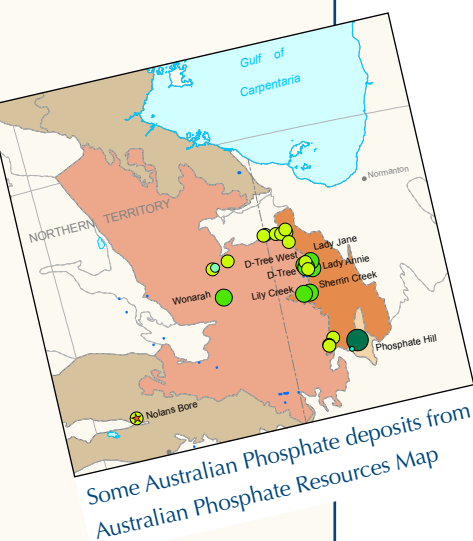
Australian Government
Geoscience Australia

Australian Mineral EXPLORATION

FEBRUARY 2010

A REVIEW of EXPLORATION for the YEAR **2009**

EXTENDED EDITION



OVERVIEW

- » Australian mineral exploration spending in 2008-09⁽¹⁾ fell by 9.7% to \$2223.1 million of which 38% was spent on the search for new deposits⁽¹⁾.
- » Spending fell in all States but rose in the Northern Territory; Western Australia dominated with 56% of Australian mineral exploration spending.
- » Iron ore became the dominant target with 26% of exploration spending while base metal's share fell to 23%.
- » Exploration results were announced for a wide range of commodities from across the country including the initial resource estimate for the Merlin molybdenum-rhenium deposit, in Queensland, significant drill intersections at the DeGrussa and Bentley base metals prospects in Western Australia, the Thunderball uranium prospect, Northern Territory and interesting gold intersections from the Handpump prospect in the remote West Musgrave Complex in Western Australia.

Exploration REVIEW

Australian and global mineral exploration reached record highs in 2008 but dropped significantly in 2009 as a consequence of the Global Financial Crisis. Australian mineral exploration expenditure fell by 9.7% from a record \$2461 million in 2007-08 to \$2223 million in 2008-09 according to data from the Australian Bureau of Statistics. In constant dollar terms this was a fall of 12.4% from the 2007-08 record (figure 1). World-wide mineral exploration fell more sharply.

The fall in exploration expenditure was smaller than anticipated as major reductions in expenditure on base metals (\$519 million: down 33.8%), gold (\$438 million: down 26.1%) and uranium (\$185 million: down 20%) were offset by spending on exploration for iron ore (\$589 million: up 30.9%), coal (\$297 million: up 26.6%) and 'Others' which includes commodities such as phosphate, manganese, tungsten and molybdenum (\$154 million: up 39.6%).

¹Australian financial year from 1 July 2008 to 30 June 2009.

²All monetary references in this paper are to Australian dollars unless otherwise stated.

³Exploration spending on the search for new deposits covers exploration for previously unknown mineralisation or exploration on known mineralisation which is not yet classified as a resource.

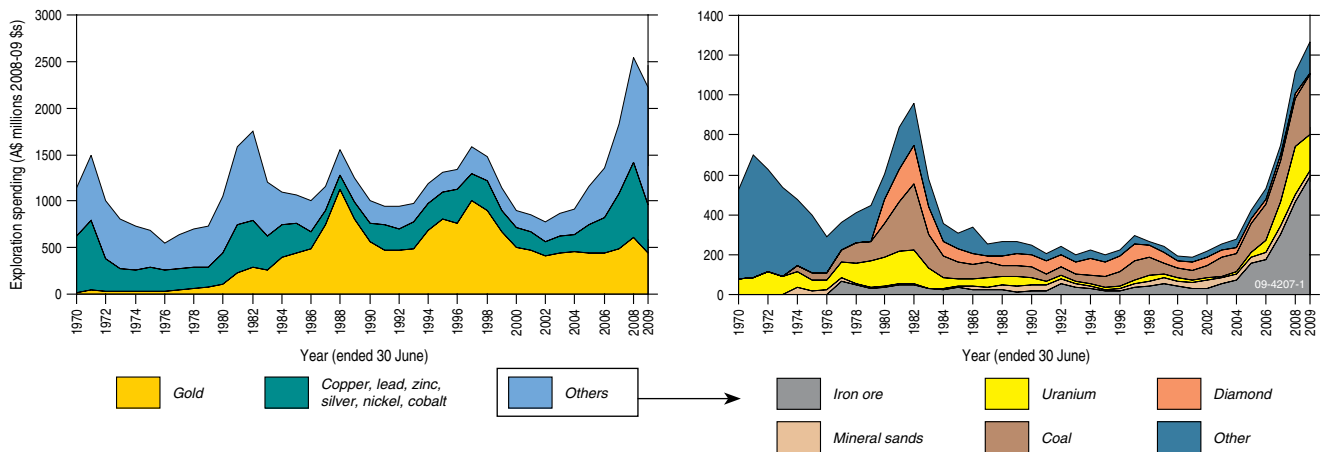


Figure 1. Australian mineral exploration expenditure in constant 2008–09 dollars (Based on Australian Bureau of Statistics data deflated by Consumer Price Index).

The Northern Territory was the only Australian jurisdiction which recorded an increase in exploration in 2008–09 with spending rising by 10%. The fall in Western Australia was limited to 1% as iron ore exploration underpinned activity in that jurisdiction. High levels of coal exploration in New South Wales and Queensland limited the overall falls in exploration expenditure in those states to 7.7% and 11.6% respectively. In the other states, with limited or no exploration for iron ore and/or coal, mineral exploration expenditure fell by more than 30%.

Drilling fell by 19% to 7,888,000 metres in 2008-09. Drilling in greenfields areas fell significantly (down by ~31% to 2,720,000 metres) compared to brownfields which fell by 11% to 5,167,000 metres, confirming the continuing dominance of brownfields exploration.

World non-ferrous mineral (including base metals, precious metals, diamonds, uranium but not coal or iron ore) exploration budgets reported by the Metals Economics Group (MEG) fell from a record US\$14.4 billion in 2008 to an estimated US\$8.4 billion in 2009, a fall of 42%. This directly reflects the impact of the global economic downturn which resulted in reduced demand for most minerals, especially base metals, and consequent substantial price falls for many of those commodities.

Some 30 Initial Public Offerings on the Australian Securities Exchange in 2009 were fully or partially for mineral exploration in Australia. This is a substantial reduction from the 49 listed in 2008. Mineral IPO raisings totalled \$540 million in 2009. While the number of companies listed remains low there were signs that restraints on capital raising may be easing with some 80% of the new company listings occurring in the last quarter of 2009. In addition to IPOs, over \$6.5 billion dollars was raised by the minerals sector for a range of purposes including exploration, development, and the provision of working capital – over half this amount was raised by private placement.

EXPLORATION

ANTIMONY (FIGURE 2)

New South Wales

Anchor Resources Ltd reported a successful resource drilling program at the **Wild Cattle Creek** antimony deposit, part of the Bielsdown Project, which confirmed depth and strike extensions to the existing resource. Better intersections included: 11.5 m @ 2.32% Sb and 0.34g/t Au, and, 4.4 m @ 3.19% Sb and 0.73g/t Au. Anchor reported an Inferred Resource for Wild Cattle Creek of 880 000 t @ 1.99% Sb for 17 500 t Sb.

COPPER, LEAD, ZINC, SILVER

New South Wales

Cobar Consolidated Resources Ltd reported results from resource definition drilling at the **Wonawinta** silver project, 80km S of Cobar, aimed at upgrading the

Table 1: A selection of Australian mineral discoveries since 2000.

Year	State	Deposit/Project	Commodities	Status
2000	WA	West Musgraves	Ni, Cu, Co	Exploration; Preliminary resource: 392 Mt @ 0.3% Ni, 0.33% Cu
2000 + later	WA	Golden Grove orebodies	Cu, Pb, Zn, Ag	Mine; June 2008 resource: 1.4 Mt Zn, 0.8 Mt Cu, 0.13 Mt Pb, 44 Moz Ag, 1 Moz Au
2000 + later	WA	Flying Fox orebodies	Ni	Mine; Current resource: 245 955 t Ni
2000	NSW	Hera	Au, Zn, Pb, Cu, Ag	Exploration; Current resource: 3.3 Mt @ 2.7g/t Au, 3.4% Zn, 2.7 Pb, 0.18% Cu, 15g/t Ag
2001	NSW	Wyoming	Au	Exploration with feasibility study in progress; Current resource: 0.8 Mozs Au
2001	SA	Prominent Hill	Cu, Au	Mine; Current resources: 2.5 Mt Cu, 6.3 Moz Au, 21.4 Moz Ag
2002	WA	Jaguar	Cu, Pb, Zn, Ag	Mine; Current ore reserve: 1.11Mt @ 2.9% Cu, 0.53% Pb, 7.4% Zn, 93g/t Ag
2002	WA	Copernicus	Ni, Cu, Co	Mine not currently operating; Current resource: 6000 t Ni, 4000 t Cu, 200 t Co
2004	WA	Trident	Au	Mine; Current resource: 1 Moz Au
2004	SA	Jacinth & Ambrosia	Mineral sands	Mine construction; Production due mid-2010
2005	WA	Tropicana	Au	Feasibility studies; Current resource: 5.01 Mozs Au
2005	SA	Four Mile	U	Decision to mine Four Mile West; Current resource 3.9 Mt @ 0.37% U ₃ O ₈
2005	SA	Tripitaka	Mineral sands	Pre-feasibility study; Current resource: 28 Mt @ 2.3% Heavy Minerals (HM)
2005	SA	Carrapateena	Cu, Au	Exploration; 905 m @ 2.1% Cu, 1.0g/t Au
2005	WA	Caliwingina	Fe	Exploration: 875 Mt @ 56.9% Fe; Channel Iron Deposit; Pilbara Region
2006	SA	Gullivers	Mineral sands	Exploration; Part of Eucla Basin Mineral Sands Project
2006	QLD	Mount Carlton	Au, Ag, Cu	Feasibility study; Current resource: 25.7 Mt @ 1.65g/t Au, 44g/t Ag, 0.28% Cu
2006	NSW	McPhillamys	Au	Exploration; 366 m @ 1.85g/t Au
2006	WA	Cooljarloo North	Mineral sands	Scoping study completed; Current resource: 260 Mt @ 2.4% HM
2006	QLD	Rocklands	Cu	Feasibility study; Resource 25 Mt @ 1.57% Cu, 818ppm Co and 0.2g/t Au
2007	WA	Spotted Quoll	Ni	Mine; Current resource: 2 Mt @ 6.2% Ni
2007	WA	Cyclone & Hurricane	Mineral sands	Exploration; Current resource for Cyclone 98 Mt @ 2.88% HM; Eucla Basin
2008	SA	Mojave	Mineral sands	Exploration HM grades from 1-22.2% HM; Eucla Basin
2008	VIC	Chewton	Au	Exploration: Inferred resource of 686,000 ozs Au
2008	VIC	Stavely	Cu, Pb, Zn, Ag, Au	Exploration: Inferred resource 47,300 t Cu
2008	QLD	Merlin (Mt Dore)	Mo, Re	Exploration: 13 Mt @ 0.8% Mo, 14g/t Re, 0.2% Cu and 4.8g/t Ag.

GOVERNMENT PROGRAMS

GEOSCIENCE AUSTRALIA

Geoscience Australia continued its \$59 million five-year geoscience program. The new Radiometric Map of Australia was launched and the 5th edition of the Magnetic Anomaly Map of Australia will be released in March 2010. A 380 km seismic and magnetotelluric traverse was completed over the southern Georgina Basin and the eastern Arunta region and interpretation results from the 2007 North Queensland Project were released. Processed AEM data were released for the Paterson Province and Pine Creek Inlier. Sample collection for the National Geochemical Survey of Australia was completed.

NEW SOUTH WALES

The NSW New Frontiers initiative has a budget of \$16.5 million for three years from 2008 to 2011. The initiative includes programs studying areas poorly explored in the past, or under cover, such as the Koonenberry Belt and the Thomson Orogen. Both of these regions have recently received a significant boost in EL applications following the release of high resolution geophysical data and geoscience mapping programs. The 2010 program includes the acquisition of new high resolution geophysics over the south east of the state, which holds exploration opportunities for gold and base metals.

NORTHERN TERRITORY

The BRINGING FORWARD DISCOVERY initiative is a four-year, \$14.4 million program that commenced in 2007–08. It includes extensive regional gravity surveys and field-based geological mapping and prospectivity assessments, with an emphasis on under-explored 'greenfields' regions such as the Arunta region in central Australia. The initiative also provides funding for collaborative drilling with explorers, along with collaborative funding for regional-scale geophysical surveys and improving web-based delivery of information.

QUEENSLAND

The SMART EXPLORATION and SMART MINING – FUTURE PROSPERITY programs with funding of nearly \$50 million from 2005–06 to 2009–10 are providing new data including airborne magnetic and radiometric, gravity, deep seismic, airborne hyperspectral surveys and geological mapping programs. The program includes funds for collaborative drilling with explorers. The CARBON GEOSTORAGE initiative is a \$50 million collaborative program to search for sites for carbon dioxide storage, and the \$5 million COASTAL GEOTHERMAL ENERGY initiative will drill holes to identify areas of high geothermal gradient close to existing transmission lines.

SOUTH AUSTRALIA

The Plan for Accelerating Exploration (PACE) is a seven-year, \$30.9 million initiative to increase exploration and mineral production by ensuring that the South Australia is regarded as a premier destination for resource exploration and development investment. PACE's highly successful collaborative drilling program continued in 2009 and is supplemented by PACE Geochronology, a program designed to date key mineral systems and host rocks identified by exploration companies. PACE also partnered the GOMA frontier drilling program in the north-western Gawler Craton, retrieving new basement information, assay results and HyLogger spectral data.

TASMANIA

2009–10 is the final year of TasExplore, a four-year \$5.05 million program consisting of \$4.1 million for new geoscientific information and \$0.95 million for promotion of exploration opportunities. Aeromagnetic and radiometric data

have been acquired over NE Tasmania and interpretive reports published. Updated geological mapping has been completed in the central North and is now published. 4286 gravity stations have been measured in NE Tasmania and on Flinders Island. Mapping is close to completion in NE Tasmania and on southern King Island. One aim of the project is an upgraded 3D geological model of NE Tasmania.

VICTORIA

The three-year, \$9 million Gold Undercover initiative was completed in 2009. It delivered new geoscience information to help explorers look for gold deposits under the sedimentary cover in northern Victoria. The program aimed to: (a) capture and interpret new data on geophysics, crustal architecture, geochronology, geochemistry, mineralogy and gold deposit models in central and western Victoria; (b) estimate probable undiscovered gold endowment, and (c) improve geological databases and provide better access to geoscience data. Reports and associated data may be downloaded at www.dpi.vic.gov.au/minpet/store. The four-year, \$5 million Rediscover Victoria initiative, comprises: a drilling grant project that reimburses exploration companies a proportion of approved drilling costs, and the 3D Victoria project that will produce a 3D model of the State.

WESTERN AUSTRALIA

In April 2009 the Western Australia Government announced funding of a five-year, \$80 million Exploration Incentive Scheme (EIS) to encourage exploration in Western Australia. Most of the six broad programs under the EIS are focused in under-explored greenfield regions. Major components of the Scheme are the completion of the State's coverage by airborne magnetic surveys at 400 metre or less line spacing, a major expansion of the area covered by gravity surveys, Government co-funding of innovative exploration drilling by companies in under-explored areas, stratigraphic drilling, deep seismic lines, 3D geological mapping, and improving access to Aboriginal land for exploration.

existing Inferred Resource of 44 Moz Ag to measured and indicated status. Intersections reported included 7 m @ 116g/t Ag, 2.8% Pb, including 1 m @ 560g/t Ag, 9.6% Pb; 10 m @ 287g/t Ag, 2.9% Pb, including 4 m @ 566g/t Ag, 0.7% Pb. An upgraded resource estimate of 33.5 Mt @ 53g/t Ag, 0.76% Pb for contained metal of 57.1 Mozs Ag and 254 000 t Pb was subsequently announced.

CBH Resources Ltd reported an upgrade to the resource estimate for the **Rasp** Mine at Broken Hill with contained zinc and lead increasing by 225% due to increased tonnage and grade. Resources at Rasp now total 16.5 Mt @ 6.6% Zn, 5.1% Pb and 89g/t Ag and are a combination of the Western Mineralisation, Centenary Mineralisation, Zinc Lodes and the Main Lode Remnants. An initial Ore Reserve of 3.2 Mt @ 6.0% Zn, 4.6% Pb and 64g/t Ag was announced.

Straits Resources Ltd announced that deep drilling at its **Tritton** copper mine intersected 65.8 m @ 1.11% Cu and 0.2% Zn approximately 150 m below the previous limit of exploration.

Newcrest Mining Ltd upgraded the resource for its **Marsden** prospect to an Indicated and Inferred Resource of 216 Mt @ 0.17g/t Au and 0.33% Cu.

Goldminco Corp continued to explore porphyry copper-gold systems near Temora. Significant intersections included 86 m @ 0.49% Cu, 0.24g/t Au and 35g/t Mo at **Yiddah** and 96 m @ 0.22% Cu, 0.16g/t Au and 0.006% Mo from the **Mandamah** porphyry system.

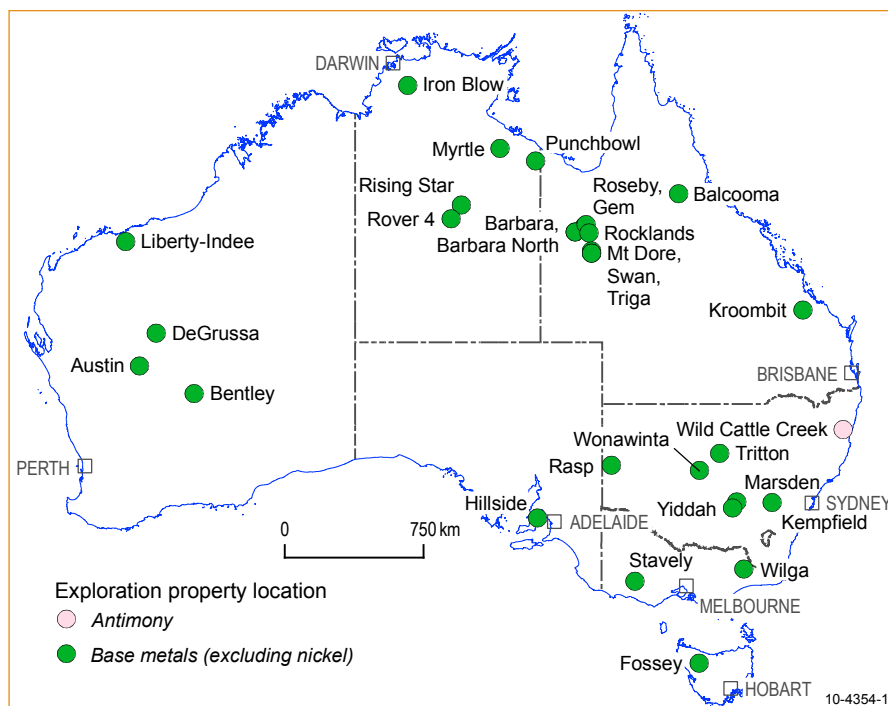


Figure 2: Selected base metal (excluding nickel) exploration projects 2009.

Argent Minerals Ltd continued exploration at its **Kempfield** project. Intersections included 86 m @ 102.8g/t Ag; 88 m @ 48.1g/t Ag, 0.40% Pb, 1.73% Zn, and 48 m @ 133.2g/t Ag including 10 m @ 303.2g/t Ag and 2m @ 618g/t Ag. The company announced a Measured, Indicated and Inferred near surface resource of 2.7 Mt @ 100g/t Ag, 0.4% Pb, 0.7% Zn and 27% barite with an additional Measured, Indicated and Inferred resource below 70 m of 1.9 Mt @ 72g/t Ag, 0.9% Pb, 2.1% Zn and 23% barite.

Northern Territory

Redbank Copper Ltd released initial results from drill holes at the **Punchbowl** prospect in its Redbank project, in the Gulf of Carpentaria region, near the

Queensland border. The holes returned intersections including: 31 m @ 2.5% Cu from 182 m including 10 m @ 4.4% Cu from 202 m; 25 m @ 2.4% Cu from 100 m including 4 m @ 5.3% copper from 110 m and 4 m @ 3.5% copper from 120 m. Redbank subsequently announced increased resources for the project, including Punchbowl, totalling 6.24 Mt @ 1.5% Cu.

Rox Resources Ltd announced the results of drilling to test the open pit potential of the **Myrtle** zinc-lead prospect, 20 km S of the McArthur River mine. Results included 9 m @ 3.44% Zn and 1.28% Pb from 41 m including 2 m @ 5.87% Zn, 2.67% Pb; 10 m @ 3.23% Zn, 1.32% Pb. The company reported that these results indicate near surface mineralisation has a strike length of at least 700 m along the "main zone" of mineralisation.

Adelaide Resources Ltd reported an intersection of 46 m @ 1.24% Cu from **Rover 4**, 70 km SW of Tennant Creek, including 10 m @ 2.31% Cu and 3 m @ 2.73% Cu.

Emmerson Resources Ltd reported an encouraging intersection at the **Rising Star** prospect at Tennant Creek of 1.9 m @ 6.49% Cu from 201.2 m. This mineralisation is hosted in a thick zone of hematite-dolomite-chlorite alteration that contains bornite and chalcopyrite.

Crocodile Gold Inc. reported an intersection of 55.1 m @ 3.2g/t Au, 318g/t Ag, 8.4% Zn, 0.3% Cu and 3.1% Pb from the **Iron Blow** polymetallic deposit 140 km SE of Darwin.

Queensland

CuDeco Ltd reported significant mineralisation throughout the year from drilling at the **Rocklands** project near Cloncurry. Typical intersections reported from the Las Minerale prospect included: 27 m @ 0.60% Cu, 964ppm Co and 0.13g/t Au; 36 m @ 1.41% Cu, 36ppm Co and 0.20g/t Au, and 42 m @ 0.99% Cu, 19ppm Co and 0.16g/t Au.

Ivanhoe Australia Ltd announced that drilling at the **Swan** high-grade copper-gold zone at the Mount Elliott Project, in northwest Queensland, expanded the mineralisation on the zone's eastern and western flanks. Intersections reported included: Eastern Flank 342 m @ 1.21% Cu and 0.80g/t Au and 114 m @ 0.92% Cu and 0.76g/t Au and, from the Western Flank, 102 m @ 0.84% Cu and 0.52g/t Au, 128 m @ 0.82% Cu and 0.48g/t Au, and 135 m @ 1.25% Cu and 0.76g/t Au.

Ivanhoe Australia Ltd also announced a Mineral Resource estimate for **Mount Dore** which resulted in an increase of 35% to a total Identified Resource of 108 Mt @ 0.6% Cu, 0.2% Zn, 0.1g/t Au, 87ppm Co and 6.0g/t Ag. Mount Dore's total contained metal is 610 000 t Cu, 240 000 t Zn, 360 000 ozs Au and 21 Mozs Ag.

Ivanhoe Australia Ltd announced that drilling on the **Triga** prospect, 8km SSE of Lanham's Shaft (See Molybdenum below) on the company's Cloncurry leases returned a significant intersection of copper, gold, and cobalt mineralisation of 46 m @ 1.05% Cu, 0.66g/t Au, 1124ppm Co from 20 m which included 28 m @ 1.41% Cu, 0.46g/t Au, 1421ppm Co from 38 m. Drilling indicates that the zone is open at depth and to the south. The host structure can be traced for over 500 m with strong associated copper, gold and cobalt surface geochemical anomalies.

Universal Resources Ltd completed drilling at the Bedford North, Lady Clayre and Ivy Ann deposits, which are potential sources of sulphide mineralisation for its **Roseby** Project north of Cloncurry. Intersections at Bedford North included 12 m @ 2.21% Cu and 0.50g/t Au from 40 m; 6 m @ 2.64% Cu and 2.26g/t Au from 52 m, and 6 m @ 3.75% Cu and 0.84g/t Au from 18 m. At Ivy Ann results included 4 m @ 4.63% Cu and 0.52g/t Au from 52 m; 30 m @ 0.62% Cu and 0.08g/t Au from 126 m, and 7 m @ 1.08% Cu and 0.18g/t Au from 147 m. Lady Clayre returned 30 m @ 0.5% Cu and 0.2g/t Au from 93 m, 4 m @ 0.59% Cu and 0.03g/t Au from 74 m, and 10 m at 0.68% Cu and 0.66g/t Au from 141 m.

Mt Isa Metals Ltd announced that drilling at the **Barbara North Lode** project, 50 km NE of Mount Isa, returned high-grade intersections including: 7 m @ 3.97% Cu and 0.26g/t Au; 8 m @ 3.25% Cu and 0.32g/t Au, and 6 m @ 4.00% Cu and 0.29g/t Au. The Barbra North Lode is a joint venture between Mt Isa Metals and Syndicated Metals Ltd.

Syndicated Metals Ltd announced results from drilling at the **Barbara** Copper Project, 50 km NE of Mount Isa, which has an Indicated and Inferred Resource in the South Lode of 2.4 Mt @ 1.6% Cu. Intersections reported included: 32 m @ 1.01% Cu including 12 m at 1.5% Cu and 0.1g/t Au; 9 m @ 3.2% Cu and 0.4g/t Au, and 7 m @ 2.3% Cu and 0.15g/t Au. A single infill drill hole returned 13 m @ 3.98% Cu and 0.22g/t Au in a wider zone of 41 m @ 1.91% Cu and 0.12g/t Au;

Kagara Ltd reported results from underground drilling at the **Balcooma** copper deposit. Better results included: 15.9 m @ 7.9% Cu, 16.1 m @ 4.9% Cu and 7.7 m @ 8.1% Cu. This drilling aimed to convert an indicated resource of 1.6 Mt to a reserve.

Argonaut Resources NL announced a maiden resource estimate for the **Kroombit** deposit in Central Queensland. The combined Inferred and Indicated Resources are a zinc resource of 5.2 Mt @ 1.9% Zn and 0.15% Cu for 98 800 t Zn and 7800 t Cu and a copper resource of 0.9 Mt @ 1.0% Cu for 9000 t Cu.

China Yunnan Copper Australia Ltd announced encouraging results from drilling at its **Gem** Prospect at the Cloncurry North Project. Intersections included: 3 m @ 2.36% Cu and 0.40g/t Au; 1 m @ 2.53% Cu and 0.24g/t Au, and 6 m @ 1.10% Cu and 0.28g/t Au. The mineralised zone consist a series of sub-parallel quartz - pyrite - chalcopyrite - pyrrhotite - magnetite vein sets and shears.

South Australia

Rex Minerals Ltd announced that drilling at its **Hillside** Project on the Yorke Peninsula, returned high-grade copper-gold intersections. Drill results reported for the Zanon Fault Zone included 259 m @ 1.7% Cu and 0.4g/t Au which included 26 m @ 4.4% Cu and 0.9g/t Au, and 75 m @ 3.3% Cu and 0.8g/t Au. Later results included drilling on the Songvaar structure which returned intersections including: 71 m @ 1.5% Cu and 0.4g/t Au, which included 29 m @ 2.2% Cu and 0.5g/t Au; 33 m @ 0.7% Cu and 0.9g/t Au, and 28 m @ 1.1% Cu and 0.6g/t Au.

Tasmania

Bass Metals Ltd reported an updated Indicated and Inferred Resource estimate for the **Fossey** Zone of 0.8 Mt @ 9.9% Zn, 5.8% Pb, 0.4% Cu, 137g/t Ag and 2.5g/t Au. These results increased the confidence of the resource estimate with a major shift in tonnages from the Inferred to Indicated classification with 86% of the resource now classified as Indicated.

Victoria

Jabiru Metals Ltd upgraded resource estimates for the **Wilga** and Currawong deposits at Benambra. The upgraded estimate is a combined Indicated and Inferred Resource of 12.5 Mt @ 2.1% Cu, 4.4% Zn, 0.7% Pb and 38g/t Ag, with over 90% in the Indicated Resource category.

Beaconsfield Gold NL (now BCD Resources NL) continued drilling at the **Stavelly** project in western Victoria and reported intersections including 35 m @ 3.7% Cu from 24 m at the Junction 1 prospect. Junction 1 is 3 km south of the Thursdays Gossan prospect which has an Inferred Resource of 10.6 Mt @ 0.45% Cu.

Western Australia

Sandfire Resources NL reported encouraging copper-gold mineralisation from the first diamond drill hole at its **DeGrussa** prospect in the Doolgunna Project, 150 km NE of Meekatharra. Intersections reported include: 6.1 m @ 21.4% Cu, 1.7g/t

Au and 40.1g/t Ag; 17.0 m @ 11.9% Cu, 3.3g/t Au and 34.1g/t Ag, and 8.8 m @ 27.1% Cu, 5.1g/t Au, 60.4g/t Ag. These were in addition to an earlier 10.7 m @ 26.2% Cu and 1.7g/t Au. Other results reported included 41.0 m @ 13.7% Cu, 2.4g/t Au from DeGrussa and 5.1 m @ 15.0% Cu, 3.7g/t Au and 36.2 m @ 9.4% Cu, 3.7g/t Au both from Conductor 1200 m E of Degruessa

Jabiru Metals Ltd announced results from drilling at the **Bentley** Prospect, 50 km NNW of Leonora. Massive sulphide intersections included: 7 m @ 0.4% Cu, 24.1% Zn, 1.1% Pb, 218g/t Ag and 1.2g/t Au and 74 m @ 13.1% Cu, 11.3% Zn, 0.6% Pb, 270g/t Ag and 0.8g/t Au. Other results included: 4.1 m @ 0.5% Cu, 28.2% Zn, 1.6% Pb, 1.1g/t Au and 322g/t Ag; 4.3 m @ 2.8% Cu, 23.3% Zn, 0.3% Pb, 1.7g/t Au and 195g/t Ag and 4.75 m @ 1.6% Cu, 30.4% Zn, 1.4% Pb, 1.3g/t Au and 364g/t Ag. Significant "stringer zone" intercepts adjacent to the massive sulphide zone included: 16.4 m @ 5.6% Cu, 0.9g/t Au, 32g/t Ag and 3.8 m @ 2.6% Cu, 2.2g/t Au and 59g/t Ag. Jabiru announced a revised total Indicated and Inferred Resource for Bentley of 1.7 Mt @ 1.9% Cu, 12.0% Zn, 0.8% Pb, 0.8g/t Au and 148g/t Ag.

Venturex Resources Ltd reported assays of massive sulphides intersected at the Evelyn Prospect, **Liberty-Indee** Project in the Pilbara Region. These assays, which confirmed the high grade of the mineralisation, included: 20 m @ 3.43% Cu, 6.47% Zn, 65g/t Ag, 1.73g/t Au; 17 m @ 4.16% Cu, 8.7% Zn, 66g/t Ag, 1.03g/t Au, and 15 m @ 2.37% Cu, 3.75% Zn, 45g/t Ag, 0.84g/t Au. Venturex announced an Indicated plus Inferred Resource of 0.708 Mt @ 1.9% Cu, 3.6% Zn, 0.3% Pb, 35g/t Ag and 0.8g/t Au.

Silver Swan Group Ltd discovered copper-zinc mineralization in a volcanogenic massive sulfide system at the **Austin** prospect, 60 km SSW of Meekatharra. Drill intersections include 66 m @ 1.5% Cu from 106 m.

GOLD (FIGURE 3)

New South Wales

Alkane Resources Ltd reported encouraging drill intersections from the **McPhillamys** prospect, 35 km SE of Orange, where it is in joint venture with Newmont Australia Ltd. An intersection of 299 m @ 1.09g/t Au from 68m included 207 m @ 1.38g/t Au from 160 m and 30 m @ 3.21g/t Au from 336 m. Another hole returned 135 m @ 1.00g/t Au from 41 m and 69.6 m @ 1.04g/t Au from 225 m.

Cortona Resources Ltd reported more encouraging drill intersections from its Majors Creek Project near Majors Creek. Intersections at the Dargues Reef prospect and at Exeter Farm continued to highlight the potential of the area. At **Dargues Reef** an intersection returned 17 m @ 7.44g/t Au, 5.0g/t Ag and 0.1% Cu. At Exeter Farm, results included 19 m @ 6.62g/t Au, 7.0g/t Ag and 0.13% Cu from 114 m, and 3 m @ 7.3g/t Au from 179 m. Later results from Exeter farm included 7 m @ 4.07g/t Au and 5 m @ 4.88g/t Au. The company will proceed with a Definitive Feasibility Study on the Dargues Reef Main Lode.

Goldminco Corp. announced an increase in mineral resources at the **Discovery Ridge** project near Orange and an initial resource for the nearby Bald Hill porphyry gold deposit. The Discovery Ridge resource estimate increased by 41% to 508 000 ozs Au in a Measured Resource of 4.9 Mt @ 1.3g/t Au and an Inferred Resource of 9.1 Mt @ 1.21g/t Au. The Bald Hill resource, at a 0.3g/t Au cut off grade, is 37.0 Mt @ 0.5g/t Au in the Inferred Resource category. It is open below 200 m depth from the surface and down dip and along strike to the south.

Alkane Resources Ltd extended the timetable for the **Tomingley** Gold Project Definitive Feasibility Study to enable it to maximise the project's

economics and extend mine life by bringing forward the development of underground operations. Global resource for the project now totals 11.41 Mt @ 2.29g/t Au. Significant recent intersections from the Caloma deposit include 39 m @ 6.56 g/t Au from 71 m including 15 m @ 11.9 g/t Au from 72 m and 7 m @ 8.70 g/t Au from 96 m and 21 m @ 5.95g/t Au from 114 m including 12 m @ 9.90g/t Au from 119 m

Northern Territory

Westgold Resources Ltd reported encouraging new drill results from the Western Zone at the **Rover 1** project 80 km SW of Tennant Creek, (adjacent to Adelaide Resources Ltd's Rover 1 project). Intersections reported included: 128 m @ 1.2% Cu, 1.2g/t Au, 2.0g/t Ag, 0.07% Bi, 0.05% Co from 402 m; 13 m @ 3.7% Cu, 0.13g/t Au, 1.6g/t Ag, 0.13% Co from 433 m; and 7 m @ 4.1% Cu, 4.4g/t Au, 7.9g/t Ag, 0.40% Bi, 0.11% Co from 494 m.

Adelaide Resources Ltd reported that a hole drilled at its **Rover 1** prospect near Tennant Creek returned two intervals of high-grade ironstone hosted mineralisation. The first was a copper-rich upper zone which yielded 55 m @ 3.36% Cu that incorporated narrower zones of higher grade including 9 m @ 8.00% Cu. A lower gold-copper zone returned 31 m @ 2.16g/t Au and 2.23% Cu including 2 m @ 23.24g/t Au and 1.87% Cu. Later results included 47 m @ 1.51g/t Au in the alteration zone below the ironstone body. In addition, a newly reported zone of 47 m @ 1.51g/t Au includes 1 m @ 15.9g/t Au and 1 m @ 21.1g/t Au.

Excalibur Mining Ltd reported high-grade gold intersections from the **Juno** project, which is testing up-dip extensions of the historical Juno gold mine near Tennant Creek. These included 13 m @ 42.84g/t Au from 160 m, including 5 m @ 102.38g/t Au, 14 m @ 1.24% Cu from 236 m and 5 m @ 23.78g/t Au from 191 m.

Emmerson Resources Ltd reported encouraging drill results from the **Pinnacles North** prospect at Tennant Creek where an intersection of 2 m @ 50.6g/t Au at was recorded.

Queensland

At the **Cracow** gold mine near Theodore, drilling on the Kilkenny prospect produced significant intersections including 12.8 m @ 14.18g/t Au which included 2 m @ 79.4g/t Au. Newcrest Mining Ltd has 70% of the project and is the project manager and Lion Selection Ltd holds 30%.

Drummond Gold Ltd announced high-grade intersections from its first diamond drill hole at **East Hill** at the Yandan Gold Project 45 km W of Mt Coolon. Intersections reported included: 13 m @ 5.91g/t Au which included 3 m @ 20.92g/t Au; 2 m @ 9.96g/t Au and 1.9 m @ 48.12g/t Au. A preliminary resource estimate for East Hill is an Inferred Resource of 4.1 Mt @ 2.4g/t Au for 308 000 ozs Au.

Kagara Ltd announced a significant upgrade of the gold resource at **Mungana**, near Chillagoe, to 16.8 Mt @ 1.29g/t Au, 0.22% Cu, 0.33% Pb, 0.55% Zn and 19g/t Ag at a 0.5g/t Au cut off. This resource is within a larger gold resource of 45.9 Mt @ 0.76g/t Au. Kagara's resource at the nearby Red Dome deposit also increased to 45 Mt @ 1.0g/t Au, 0.3% Cu and 8g/t Ag.

Republic Gold Ltd announced results from drilling at the **Terrace Creek** Prospect, in the Tregoora project in Far North Queensland. Intersections included 56 m @ 1.62g/t Au, which included 8 m @ 6.85g/t Au. Republic released an increased total resource estimate for the Tregoora project of 4.5 Mt @ 1.6g/t Au for a contained 0.23 Mozs Au.

The combined Indicated and Inferred Resource at Renison Consolidated Mines NL's **Agate Creek** epithermal gold project is 14.8 Mt @ 1.0g/t Au, at a 0.3g/t Au cut off. Regional mapping within the area has resulted in the identification of new prospects where rock chip sampling returned up to 357g/t Au from the Phoenix Prospect; up to 2510g/t Ag, 5.58% Cu, 3.4% Pb and 5.94% Zn from the Moon Beam Prospect, and up to 7.77g/t Au from the Will Scarlet Prospect.

South Australia

Southern Gold Ltd's drilling at its **Golf Bore** prospect, 40 km NE of the Challenger Gold Mine extended down plunge gold mineralised shoots. In the Central Zone intersections reported included 33 m @ 1.10g/t Au, including 5 m @ 2.13g/t Au and 9 m @ 2.26g/t Au; 27 m @ 1.15g/t Au and 17 m @ 1.00g/t Au. In the South Zone intersections included: 13 m @ 1.01g/t Au from 82 m (including 4 m at 2.08g/t Au (from 82 m) and 19 m @ 1.04g/t Au from 112 m (including 6 m at 2.00g/t Au from 117 m).

Tasmania

Bendigo Mining Ltd reported an extension to mineralisation at the **Henty** Gold Mine with drill intersections including 9.1 m @ 11.8g/t Au, 3.5 m @ 34.5g/t Au and 3.0 m @ 8.7g/t Au. These were beneath the previously mined Darwin South Zone. The discovery consists of three pods of mineralisation, two of which are the continuation of the Darwin South orebody, and the third lies further into the hanging wall and offers significant size potential.

Victoria

GBM Resources Ltd announced 76% increase to bring resources in its **Leven Star** deposit at the Malmsbury project, to an Inferred Resource of 104 000ozs Au. The deposit is reported to be open along strike and at depth with a current resource of 0.8 Mt @ 4.0g/t Au at a 2.5g/t Au cut-off grade.

Northgate Minerals Corp continued near-mine exploration at the **Fosterville** and **Stawell** gold mines. At Fosterville, drilling confirmed that gold mineralisation on the currently mined Phoenix fault system continues laterally and down plunge, with intersections including 6.7 m @ 10.1g/t Au. At 30 June, Fosterville had 564 000ozs of contained gold in ore reserves and 1 967 000ozs of contained gold in Measured, Indicated and Inferred Resources. At the Stawell mine, an additional 93 000ozs of ore reserves and 130 000ozs of resources were delineated in 2009. At 30 June, the Stawell mine had 313 000ozs of contained gold in ore reserves and 435 000ozs of contained gold in Indicated and Inferred Resources.

At the **Kangaroo Flat** mine at Bendigo, Bendigo Mining Ltd identified a sub-vertical zone of auriferous quartz veining cross-cutting predominant structures. The zone is 10-15 m long, 3-5 m wide and more than 170 m high, with intersections including 3.7 m @ 105g/t Au and 5.0 m @ 10g/t Au.

Synergy Metals Ltd announced an Inferred Resource of 338 000 t @ 7g/t Au and 11g/t Ag at the **Glen Wills** project, and a further 112 000 t @ 2.6g/t Au in tailings at Glen Wills and 76 000 t @ 7g/t Au at the adjacent Sunnyside prospect.

Western Australia

Intrepid Mines Ltd announced that deep drill at the **Paulsens** mine identified a down plunge high-grade component to the Voyager mineralisation. Drill intersections reported included 4 m @ 44.2g/t Au, 2.9 m @ 53.6g/t Au and 3 m @ 36.8g/t Au. Updated resource estimates for Voyager are: Indicated Resources of 204 000 t @ 13.7g/t Au for 89 700 ozs Au and Inferred Resources of 110 000 t @ 11g/t Au for a contained 39 000ozs Au.

Beacon Minerals Ltd announced that drilling at the Halleys West Zone at the **Barlee** Project included: 14 m @

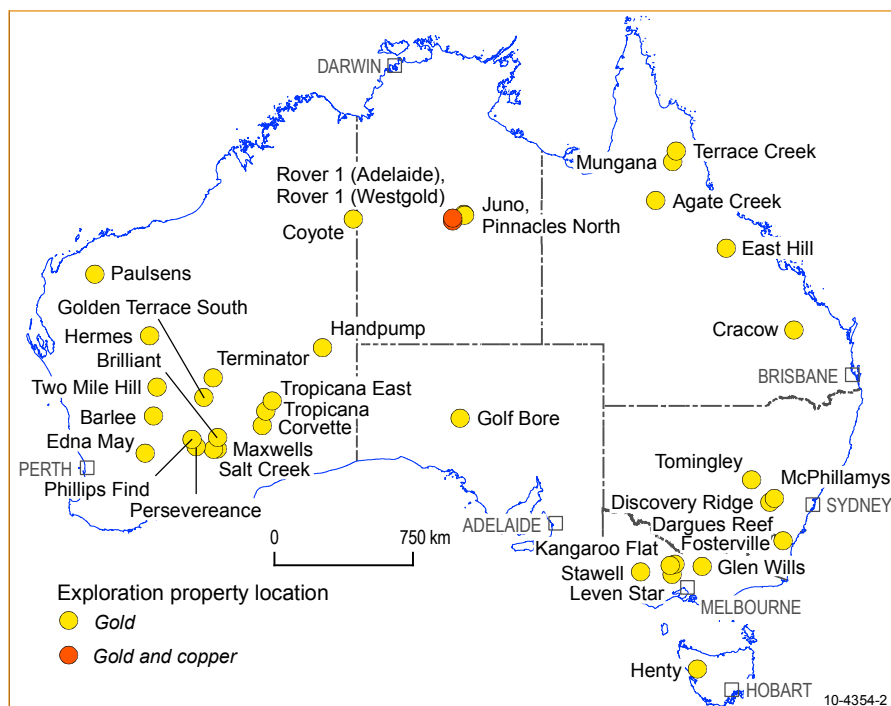


Figure 3: Selected gold exploration projects 2009.

45.32 g/t Au, 6 m @ 6.16 g/t Au, and 2 m @ 5.39 g/t Au. Beacon subsequently announced a resource estimate for the Barlee project of an Inferred Resource of 384 000 t @ 6.0g/t Au for 74 000ozs Au not including the Halleys West mineralisation.

Integra Mining Ltd reported high grade gold intersections from the **Maxwells** deposit in its Randalls Project, 60 km SE of Kalgoorlie. These included: 4.2 m @ 43.22g/t Au which included 1.3 m @ 123g/t Au; 12.4 m @ 19.89g/t Au which included 6.7 m @ 31.92g/t Au, and 9.77 m @ 34.07g/t Au including 6.1 m @ 53.11g/t Au. Also at the Randalls project, Integra announced high grade gold intersections from the **Salt Creek** deposit. These included: 5 m @ 129g/t Au which included 1 m @ 627g/t Au; 26 m @ 2.13g/t Au, including 1 m @ 19.55g/t Au, and 56.45 m @ 5.63g/t Au including 7.15 m @ 16.47g/t Au.

Corvette Resources Ltd reported encouraging assay results from the drilling at the **Corvette** Prospect, 60 km S of Tropicana in the Albany Fraser Belt. Drilling identified two new high grade zones on the Corvette Prospect at Mustang and Camaro. At Mustang it reported 3 m @ 4.6g/t Au from 125 m depth which included 2 m @ 6.7g/t Au. At the Camaro zone it reported 3 m @ 3.0g/t Au from 66 m including 2 m @ 4.3g/t Au. Subsequently, Corvette reported a high-grade gold intersection at Camaro of 3 m @ 40.33g/t Au from 97 m. The gold intersections are within potassic altered quartzo-feldspathic gneiss with anomalous bismuth and tellurium, similar to the host rocks at Tropicana.

Independence Group NL and its partner AngloGold Ashanti announced an increase in the **Tropicana** open-cut resource, 230 km ESE of Laverton, from 4.05 Mozs Au to 5.01 Mozs made up of: Measured Resource of 19.9 Mt @ 2.38g/t Au for 1.53 Mozs Au, Indicated Resource of 31.0 Mt @ 2.06g/t Au for 2.01 Mozs Au and an Inferred Resource of 24.3 Mt @ 1.83g/t Au for 1.43 Mozs Au for a total of 75.3 Mt @ 2.07g/t Au for 5.01Mozs Au. Following a positive Pre-feasibility Study the Tropicana Joint Venture approved the start of a Bankable Feasibility Study which will focus on a detailed assessment of owner and contract mining options and on optimising capital and operating costs.

Focus Minerals Ltd announced high-grade gold intersections from drilling at its Coolgardie Gold Project where, at the **Perseverance** deposit, intersections

including 5.41 m @ 33.03g/t Au, 3.99 m @ 11.62g/t Au and 1.45 m @ 11.89g/t Au were reported.

Troy Resources NL announced that drilling at **Two Mile Hill**, near Sandstone, better delineated tonalite hosted gold mineralisation discovered in 2008 and identified higher grade gold mineralisation hosted in a banded iron formation. Gold intersections in the banded iron formation mineralisation included: 6.8 m @ 15.73g/t Au from 215.0 m downhole which included 3.4 m @ 30.36g/t Au and 25.9 m @ 16.56g/t Au. Subsequent drilling of the banded iron formation mineralisation returned intersections including: 8.5 m @ 49.59g/t Au, 4.75 m @ 11.16g/t Au and 2 m @ 9.1g/t Au. Tonalite hosted gold intercepts included: 96.6 m @ 1.66g/t Au, 205.5 m @ 1.14g/t Au and 156.3 m @ 1.14g/t Au. Later drilling returned 1 m @ 21.15g/t Au.

Barra Resources Ltd reported intersecting high-grade gold mineralisation in drilling at its **Phillips Find** Project, 50 km NNW of Coolgardie. Intersections included 14.0 m @ 5.75g/t Au from 44 m which included 7.0 m @ 10.84g/t Au.

Tanami Gold NL reported diamond drill intersections from its **Coyote** underground exploration programme confirmed the high grade nature of the South Zone mineralisation at the Coyote mine. Intersections with visible gold returned assays including: 0.3 m @ 2379g/t Au, 0.4 m @ 243.1g/t Au and 0.3 m @ 103.6g/t Au. Additional drilling of the Bommie vein system also returned intersections with visible gold at the expected target depths.

Carrick Gold Ltd reported an upgraded resource estimate for its **Brilliant** Prospect, 90 km ENE of Kalgoorlie. Indicated and Inferred Resources for Brilliant are now: Indicated 2.5 Mt @ 2.1g/t Au for 168 000ozs Au; Inferred 10.3 Mt @ 2g/t Au for 645 800ozs Au.

South Boulder Mines Ltd announced that drilling at the **Terminator** Prospect, 120 km NNW of Laverton, returned gold grades of up to 22.10g/t Au over 2m. In addition, intersections reported included: 64 m @ 1.24g/t Au from surface; 28 m @ 2.68g/t Au from 52 m and 6 m @ 7.84g/t Au from 48 m, including 2 m @ 22.10g/t Au from 52 m.

At its **Hermes** project, 60 km SW of the Plutonic Gold Mine, Alchemy Resources Ltd reported shallow high-grade gold mineralisation in drilling. Results included 5 m @ 6.4g/t Au from 3 m and 15 m @ 3.2g/t Au from 34 m. Drilling earlier in the year identified two new high-grade zones of gold mineralisation from which better results were 5 m @ 34.0g/t Au from 34 m (including 1 m @ 118.2g/t Au) and 8m @ 10.3g/t Au from 156 m (including 1m @ 64.9 g/t Au). Late in the year intersections reported included 19 m @ 10.78g/t Au, 29 m @ 2.26g/t Au and 9 m @ 4.46g/t Au.

Beadell Resources Ltd announced the discovery of a saprolite gold anomaly at its Neale Prospect in the **Tropicana East** project, immediately north of the AngloGold- Ashanti and Independence Group Joint Venture Tropicana tenements. Aircore drill samples returned values of 674ppb Au (0.67g/t) and 312ppb Au (0.31g/t) from separate holes in the southern part of the tenement. The company also announced new gold anomalies at Hercules and Pleiades in the project area.

Beadell Resources Ltd also announced that drilling at its **Handpump** prospect in the West Musgrave region in Western Australia near the border with South Australia, intersected significant gold mineralisation in rhyolitic breccia. An intersection of 65 m @ 0.83g/t Au from 10 m depth included a high grade zone of 5 m @ 5.1g/t Au from 35 m depth within a zone of 15 m @ 2.3g/t Au from a depth of 30 m. The company commented that these results represent the first economic gold intersection in the Musgraves.

Pacrim Energy Ltd reported encouraging intersections from **Golden Terrace South**, 50 km NE of Leonora, including 69 m @ 5.03g/t Au, that included 15 m @ 10.05g/t Au and 35 m @ 5.48g/t Au. Another hole returned 60 m @ 2.28g/t Au that included 15 m @ 5.63g/t Au and 5 m @ 4.33g/t. Golden Terrace South has an Indicated Resource of 113 000 t @ 3.7g/t Au and an Inferred Resource of 302 000 t @ 3.2g/t Au.

Catalpa Resources Ltd reported drill intersections from its **Edna May** project near Westonia that contributed to increased resource estimates for the Edna May and Greenfinch deposits being reported. Intersections from Greenfinch included: 27 m @ 5.3g/t Au from 80 m, 2 m @ 21.83g/t Au from 19 m, and 3 m @ 7.23g/t Au from 1 m. At Edna May intersections included of 53.4 m @ 3.02g/t Au from 182.9 m and 12.0 m @ 2.43g/t Au from 45 m. Catalpa reported a total resource for the project to a depth of 300 m of 1.66 Mozs Au with an ore reserve of 0.954 Mozs Au.

IRON ORE (FIGURE 4)

New South Wales

Carpentaria Exploration Ltd announced initial drilling results from its **Hawsons** magnetite project 60 km SW of Broken Hill. They include 115 m with a Davis Tube Recovery concentrate grade of 69.8% Fe and an 18% recovery by weight.

Northern Territory

Western Desert Resources Ltd announced significant iron intersections from drilling in Area F of the **Roper Bar** project. They included: 7 m @ 64.3% Fe,

<0.01% P, 4.0% SiO₂, 2.1% Al₂O₃ and 1.4% LOI; 9 m @ 62.7% Fe, <0.01% P, 4.3% SiO₂, 2.0% Al₂O₃ and 3.6% LOI, and 7 m @ 66.2% Fe, <0.01% P, 3.1% SiO₂, 1.2% Al₂O₃ and 0.7% LOI. Late in the year, the company announced an Inferred Resource for Area F East of 14.2 Mt @ 49.5% Fe, 22.0% SiO₂, 3.2% Al₂O₃, 0.01% P and 2.5% LOI, including a high-grade zone of 7.3 Mt @ 59.3% Fe, 8.9% SiO₂, 2.8% Al₂O₃, 0.01% P and 2.2% LOI. A resource of 12.3 Mt @ 44.0% Fe, 24.6% SiO₂, 1.8% Al₂O₃, 0.01% P and 8.8% LOI was reported for hematitic ore in Area E East

South Australia

Iron Road Ltd reported that drilling at its **Warrambo** project returned intersections including: 46 m @ 24.9% Fe, 12 m @ 23.0% Fe, 34 m @ 21.3% Fe, and 4 m @ 21.6% Fe. Metallurgical work indicated high quality concentrates averaging 70.1% Fe could be produced. The company reported an initial Inferred Resource of 110.5 Mt @ 19.4% Fe, 50.0% SiO₂, 11.4% Al₂O₃, 0.09% P, 2.5% LOI for Warrambo.

IMX Resources Ltd reported results from drilling at the **Cairn Hill** mine, SE of Coober Pedy aimed at locating mineralisation outside its current resources. All holes intersected visible massive magnetite with copper mineralisation. Intersections included: 3 m 0.18% Cu, 0.43g/t Au, 11.52% Fe; 4 m @ 0.24% Cu, 0.05g/t Au, 44.12% Fe; 49 m @ 0.14% Cu, 0.02g/t Au, 54.81% Fe, and 3 m @ 0.05% Cu, 0.01g/t Au 57.98% Fe. IMX announced that it had received a shipping licence to export Cairn Hill magnetite ore through Port Adelaide.

IronClad Mining Ltd announced drill results for its **Weednanna** Prospect in the Wilcherry Hill Project. The results, which extended the area of shallow Direct Shipping Ore, included: 28 m @ 61.5% Fe, 6.5% SiO₂, 2.15% Al₂O₃, 0.011% P and 1.3% LOI from 20 m; 18 m @ 62.2% Fe, 4.2% SiO₂, 1.8% Al₂O₃, 0.035% P and 3.0% LOI from 26 m, and 16 m @ 62.3% Fe, 6.5% SiO₂, 1.2% Al₂O₃, 0.009% P and 0.1% LOI from 44 m.

Tasmania

Grange Resources Ltd announced that additional magnetite lenses at its **Savage River** mine were discovered using ground magnetics and a preliminary exploration drilling program has confirmed the potential for additional high grade lenses. The deposits are part of a series of discontinuous lenses that extend in a narrow belt for 25 km. The company announced a resource for the first lens of: Indicated Resources of 2.3 Mt which yields a Davis Tube Recovery grade of 64% Fe and an Inferred Resource of 1.2 Mt which yields a Davis Tube Recovery grade of 61% Fe.

Western Australia

The Fortescue Metals Group announced an increase in the iron ore resources at the **Firetail** prospect in its Solomon group. The new estimate of Indicated and Inferred Resources is 300 Mt @ 58.4% Fe, 6.37% SiO₂, 3.01% Al₂O₃, 0.114% P and 6.67% LOI more than double the previous estimate. Of the total, 120 Mt are Indicated Resources and 180 Mt are Inferred. It is predominantly bedded Brockman type ore. The Solomon Hub Resource was reported as 2.4 billion tonnes (Bt) @ 56.4% Fe, 6.9% SiO₂, 3.3% Al₂O₃, 0.08% P and 8.4% LOI.

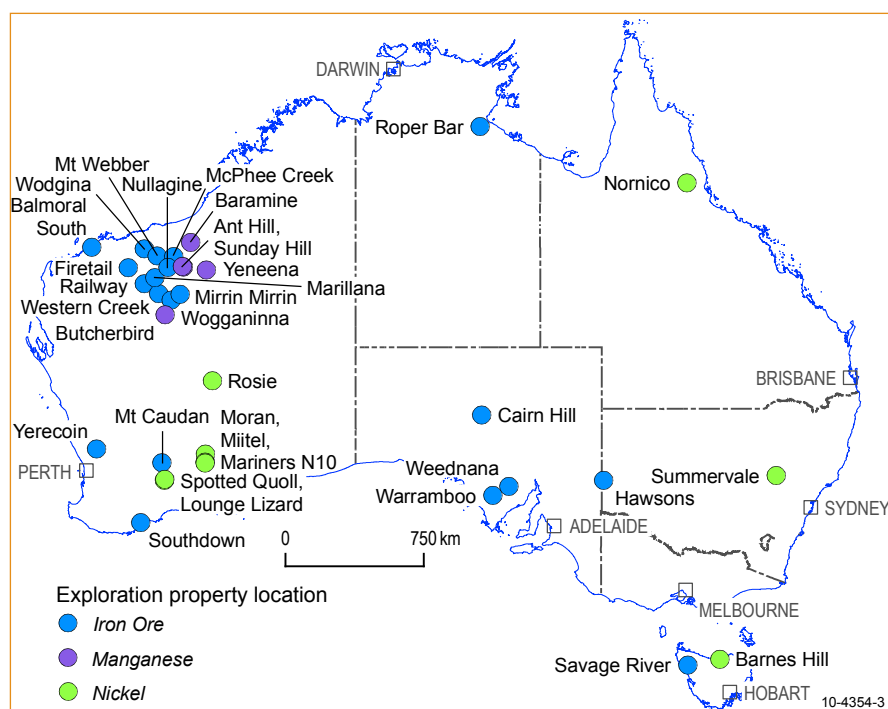


Figure 4: Selected iron ore, manganese and nickel exploration projects 2009.

Atlas Iron Ltd reported drilling results from its **Wodgina** Project, 100 km S of Port Hedland. They included: 68 m @ 60.01% Fe, 0.08% P, 4.15% SiO₂, 1.01% Al₂O₃, 8.23% LOI from surface; 46 m @ 60.61% Fe, 0.03% P 3.11% SiO₂, 0.63% Al₂O₃, 8.01% LOI from 18 m; and 26 m @ 60.6% Fe, 0.05% P, 3.7% SiO₂, 1.85% Al₂O₃, 7.27% LOI from surface.

United Minerals Corporation NL advised that drilling at its **Railway** project adjacent to the BHP Billiton Area C Mining Lease returned a vertical intersection of 147.8 m of high-grade Marra Mamba Iron Formation mineralisation. This intersection, from 41.5 m depth yielded 147.78 m @ 61.1% Fe, 2.53% SiO₂, 2.58% Al₂O₃, 0.072% P, and 6.68% LOI in detrital and bedded mineralisation. Within the bedded mineralisation an intersection of 122.28 m @ 62.0% Fe, 2.13% SiO₂, 1.88% Al₂O₃, 0.073% P and 8.08% LOI was reported. The company reported an Indicated plus Inferred Resource of 158.1 Mt @ 58.03% Fe, 5.07% SiO₂, 3.42% Al₂O₃, 0.063% P and 8.02% LOI.

Warwick Resources Ltd announced encouraging intersections of Marra Mamba Iron Formation mineralisation from drilling at its **Western Creek** iron ore project, 20 km W of Newman. Results included an intersection of 73 m @ 55.9% Fe indicating that the iron mineralisation extends to twice the depth previously recognised. The mineralisation remains open to the south beneath surficial overburden and good intersections from the western-most drilling included: 32 m @ 58.1% Fe, 19 m @ 55.3% Fe and 14 m @ 60.0% Fe.

Brockman Resources Ltd reported a 74% increase in resources at its **Marillana** Iron Ore Project in the Pilbara region. The total Indicated Resource rose to 605 Mt, comprising 551 Mt of beneficiation feed hematite detrital mineralisation (59-60% Fe grade after beneficiation) and 54.2 Mt of Direct Shipping Channel Iron Deposit mineralisation (57.4% Fe grade). In addition, Brockman reported Inferred Resources of beneficiation feed ore of 773 Mt @ 42.2% Fe and an Inferred Resource of 13.6 Mt @ 56.1% Fe of Direct Shipping Channel Iron Deposit ore.

Giralia Resources NL reported encouraging drill results from the **Yerecoin** magnetite project 10 km E of New Norcia. Surface sampling returned average grades of over 40% Fe and an initial drilling program returned intersections including: 72 m @ 32.4% Fe, 52.4 m @ 31.6% Fe, and 36.8 m @ 30.5% Fe. The company also reported that Davis Tube Recovery and grind optimisation tests showed that the Yerecoin magnetite has favourable magnetic separation characteristics and is likely to yield a premium product with concentrate grades in excess of 71% Fe, with very low silica (<1% SiO₂), at a grind size generally coarser than other magnetite projects.

Grange Resources Ltd announced an increase in the in situ mineral resource at the **Southdown** magnetite project located 90 km NE of Albany.

From a resource of 479 Mt @ 37.3% in 2006 the resource has grown to 654.4 Mt @ 36.5% Fe.

Giralia Resources NL reported results from drilling at the **Mt Webber** prospect, in its Daltons Joint Venture (Giralia 75%, Haoma Mining NL 25%), located 150 km S of Port Hedland. Drilling returned intersections including: 16 m @ 58.5% Fe, 34 m @ 55.2% Fe, and 16 m @ 56.1% Fe. Other intersections reported during the year included 50 m @ 59.6% Fe, 1.4% Al_2O_3 ; 32 m @ 58.4% Fe, 1.7% Al_2O_3 from 2 m depth, and 82 m @ 55.1% Fe from surface. An initial Inferred Resource for Mt Webber of 40.0 Mt @ 57.3% Fe (62.3% CaFe) and 1.42% Al_2O_3 included a higher grade zone of 24.6 Mt @ 59.0% Fe (64.2% CaFe) and 1.33% Al_2O_3 .

Australasian Resources Ltd announced a 44% increase in resources at the **Balmoral South** magnetite project to 1605 Mt which includes a Probable Ore Reserve of 859 Mt an increase of 26%. The company reported that it had received approval for construction and operation of the project from the Federal Environment Minister Project. Balmoral South is located some 90 km SE of Onslow.

Warwick Resources Ltd announced results from drilling at Wishbone prospect, part of its **Woggaginna** project, 55 km SE of Newman. The intersections included: 32 m @ 58.84% Fe, 5.20% SiO_2 , 3.21% Al_2O_3 , 0.04% P, 6.94% LOI from 8 m depth; 36 m @ 60.40% Fe, 3.71% SiO_2 , 1.80% Al_2O_3 , 0.56% P, 7.72% LOI from 14 m, and 26 m @ 58.11% Fe, 4.78% SiO_2 , 1.92% Al_2O_3 , 0.112% P, 8.30% LOI from 6 m. Later drilling returned intersections including: 42 m @ 60.1% Fe from 44 m depth; 36 m @ 59.3% Fe from 34 m, and 34 m @ 59.2% Fe from 24 m depth.

FerrAus Ltd continued exploration of its leases in the East Pilbara region aimed at increasing the level of resources. Included was drilling on the **Mirrin Mirrin** prospect targeting mineralisation in the Marra Mamba Iron Formation in the Davidson creek project area. Intersections included 34 m @ 58.31% Fe from a depth of 104 m. Resources of direct shipping iron ore in the company's East Pilbara prospects were increased during the year to 166.6 Mt @ 58.6% Fe.

Giralia Resources NL reported confirmed of a hematite discovery at the **McPhee Creek** prospect, 220 km SE of Port Hedland. Significant intersections reported included: 90 m @ 58.6% Fe, 0.13% P, 3.9% SiO_2 , 1.7% Al_2O_3 , 10.0% LOI; 62 m @ 57.3% Fe, 0.16% P, 6.6% SiO_2 , 2.4% Al_2O_3 , 9.22% LOI, and 42 m @ 60.1% Fe, 0.09% P, 4.1% SiO_2 , 2.2% Al_2O_3 , 7.87% LOI.

BC Iron Ltd reported that the first phase of trial mining at the Company's **Nullagine** Iron Ore project near Nullagine, supported the key technical assumptions from the Nullagine Project Feasibility Study. During trial mining over 65 000 t of ore was mined and hauled from the east end of the Outcamp deposit. The company later announced that the trial mining confirmed the findings of the project feasibility study. These findings, led the company's partner, Fortescue Metals Group, to endorse the decision to obtain final approvals and commence construction at Nullagine.

Cazaly Resources Ltd announced a 20% increase in the mineral resource estimate for its Parker Range Iron Project 15km SE of Marvel Loch. The update followed drilling to increase the status and confidence in the resource for the **Mount Caudan** deposit. The deposit is made up of a goethite-hematite Banded Iron Formation and secondary Canga. It has low levels of contaminants particularly phosphorous. The resource estimates for Mt Caudan are: Canga 4.263 Mt @ 51.0 % Fe, 8.6% Al_2O_3 , 0.01% P, 10.1% SiO_2 6.6% LOI, and Oxide ore 36.114 Mt @ 54.1% Fe, 8 0% Al_2O_3 , 0.02% P, 7.9% SiO_2 , 9.2% LOI.

MANGANESE (FIGURE 4)

Montezuma Mining Co Ltd announced that Auvex Resources and Hitec Energy reported drill results from the Ant Hill and Sunday Hill Projects, 55 km ESE of Nullagine. At **Ant Hill**, intersections included: 5 m @ 37.44% Mn, 15.95% Fe and 6.79% SiO_2 ; 9 m @ 41.13% Mn, 15.05% Fe and 3.49% SiO_2 , and 10 m @ 38.69% Mn, 18.37% Fe, and 5.11% SiO_2 . Intersections from **Sunday Hill** were 6 m @ 35.44% Mn; 5 m @ 44.40% Mn, and 5 m @ 35.92% Mn. Subsequently an Indicated and Inferred Resource estimate released for Ant Hill was 4.911Mt @ 20.3% Mn and 25.4% Fe using a 15% Mn cut-off. At Sunday Hill there is an additional 4.7 Mt @ 18.4% Mn also using a 15% Mn cut-off. Mining at Ant Hill commenced and Auvex advised that the first shipment, 24 000 t, of manganese lump left Western Australia in October for China. Production is expected to reach the targeted rate of 0.3 Mtpa in early 2010.

Montezuma Mining Co Ltd reported rock chip samples with grades up to 44.4% Mn were recovered from the **Butcher Bird** prospect 120 km S of Newman. The 33 rock chip samples from a strike length of approximately 8 km yielded up to 44.4% Mn with 4.3% Fe.

Shaw River Resources Ltd announced encouraging results from rock chip sampling of manganese mineralisation at the **Baramine** Project, 250 km E of Port Hedland. Higher-grade results included: 10 m @ 50.3% Mn, 11 m @ 46.4% Mn, 3 m @ 51.5% Mn and 24 m @ 38.7% Mn. The first drilling at Baramine returned 45 manganese intersections between 15% and 38.7% Mn in 16 of the 61 holes. The company noted that the geological setting for this mineralisation is similar to that at the Woodie Woodie Manganese Mine 80 km SE of Baramine.

Encounter Resources Ltd announced that the re-analysis of samples from previous drilling at the **Yeneena** project, 70 km SE of the Woodie Woodie manganese mine, identified potentially significant manganese mineralisation. High-grade, near surface intersections identified were 2 m @ 26% MnO from 25 m; 1 m @ 36% MnO from 26 m, and 3 m @ 20% MnO from 21 m. They are located at the southern end of a 14 km long gravity anomaly to the west of and parallel to McKay Fault.

MINERAL SANDS (FIGURE 5)

South Australia

Iluka Resources Ltd reported that the **Jacinth-Ambrosia** project, in the Eucla Basin, produced its first heavy mineral concentrate. This brings into production a long life, zircon rich mineral sands mine. The Jacinth and Ambrosia deposits were discovered by Iluka in the second half of 2004.

Victoria

Astron Ltd received government approval to commence mining the **Donald** deposit in western Victoria. The operation will produce 285 000 t per year of non-magnetic concentrate and 110 000 t annually of magnetic concentrate from 7.5 Mt of ore.

Western Australia

Infill drilling on the **Atlas** resource at Image Resources NL's Cooljarloo project confirmed the shallow depth and continuity of mineralisation and grade over a strike length of 1 km in the central part of the resource. Significant results included: 9 m @ 11.1% heavy minerals (HM) from 2 m; 4 m @ 13.4% HM from 1 m, and 3 m @ 21.5% HM from 3 m. The Atlas resource is an Indicated Resource of 1.9 Mt @ 4.9% HM (2.5% HM cut off) and an Inferred Resource of 9.7 Mt @ 5.8% HM (2.5% HM cut off) containing a total of 660 000 t of HM.

Image Resources NL completed an extensive drilling programme at the **Serpentine Lakes** prospect in the Eucla Basin. Significant intersections reported include: 17 m @ 4.4% HM from 13 m, including 3 m @ 10.7% HM from 18 m; 10 m @ 5.3% HM from 12 m, including 2 m @ 10.2% HM from 19 m; and 8 m @ 5.0% HM from 26 m, including 2 m @ 12.4% HM from 28m.

Diatreme Resources Ltd announced a 50% increase in the resource estimate for its **Cyclone** deposit. The estimated total resource for Cyclone is: 98.4 Mt @ 2.88% HM containing 2.8 Mt HM. This resource is classified as Measured (11.5 Mt @ 3.44% HM), Indicated (84.4 Mt @ 2.82% HM) and Inferred (2.5 Mt @ 2.38% HM).

MOLYBDENUM (FIGURE 5)

Queensland

Ivanhoe Australia Ltd announced an independent Mineral Resource estimate for the **Merlin** molybdenum and rhenium deposit, part of its Mount Dore project, northwest Queensland. Resources reported at a 0.3% Mo cut-off were: Indicated Resources of 5.2 Mt @ 1.0% Mo, 16g/t Re, 0.2% Cu, 4g/t Ag for a contained 52 000 t Mo and 83 000 kg Re, and an Inferred Resource of 3.5 Mt @ 0.8% Mo, 14g/t Re, 0.3% Cu, 4g/t Ag for a contained 28 000 t Mo and 49 000 kg Re.

Ivanhoe Australia Ltd announced that further drilling in the Cloncurry tenements resulted in additional high-grade intersections. In the southern area of Merlin new high-grade mineralisation at **Little Wizard** was identified with intersections of 1.4 m @ 9.3% Mo, 103g/t Re; 1.8 m @ 12.9% Mo, 178g/t Re, and 4.3 m @ 15.0% Mo, 188g/t Re. The company reported an Inferred Resource

for Little Wizard of 15 000 t @ 13% Mo, 160g/t Re, 1.7%Cu and 0.8g/t Au. This mineralisation appears to be the up-dip extension to the Merlin mineralisation.

Drilling at **Lanham's Shaft**, NNE of Merlin, by Ivanhoe Australia Ltd discovered and extended high-grade molybdenite mineralisation hosted in calc-silicates and carbonaceous metapelites. Intersections reported included: 4 m @ 8.5% Mo, 14.3g/t Re; 11 m @ 0.12% Mo, 0.40g/t Re, and 9 m @ 0.31% Mo, 5.32g/t Re.

Aussie Q Resource Ltd announced an initial mineral resource for the Gordon's molybdenum-copper prospect of 3 Mt @ 0.051% Mo, 0.07% Cu and 1g/t Ag. Gordons is part of the **Whitewash** Molybdenum-Copper Project, near Monto which, including the Gordons' resource has a total resource of 71.5 Mt @ 0.034% Mo, 0.1% Cu and 1.2g/t Ag containing over 24 000 t of molybdenum, over 70 000 t of copper and 2.6 Moz of silver. Drilling at Whitewash South returned encouraging intersections including 39 m @ 232ppm Mo, 0.23% Cu and 2.6g/t Ag and 78 m @ 0.2% Cu, 157ppm Mo and 2.0g/t Ag.

NICKEL (FIGURE 4)

New South Wales

Jervois Mining Ltd announced the initial drilling results for its **Summervale** nickel-cobalt laterite project 25 km NW of Nyngan. They include: 13 m @ 1.41% Ni and 0.083% Co and 10 m @ 0.922% Ni and 0.034% Co including 5 m @ 1.145% Ni and 0.038% Co.

Queensland

An initial resource was announced by Metallica Minerals Ltd for the Kokomo nickel-cobalt deposit located in their **NORNICO** project, NW of Townsville. Combined with resources for the Bell Creek and Minnamoolka deposits, the new resource has increased NORNICO's total resource to 50.8 Mt @ 0.72% Ni and 0.06% Co. Kokomo has an

Inferred and Indicated Resource of 12.2 Mt @ 0.67% Ni and 0.12% Co. Of this resource, 5.2 Mt @ 0.69% Ni and 0.13 % Co is classified as Indicated with 7.0 Mt @ 0.66% Ni and 0.11 % Co as Inferred.

Tasmania

Proto Resources & Investments Ltd reported results from drilling at the **Barnes Hill** deposit, 10 km NW of Launceston which included: 9 m @ 1.10% Ni and 0.04% Co from 10 m; 16 m @ 1.05% Ni and 0.06% Co from 8 m; 17 m @ 1.16% Ni and 0.09% Co from 13 m, and 11 m @ 1.27% Ni and 0.04% Co from 13 m.

Western Australia

Independence Group NL reported ongoing drilling at the **Moran** deposit, 1.4 km S of the Long deposit, intersected both thick high-grade, massive and matrix nickel sulphides in the centre of the channel and narrow, high-grade intervals on the channel flanks. Indicative intersections in the centre of the lava channel included: 5.7 m @ 4.3% Ni, 5.8 m @ 6.3% Ni and 5.3 m @ 6.0% Ni. On the channel flanks results included 1.1 m @ 12.6% Ni. Later drilling returned 4.8 m @ 10.7% Ni, 5.1 m @ 10.8% Ni and 5.6 m @ 7.8% Ni. The company later announced a resource for the deposit of 456 000 t @ 7.1% Ni for a contained 32 400 t Ni.

Western Areas NL announced a high-grade Probable Ore Reserve at **Spotted Quoll** of 386 000 t @ 5.14% Ni for 19 840 t of contained nickel to 150 m vertical depth. The ore reserve in the Tim King Pit represents only 16% of the contained nickel within the current announced mineral resource at Spotted Quoll which is 125 460 t of nickel.

Kagara Ltd announced a high-grade Indicated and Inferred Resource of 1.149 Mt @ 4.62% Ni (53 100 t of contained nickel) for the **Lounge Lizard** deposit at Forrestania. This resource is contained within an Indicated and Inferred Resource of 7.549 Mt @ 1.37% Ni (103 300 t of contained nickel).

Mincor Resources NL announced a high-grade drill intersection beyond the southern end of its **Miitel** Mine which they believe to be a new discovery. One hole returned an intersection of 1.75 m @ 8.76% Ni. The same hole also encountered disseminated mineralisation on two further open contact positions the more significant of which was 1.57 m @ 1.78% Ni.

Mincor Resources NL announced an initial resource for the **N10** deposit at its operating Mariners Mine at Kambalda. The resource is an Inferred Resource of 213 000 t @ 5.0% Ni for 10 600 t of contained nickel. In addition, the company reported further encouraging intersections including 16.43 m @ 6.59% Ni, and 1.28 m @ 3.88% Ni of which the former comprises massive, matrix and disseminated mineralisation.

South Boulder Mines Ltd reported that drilling by Independence Group NL at the **Rosie** Prospect intersected sulphides over a 400 m strike length. Intersections included: 20 m @ 1.32% Ni, 0.23% Cu, 1.54g/t Pt/Pd from 184 m and 4 m @ 1.27% Ni, 0.10% Cu, 0.83g/t Pt/Pd. Other intersections included 4.13 m @ 2.06% Ni, 0.22% Cu, 2.78g/t Pt/Pd, 545ppm Co and 0.08 g/t Au from 205.76 m including a maximum grade of 4.98% Ni, 6.93g/t Pt+Pd, 0.25% Cu, 0.21g/t Au and 1250ppm Co.

POTASH (FIGURE 5)

Reward Minerals Ltd reported that it had received an independently assessed Inferred Resource estimate for the **Lake MacKay** potash deposit. Lake MacKay is a modern, playa lake with a surface area of over 2250 km² in the Gibson Desert, straddling the Western Australia – Northern Territory border. The reported resource is: 4 780 400 000 Bench Cubic Metres @ 4.3kg K₂SO₄ per BCM for a total of 20.56 Mt of K₂SO₄. The resource estimate was based drill intersections.

PHOSPHATE (FIGURE 5)

Northern Territory

Phosphate Australia Ltd announced results from drilling at its **Highland Plains** project 500 km E of Tennant Creek, abutting the border with Queensland. Drill intersections included: 10 m @ 24.7% P₂O₅ from 8 m, including 4 m @ 31.1% P₂O₅, and 5 m @ 24.7% P₂O₅ from 34 m. The company also announced an increased resource of 14 Mt @ 20% P₂O₅ at the Western Mine Target Zone in the project.

Minemakers Ltd announced an updated resource for the **Wonarah** deposit, 200 km E of Tennant Creek, to an Indicated and Inferred Resource of 1105 Mt @ 18% P₂O₅. At a 15% P₂O₅ cut-off, the resource is 399 Mt @ 21% P₂O₅. Minemakers announced plans to bring the project into production in 2010.

Queensland

Krucible Metals Ltd announced a revised Inferred Resource for **PHM South**, 150 km SE of Mount Isa and 5 km south of the Phosphate Hill Mine. At a cut-off grade of 10% P₂O₅ the Inferred Resource is 19.3 Mt @ 19.0% P₂O₅. The Company is undertaking a scoping study to ascertain a range of economic parameters for mining and aims to produce up to 3.6 Mt at around 32% P₂O₅ over a 6 year period, at an annual rate of 0.6 Mt.

Mt Isa Metals Ltd announced an Inferred Resource for the D-Tree deposit. The **D-Tree** Project is a joint venture between Mt Isa Metals (20%) and Legend International Holdings Inc (80%, manager). The resource, at a cut-off grade of 10% P₂O₅, is 135 Mt @ 13.8% P₂O₅. Elsewhere in the project area, at D-Tree West the resource is 170 Mt @ 16.0% P₂O₅. An Inferred Resource of D-Tree Direct Shipping Ore, at a 25% P₂O₅ cut-off, was reported at 1.0 Mt @ 29.4% P₂O₅ and is in the high grade portion of D-Tree North.

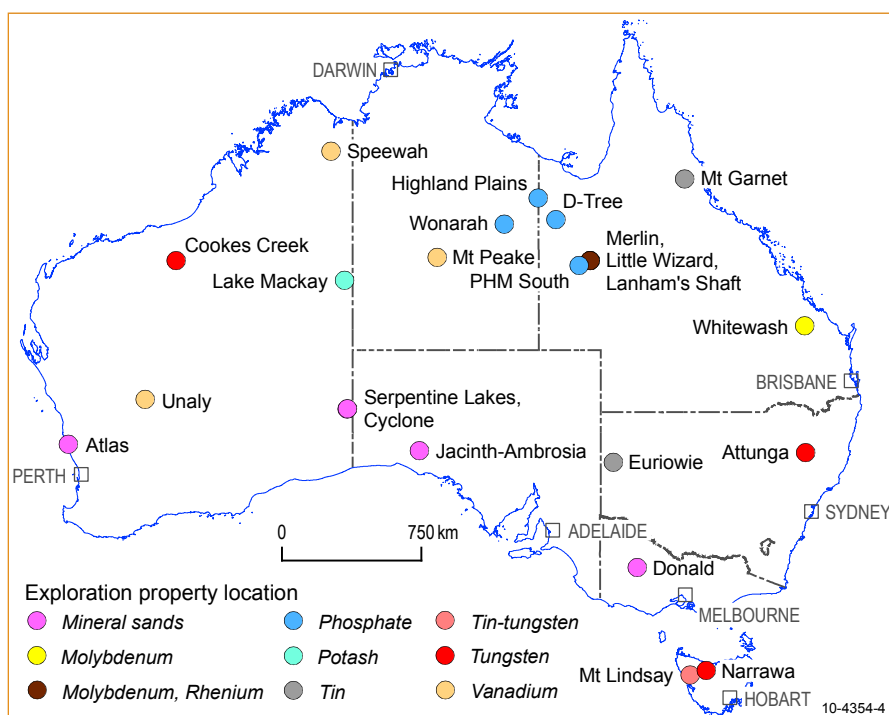


Figure 5: Selected mineral exploration projects 2009.

TIN, TUNGSTEN (FIGURE 5)

New South Wales

Peel Exploration Ltd reported that drilling at **Attunga** returned encouraging mineralisation at all prospects including a shallow, high-grade tungsten intercept from the Attunga deposit 20 km N of Tamworth. Results include: 27 m @ 0.54% WO₃, 0.06% Mo from 19 m including 2 m @ 3.38% WO₃ and 0.27% Mo from 22 m; and 2 m @ 0.59% WO₃ and 0.03% Mo from 58 m. Mineralisation at the Attunga deposit consists of skarns developed at the contact of a lime-rich sequence with the Inlet Monzonite. At least five other outcrops of tungsten mineralised skarn in close proximity to the Inlet Monzonite have been identified as having potential for the discovery of additional resources.

Carpentaria Exploration Ltd reported that work at the **Euriowie** project, 60 km N of Broken Hill, discovered tin pegmatites that have not been subject to modern exploration techniques and not drill tested. Ten traverses consisting of several one metre continuous rock chip samples were taken across the outcropping pegmatite. Results included: 8 m @ 0.44% Sn including 1 m @ 1.21% Sn; and 6 m @ 0.36% Sn which included 1 m @ 1.60% Sn.

Queensland

Consolidated Tin Mines Ltd reported a major upgrade to resources at the **Mt Garnet** Tin Project to a total Measured, Indicated and Inferred Resource of 5.3 Mt @ 0.6% Sn. The resource upgrade is a result of extensive drill programs at key project areas at Mt Garnet: Gillian, Deadmans Gully and Windermere.

Tasmania

Venture Minerals Ltd announced a resource for the **Mt Lindsay** magnetite-tin project of Inferred Resource of 23 Mt @ 0.2% Sn for 49 000 t of contained tin. In addition, the Mt Lindsay Project has an Inferred Resource of tungsten of 5.7 Mt @ 0.3% WO₃ for 14 000 t of tungsten oxide. These resources are contained in, or immediately adjacent to an Inferred Resource of 30 Mt @ 33% Fe. Drill

intersection reported at the project include: 46 m @ 0.1% Sn, 0.61% WO₃ including 12 m @ 0.11% Sn, 1.69% WO₃; 40 m @ 0.09% Sn and 0.4% WO₃; and 18 m @ 2.2% Sn, 0.23% WO₃ which included 2 m @ 14% Sn and 0.26% WO₃.

Frontier Resources Ltd announced that limited and selective re-sampling and assaying of **Narrawa** gold-base metal deposit core for tungsten returned encouraging results including 1 m @ 1.98% WO₃ within a broad low-grade geochemical halo that averaged 14 m @ 0.20% WO₃. Narrawa is 40 km SW of Davenport.

Western Australia

Hazelwood Resources Ltd's **Cookes Creek** tungsten project is located 70 km from Nullagine. The company released a resource estimate for the Big Hill deposit of Measured Resources of 1.99 Mt @ 0.27% WO₃ and Inferred Resources of 1.02 Mt @ 0.23% WO₃ for a total resource of 4.00 Mt @ 0.26% WO₃. Hazelwood also reported that drilling at the McLeods target, 1.6 km W the Big Hill deposit intersected significant coarse grained scheelite mineralisation adjacent to old workings. Intersections included: 2 m @ 1.27% WO₃ within a zone of 9 m @ 0.43% WO₃; and 13 m @ 2.42% WO₃ including 2 m @ 13.43% WO₃.

URANIUM (FIGURE 6)

Northern Territory

Thundelarra Exploration Ltd reported drill intersections from the **Thunderball** uranium prospect, a discovery 140 km SE of Darwin. These included: 11 m @ 3.4% U₃O₈ including 4.6 m @ 8.0% U₃O₈; and 15 m @ 1.5% U₃O₈ including 1 m @ 20.3% U₃O₈. Mineralisation at Thunderball occurs as disseminated to massive uraninite in sheared and tightly folded tuffaceous metasediments. Thundelarra also announced an additional high-grade uranium discovery from rock-chip sampling 3.5 km SW of Thunderball.

Rum Jungle Uranium Ltd identified roll-front type uranium mineralization associated with oxide copper on its **Mt Bundy** project 90 km SE of Darwin. The Anniversary Breccia is located 10 km NW of the Tom's Gully Gold Mine and uranium-copper mineralization was intersected with better results including: 1 m @ 1769ppm U_3O_8 and 3.87% Cu within an interval of 5 m @ 570ppm U_3O_8 and 1.12% Cu. A large low-grade intersection of 53 m @ 250ppm U_3O_8 from 45-98 m depth included 26 m @ 339ppm U_3O_8 and 2557 ppm Cu.

Energy Metals Ltd announced the discovery of an new zone of mineralisation beneath transported sand cover at the **Bigryli** project NW of Alice Springs, with intersections of 3.75 m @ 0.16% eU_3O_8 from 56.45 m and 2.35 m @ 0.09% eU_3O_8 from 71.05 m. Large diameter core drilling at the A4 and A15 anomalies intersected 8.4 m @ 0.96% U_3O_8 and 0.45% V_2O_5 from 106.0 m and 3.0 m @ 1.71% U_3O_8 and 1.57% V_2O_5 from 34.0 m, respectively.

NuPower Resources Ltd reported the first drill intersections from the **Eva** uranium-gold project, in the Murphy Inlier close to the Queensland border. Near-surface intersections included 27 m @ 0.77% U_3O_8 and 5.10g/t Au (including 4 m @ 2.24% U_3O_8 and 17.72g/t Au), 20 m @ 0.416% U_3O_8 and 5.07g/t Au and 7 m @ 1.25% U_3O_8 , 4.79g/t Au.

Queensland

At the Isa Uranium Joint Venture (Paladin Energy Ltd (50%), Summit Resources (Aust) Pty Ltd (50%)), which includes the Valhalla and Skal uranium deposits, a new resource estimate for **Skal** was completed. At Skal East, 300 m E of Skal North and South, drilling identified new uranium mineralisation where an Inferred Resource of 3.9 Mt @ 455ppm U_3O_8 for 1779 t U_3O_8 was announced. The total resource for all Skal deposits, at 250ppm U_3O_8 cut-off, is Inferred Resources totalling 11.5 Mt @ 483ppm U_3O_8 for 5560 t U_3O_8 .

Deep Yellow Limited continued exploration at its Isa North and **Isa West** projects. Drill intersections at Queens Gift included 27 m @ 569ppm U_3O_8 , 51 m @ 422ppm U_3O_8 , and 28m @ 608ppm U_3O_8 . The Bambino prospect returned 17 m @ 433ppm U_3O_8 , 25 m @ 375ppm U_3O_8 , and 10 m @ 477ppm U_3O_8 . Intersections at the Thanksgiving prospect included 55 m @ 587ppm eU_3O_8 , 3 m @ 2902ppm eU_3O_8 , 7 m @ 682ppm eU_3O_8 and 11 m @ 511ppm eU_3O_8 . Eldorado North returned 6 m @ 2216ppm eU_3O_8 , 7 m @ 1764ppm eU_3O_8 , and 7m @ 1772ppm eU_3O_8 .

South Australia

Curnamona Energy Ltd announced an initial resource estimate for the **Oban** deposit of an Inferred Resource of 8.2 Mt @ 260ppm eU_3O_8 for 2100 t of contained U_3O_8 . The mineralization is hosted by a horizontal lignitic, pyritic and carbonaceous lower sand member of the Eocene Eyre Formation at depths of between 80-90 m.

UraniumSA Ltd announced drilling at the **Plumbush** Prospect, 10 km SW of Whyalla, delivered significant uranium intersections. The Plumbush Prospect, part of the Mullaquana Uranium Project had intersections including: 8.3 m @ 142ppm eU_3O_8 ; 3.0 m @ 474ppm eU_3O_8 which included 2.1 m @ 614ppm eU_3O_8 ; 2.6 m @ 488ppm eU_3O_8 , and 5.8 m @ 246ppm eU_3O_8 .

Marmota Energy Ltd announced that uranium continued to be intersected in drilling at its **Junction Dam** project in northeastern South Australia. Intersections reported included: 0.75 m @ 1676ppm eU_3O_8 ; 1.1 m @ 3226ppm eU_3O_8 ; 0.95 m @ 7551ppm eU_3O_8 , and 0.85 m @ 1996ppm eU_3O_8 .

Rex Minerals Ltd announced that drilling at its **Hillside** Project on the Yorke Peninsula, identified the Parsee structure which returned high-grade uranium intersections. These included: 5 m @ 0.8% Cu and 276ppm U_3O_8 from 439 m; 18 m @ 297ppm U_3O_8 from 509 m and 2 m @ 887ppm U_3O_8 .

Alliance Resources Ltd reported a major increase in Inferred Resources at the

Four Mile Uranium Project, 550 km N of Adelaide. With the estimate for the **Four Mile East** deposit, the total mineral resource inventory increased by more than 90% to 61 million lbs (28 000 t) U_3O_8 in a resource of 8 Mt @ 0.35% U_3O_8 . Mineralisation at Four Mile is of the sandstone uranium type, associated with reduction-oxidation (redox) interfaces and occurs in sub-horizontal, sandy, materials below the water table and beneath a layer of predominantly clay/siltstone

Western Australia

Aura Energy Ltd intersected anomalous uranium in the **Junction** palaeochannel, W of Laverton. An intersection of 1 m @ 168ppm eU_3O_8 was reported from a 14 m thick zone with anomalous uranium values. The company indicated that characteristics of the mineralisation suggest an environment favourable for sandstone hosted uranium.

Uranio Ltd announced an initial Inferred Resource for the **Double 8** prospect some 180 km ENE of Kalgoorlie. The resource is 16 Mt @ 310ppm eU_3O_8 for a contained 4960 t of U_3O_8 at a cut off of 200ppm eU_3O_8 .

Energy and Minerals Australia Ltd announced an initial resource estimate for the **Mulga Rock** deposits. The Inferred Resource estimate is 24 520 t of U_3O_8 at a cut-off grade of 200ppm U_3O_8 . The resource work included the delineation of high grade uranium mineralisation at the Ambassador deposit of 7.63 Mt @ 960ppm U_3O_8 for 7290 t of contained U_3O_8 . High-grade mineralisation was also identified at both the Emperor and Shogun deposits.

VANADIUM

Northern Territory

TNG Ltd announced an initial Inferred Resource for the **Mt Peake** Project, near Barrow Creek, of 107 Mt @ 0.32% V_2O_5 and 5.9% TiO_2 at a 0.1 % V_2O_5 cut-off. Later drilling has reportedly extended the area of mineralisation

Western Australia

Niplats Australia Ltd announced further intersections from the Central, Buckman and Red Hill Prospects at **Speewah**. The Company reported a maiden vanadium resource for the Central deposit of Indicated plus Inferred Resources of 851 Mt @ 0.32% V_2O_5 with 334 Mt @ 0.32% V_2O_5 in the

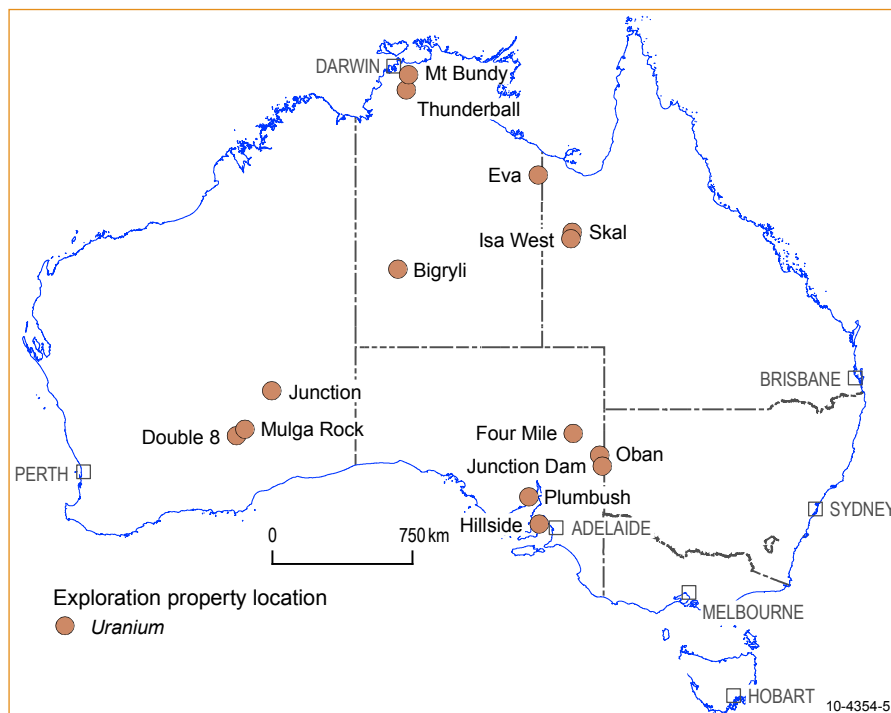


Figure 6: Selected uranium exploration projects 2009.

Indicated category. Included in this is a basal high grade zone with Indicated plus Inferred Resources of 279 Mt @ 0.39% V_2O_5 . Intersections reported late in 2009 included: 50 m @ 0.30% V_2O_5 , including 19 m @ 0.34% V_2O_5 , and 117 m @ 0.30% V_2O_5 , including 28 m @ 0.35% V_2O_5 .

Late in the year Black Ridge Mining NL reported new drill intersections from the **Unaly** project, 30 km W of the Windimurra mine, including: 117 m at 34.56% Fe, 0.66% V_2O_5 , 9.56% TiO_2 ; 26 m at 34.74% Fe, 0.68% V_2O_5 , and 9.67% TiO_2 ; and 8 m @ 43.2% Fe, 0.85% V_2O_5 , and 12.75% TiO_2 .

DEVELOPMENT

In year to the end of October 2009, the Australian Bureau of Agricultural and Resource Economics (ABARE) reported that 33 major mineral and energy projects were completed in Australia at a capital cost of \$9.1 billion. At the end of October 2009 ABARE reported that there were 74 projects at an advanced stage of investigation. A full review of developments is given in the ABARE report *Minerals and Energy Major Development Projects – October 2009* listing which may be downloaded at www.abare.gov.au

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