

Quarterly Report

for the period ending 31 December 2012



MINOTAUR EXPLORATION LIMITED ACN 108 483 601 **ASX: MEP**

LEVEL 1, 8 BEULAH ROAD, NORWOOD, SOUTH AUSTRALIA 5067 **T** +61 8 8132 3400 **F** +61 8 8132 3499 **E** admin@minotaurexploration.com.au
www.minotaurexploration.com.au

HIGHLIGHTS

CORPORATE

- Finished the year with \$10.1 million cash on hand.
- The Budget for calendar 2013 foresees exploration expenditure of \$8.5 million including joint venture contributions.
- Short listed several Australian gold and copper-gold projects as potential acquisition or joint venture opportunities, for further assessment.

PROJECT DEVELOPMENT

- Initiated global distribution of Carey's Well kaolin samples to potential end users for their technical assessment.
- An 'agreement in principle' reached with Native Title claimant group for the Mutooroo area, paving the way for a resumption of regional drilling activities.

EXPLORATION

- Arthurville JV project (NSW) being prepared for on-ground geophysics and RC drill programs.
- Catch Dam base metal prospect (Border JV, SA) identified as a strong 'ready to drill' IP target.
- Camel Lake tenement (SA) granted. DMITRE publications report presence of high-quality halloysite (kaolin nanotubes) in the lake bed.
- Two tenements granted in SA's central Gawler Range Volcanic Province, prospective for epithermal gold/silver mineralisation similar to the regional Paris discovery of Investigator Resources.
- New basement conductors located at Cormorant South, 3km south of the Cormorant linear structure drilled previously (JOGMEC JV, Queensland).
- IP anomalies near Osborne mine suggest potential for extension into Minotaur's ground of known mineralisation at Ivanhoe Australia's Kulthor copper-gold deposit.
- Numerous targets generated from legacy VTEM data over the Lexington copper-gold project near Ararat (Victoria), ready for ground follow up and drill prioritisation.

CORPORATE REVIEW

At 31 December 2012 the Company's market value was \$14.5 million. Cash and term deposits totalled \$10.1 million. Investments in ASX listed companies (*refer later Table for details*) were valued at market at \$3.5 million.

Project related expenditure outflow during the quarter was \$1.2 million (net after joint venture recoveries), relating primarily to geophysical surveys, metallurgical tests, drill investigations, assays, processing trials and administration costs. Expenditure for the March 2013 quarter is forecast to be \$1.5 million.

Discussions continued with several parties for joint venture farm-in or purchase opportunities related to gold and copper-gold projects. Due diligence assessments are underway.

REVIEW OF ACTIVITIES



Figure 1: Minotaur Exploration Limited's project locations, Australia.

NEW SOUTH WALES

Arthurville Base Metals Project

EL 7588, Minotaur 100%, MMC and MC earning 49%

The Arthurville tenement, located near Dubbo in central NSW, is prospective for porphyry-style copper and gold within the Molong Volcanic belt of the Lachlan Orogen (Figure 2). Negotiations with land holders for access are well advanced and planned activities for 2013 include ground geophysical surveys and a 5 hole RC drill program.

Dubbo Project

EL 7929, ELA 4720, ELA 4722, ELA 4723, Minotaur 100%

In addition to the existing Wallaby Creek tenement west of Dubbo, three new tenement applications encompassing 329 km² have been submitted for portions of the highly prospective Ordovician Molong Volcanic Belt which regionally contains several major copper and gold deposits, notably Cadia and North Parkes (Figure 2). A preliminary review of historical data for the Smoky Camp tenement has revealed several significant positive IP anomalies which were apparently not drill tested, thus providing excellent targets for early exploration activity.

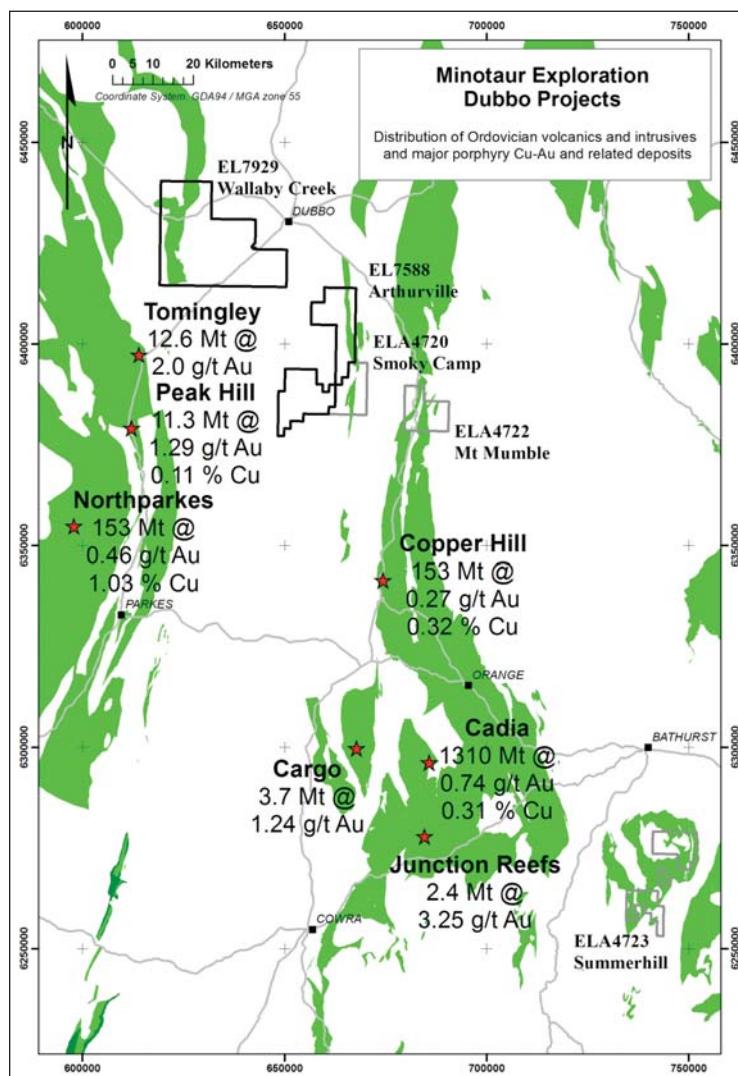


Figure 2: Location of Arthurville JV and new tenement applications (ELA4720, 4722 & 4723) near Dubbo.

SOUTH AUSTRALIA

Bonython Hill Project

EL 4745, Minotaur 100%

Previous soil and rock chip sampling at the old Mingary Mine (Figure 3) showed strong geochemical anomalies along the main Mingary line of lode and over another magnetic linear 1.5 km to the west, including rock chip values up to 1.7 ppm Au, 2.1 % Pb and 0.16 % Cu and a nearby soil anomaly up to 48 ppb Au. At the Ballara trend, gossanous rock chip samples returned values up to 2.8 g/t Au, 7.63 % Cu, and 228 ppm Ag. Additional in-fill soil sampling surveys were conducted at both localities and results are awaited.

Border Base Metals Project

EL 4270, 4352, 4844, 5079, Sumitomo 59.1%, Minotaur 40.9%

At Catch Dam, an IP survey earlier in the year identified a number of new exciting positive chargeable anomalies (Figures 3-4). The region was initially targeted because historical gravity surveys revealed a discrete positive gravity anomaly, defined by two gravity stations. A detailed infill gravity survey revealed several closely-spaced anomalies in a magnetically quiet zone. A subsequent reconnaissance dipole-dipole IP survey involving a total of 5.75 line kilometres along three lines revealed several significant chargeable bodies located proximal to the positive gravity anomalies and at a depth of ~100-150 m. There are no historical drillholes in vicinity of either the positive gravity or IP anomalies. These positive IP anomalies represent exciting new targets for drill testing during 2013.

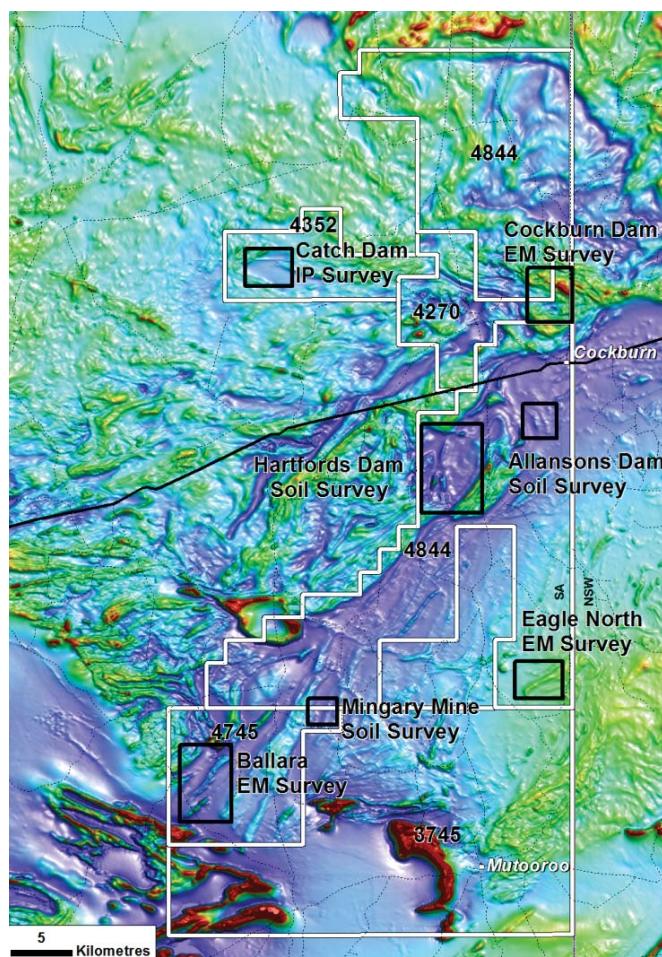


Figure 3: Select base metal prospects for the Border JV and Bonython Hill with respect to the regional magnetic image.

SOUTH AUSTRALIA

Border Base Metals Project continued

Additional soil geochemical sampling was undertaken at Hartsford Dam and Allanson Dam, for which results are awaited (*Figure 3*).

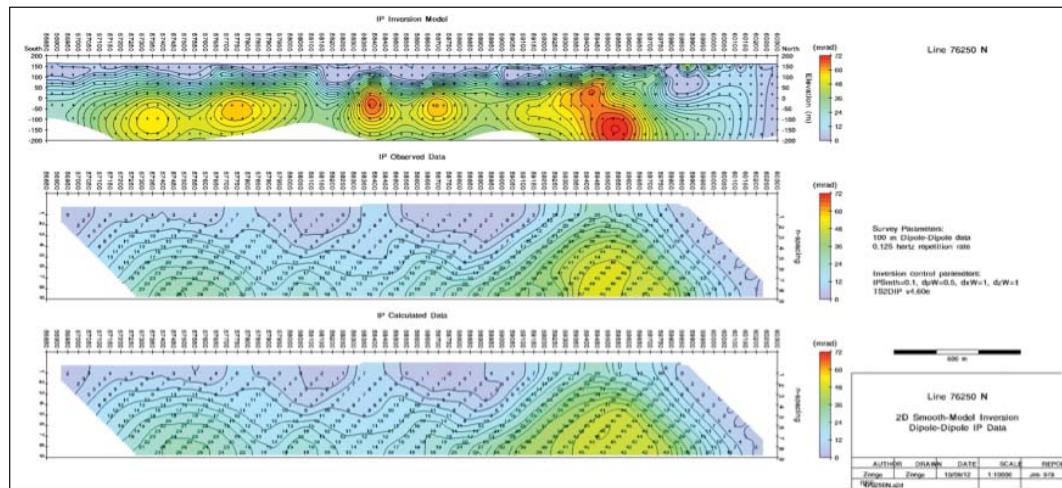


Figure 4: IP chargeability for line 476250E at Catch Dam (Border Base Metals Project).

Mutooroo Magnetite Project

EL 5079, Sumitomo 59.1%, Minotaur 40.9%

Registration of a new Native Title claim over the Cockburn-Mutooroo area by the Wilyakali required the Company to negotiate an agreement around its exploration activities and undertake a heritage survey over the Mutooroo, Muster Dam, Duffields and Surrender Dam areas.

The consulting anthropologist's report is awaited and will finalise clearances enabling field activities to resume. Meanwhile, metallurgical test work continues on holes MDD001-MDD003 assessing grind sizes, magnetite recovery and a combined magnetite +haematite recovery flow sheet.

Poochera Kaolin Project

EL 4575, 4697, 5016, ELA 2012/230, Minotaur 100%

Minotaur continues to assess the commercial marketability of various kaolin grade products from Poochera with both hydrous and calcined kaolin samples having been sent to nine international companies for their evaluation and feedback. Preliminary responses in the ceramic market sector have been most encouraging while responses from other market sectors are awaited. Several parties have been approached concerning either possible joint venture participation or divestment. Preliminary interest has been expressed by some Indian and Chinese groups.

Camel Lake Project

EL 5095, Minotaur 100%

Tenure has been formally granted to EL 5095 (Camel Lake) in far western South Australia on Maralinga Tjarutja Land. A Land Access and Minerals Exploration Agreement was successfully negotiated with the Maralinga Tjarutja Council. Halloysite (kaolin nanotubes) is known to occur within Tertiary sediments exposed in the bed of Camel Lake and in an old 1976 drillhole (*Figure 5*) and is the subject of research¹ by DMITRE personnel.

¹ Keeling, J.K., Pasbakhsh, P. and Churchman, G.J., 2011. Halloysite from the Eucla Basin, South Australia — comparison of physical properties for potential new users. 10th International Congress for Applied Mineralogy, Trondheim, 2011:351–359

SOUTH AUSTRALIA

Camel Lake Project continued

Technical journals report that research into potential uses of halloysite includes as fibre reinforcement in polymers and as micro-containers for controlled delivery of active agents (anti-fouling agents, fertiliser and pesticide delivery, invitro medical drugs).

There are currently only two commercial deposits of halloysite worldwide (Northland in New Zealand and Dragon Mine, Utah, USA) and recent studies by DMITRE indicate that halloysites from Camel Lake are thinner, more consistent in shape and with superior internal characteristics (Figure 5).

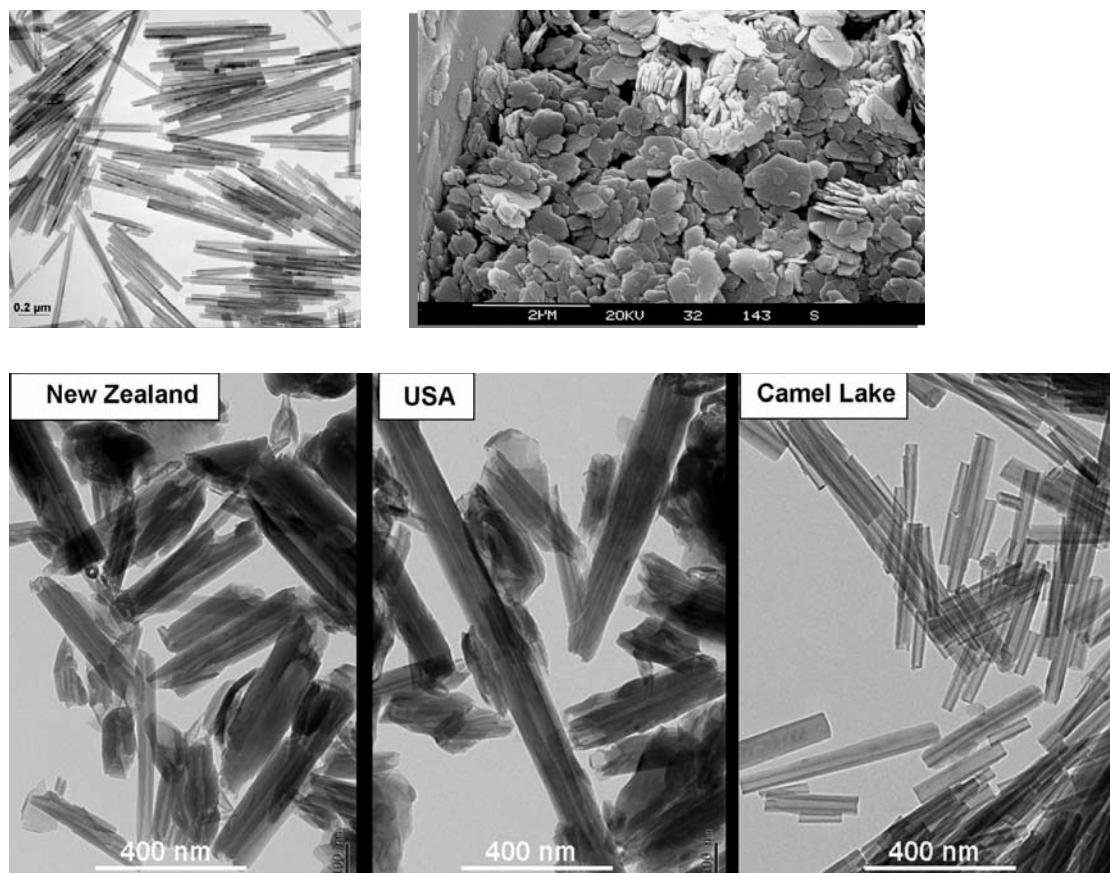


Figure 5: Kaolin nanotubes from Camel Lake (top left) and hexagonal kaolin platelets from Poochera (top right).
1μm = 1000th of a millimetre. Lower diagrams show different shape characteristics for halloysite from Northland (New Zealand), Dragon Mine (Utah, USA) and Camel Lake.

Sceales Project

EL 4203, Minotaur 100%

The Lake Purdilla Gypsum Deposit² has an Exploration Target³ of 50-60 Mt at 85-90% gypsum and average thickness of 2.8 m and average overburden thickness of only 0.18 m (refer MEP ASX Announcement 2nd March 2012 and Figure 6). Various companies are being contacted concerning either possible joint venture or divestment of this project.

² Refer MEP release to ASX dated 2 March 2012, *Exploration Target determined for Lake Purdilla Gypsum Deposit*, for methodology and accompanying Competent Persons statement.

³ The term "Exploration Target" should not be misconstrued as an estimate of Mineral Resources or Ore Reserves as defined in the JORC Code (2012) and the term has not been used in that context. The term is conceptual in nature and it is uncertain if further exploration will result in the determination of a Mineral Resource. Refer Clause 17 of the JORC Code (2012 edition).

SOUTH AUSTRALIA

Sceales Project continued

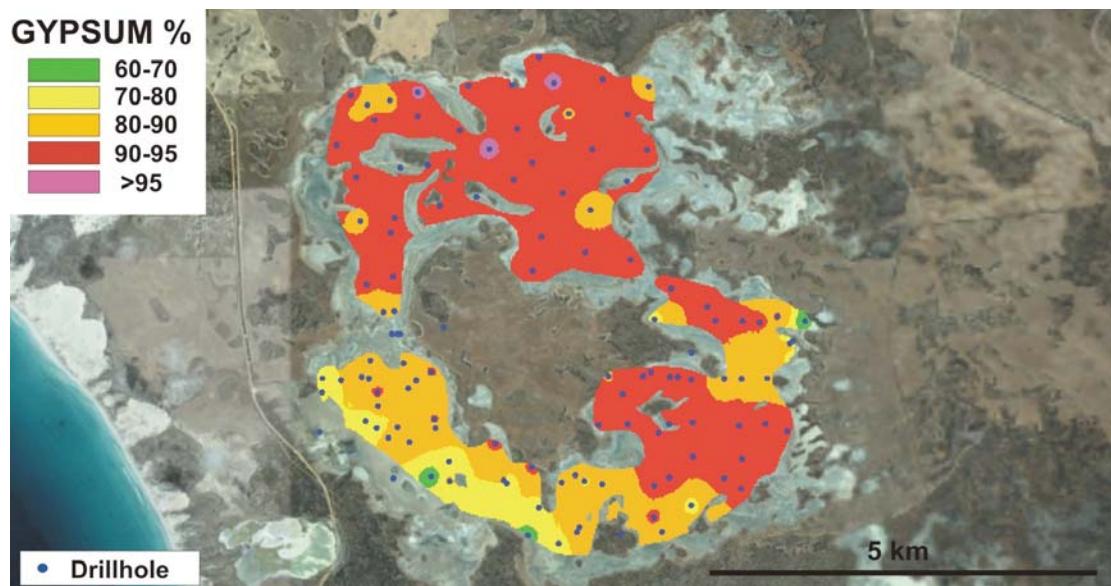


Figure 6: Gypsum block model for Lake Pardilla showing percent gypsum distribution and historical drillholes. The Exploration Target was based on an analysis of data collated from historic drillholes. Minotaur does not currently intend to undertake further exploration that might cause the target to be upgraded to a JORC Mineral resource.

Coober Pedy Project

EL 4980, 4981, Minotaur 100%

Access negotiations commenced with the departments of Defence, Environment, Native Title and with Pastoral interests following grant of two tenement areas north and east of Coober Pedy, where iron oxide copper-gold (IOCG) exploration is intended (Figure 7).

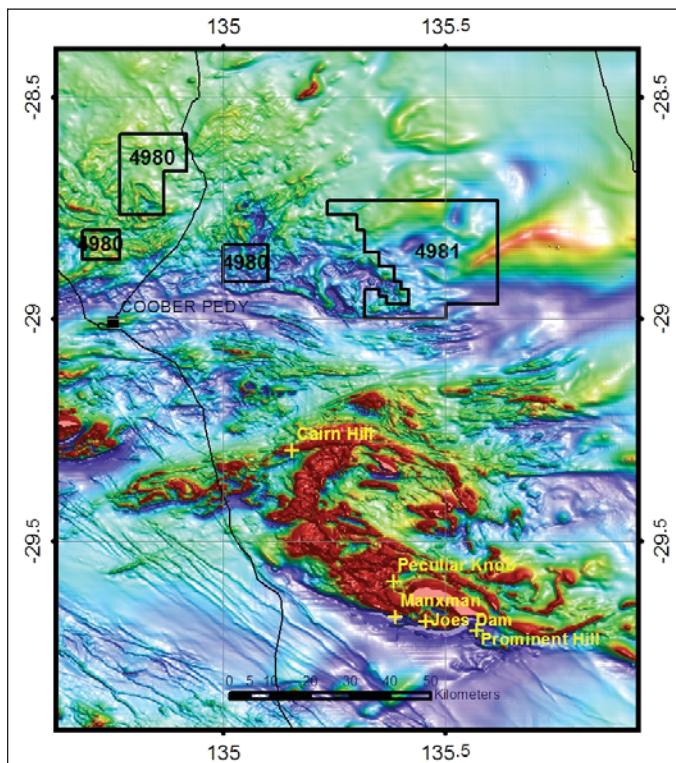


Figure 7: Regional TMI image for the Coober Pedy and Prominent Hill area.

SOUTH AUSTRALIA continued

Central Gawler Ranges Project

EL 5096, 5097, ELA 2012/244, Minotaur 100%

Of three exploration areas in the central Gawler Range Volcanic Province, two tenements have now been granted over extensions along strike of the Yarlbrinda Shear Zone where the structure is concealed by exposed strata of the Gawler Range Volcanics. The region is considered to be prospective for either epithermal high-grade silver mineralisation similar to that discovered in 2011 at Paris by Investigator Resources or shear zone-hosted gold mineralisation as at Tunkillia (Figure 8). Numerical modelling studies by CSIRO theorises that Mesoproterozoic hydrothermal fluids may have been preferentially focused along key structures and then trapped below younger flat-lying strata of the Gawler Range Volcanics.

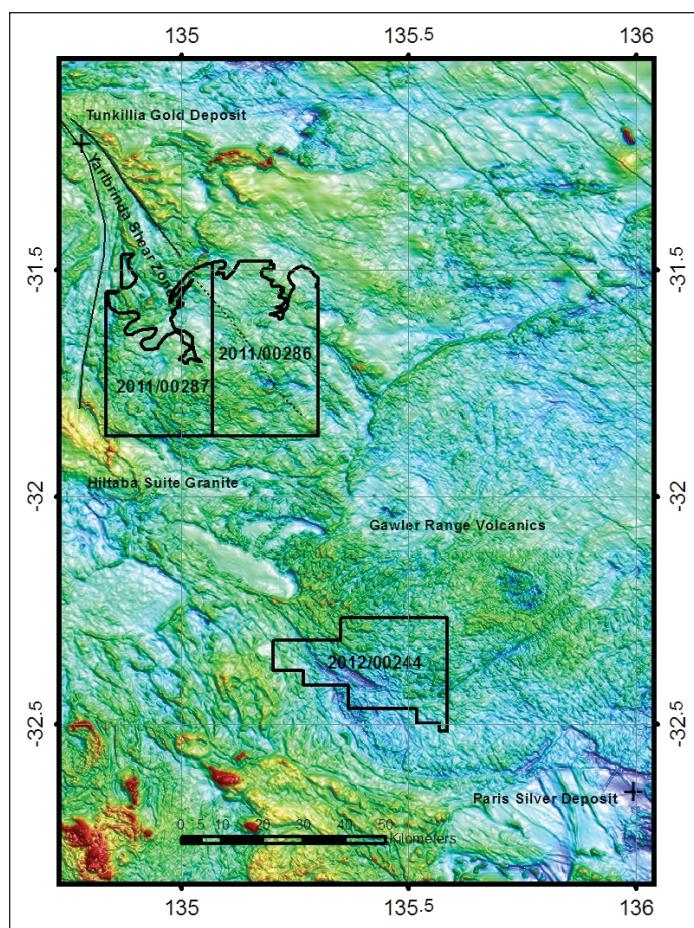


Figure 8: Regional TMI image for the central Gawler Ranges showing location of Minotaur's tenements between the Tunkillia gold deposit and Paris silver Prospect .

Southern Gawler Ranges Project

EL 4776 Spencer Resources 70%, Minotaur 30%; EL4696, 4708, 4843 Spencer Resources 80%, Minotaur 20%

Following an airborne geophysical survey (VTEM) over a part of EL 4776 (Mt Double) and delineation of new positive late-time bedrock conductors, a Declaration of Environmental Factors (DEF) will be submitted by the Operator for ground-based work on massive sulphide mineralisation targets within the Gawler Ranges National Park (dual proclamation).

QUEENSLAND

Cloncurry Joint Venture (JOGMEC JV)

EPN 8608, 12463, 14296, 16479, 16594, 16927, 16975, 16977, 17286, 18017, 18068, 18268, 18283, 18367 (JOGMEC 51% Minotaur 49% except EPM 8608 & 12463 with Royalty by BHPBilliton)

To generate new IOCG targets 9.15 line kilometres of ground EM surveys were conducted at five localities. New basement conductors were identified at Cormorant South, ~3 km south along strike from the Cormorant Prospect. These conductors confirmed positive results obtained from a 2011 SQUITEM survey. The conductors are located proximal to, but west of, the linear magnetic anomaly and have not previously been drill tested (Figures 9-11).

During the Quarter, expenditure by JOGMEC on the Cloncurry JV aggregated to \$4 million thereby earning JOGMEC 51% equity within the project. The one remaining tenement application (EPN 18068) within the Joint Venture has finally been granted. A distinct linear positive gravity anomaly will be the target of exploration activities.

With completion of the five-hole diamond drilling program at the Cormorant and Cotswold targets during the previous quarter detailed evaluation of the drill results and all previous geophysical activities is in hand ahead of a joint venture meeting in February to discuss the work program and budget for 2013.

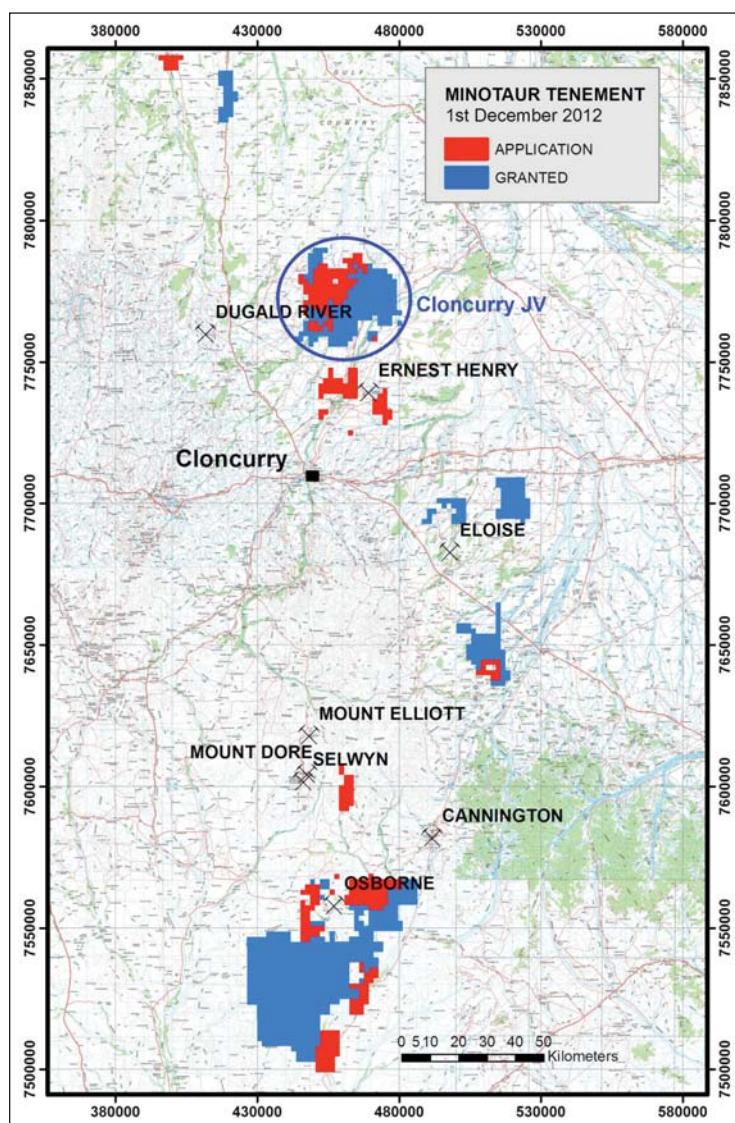


Figure 9: Location of Minotaur tenements (granted and under application) in the Cloncurry region.

Cloncurry Joint Venture (JOGMEC JV) continued

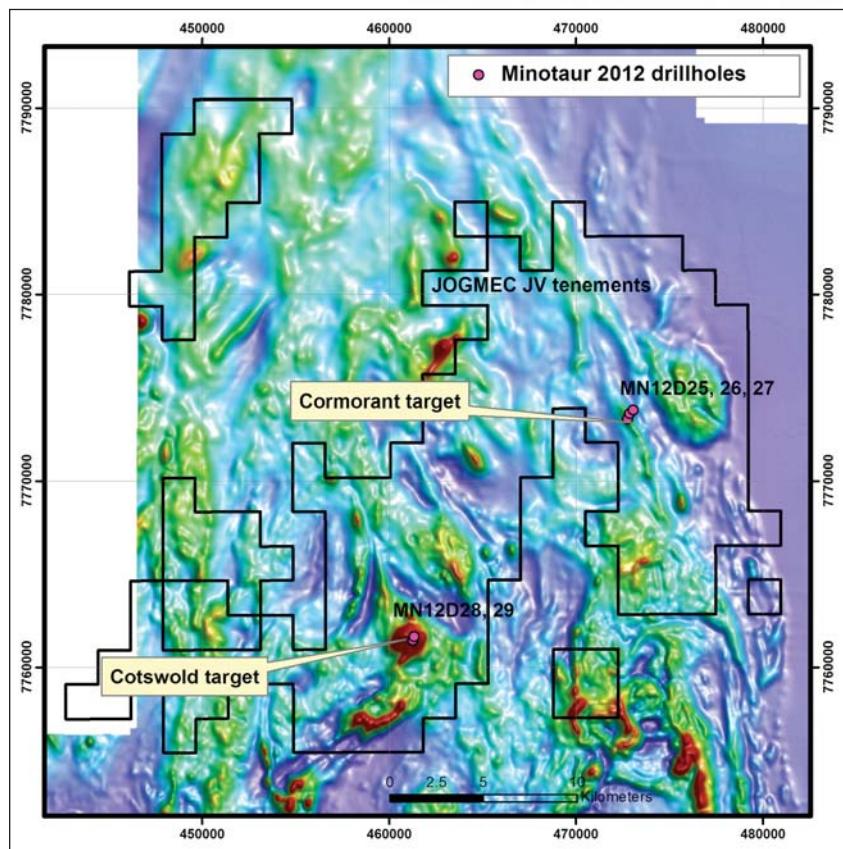


Figure 10: Cotswold and Cormorant Targets with respect to regional magnetic image

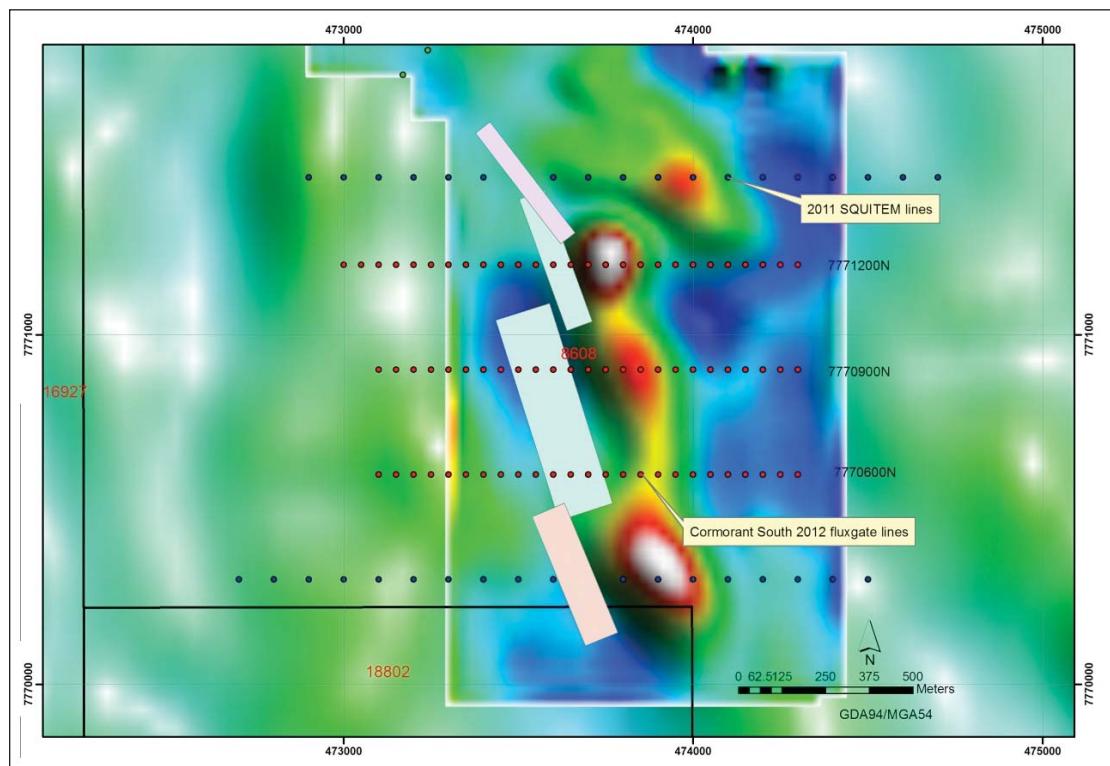


Figure 11: Magnetic images for Cormorant South showing position of new basement conductors (rectangles), 2011 SQUITEM stations (black dots) and 2012 ground EM stations (red dots).

QUEENSLAND continued

Minotaur Cloncurry Project

EPMs 18315, 18624, 18802, 19096, 19205, 19500; EPMA 18317, 18861, 19383 (competing), 19412, 19505, 19690 (competing), 19775, 19848. Osborne Area: EPMs 18571, 18572, 18573, 18574, 18575, 18576; EPMA 18720, 19050, 19061, 19066

Exploration commenced on tenements south of the Osborne Mine area with trial geophysical surveys on EPM 18571 (Sandy Creek) and EPM 18575 (Carbo Creek). An experimental ground EM survey incorporating 15.85 line kilometres at 11 sites failed to identify basement conductors. A short dipole-dipole IP survey of 7 line kilometres detected two anomalies, possibly representing an extension of known mineralisation 4km away at the Kulthor copper-gold deposit currently being mined by Ivanhoe Australia³ (Figure 12).

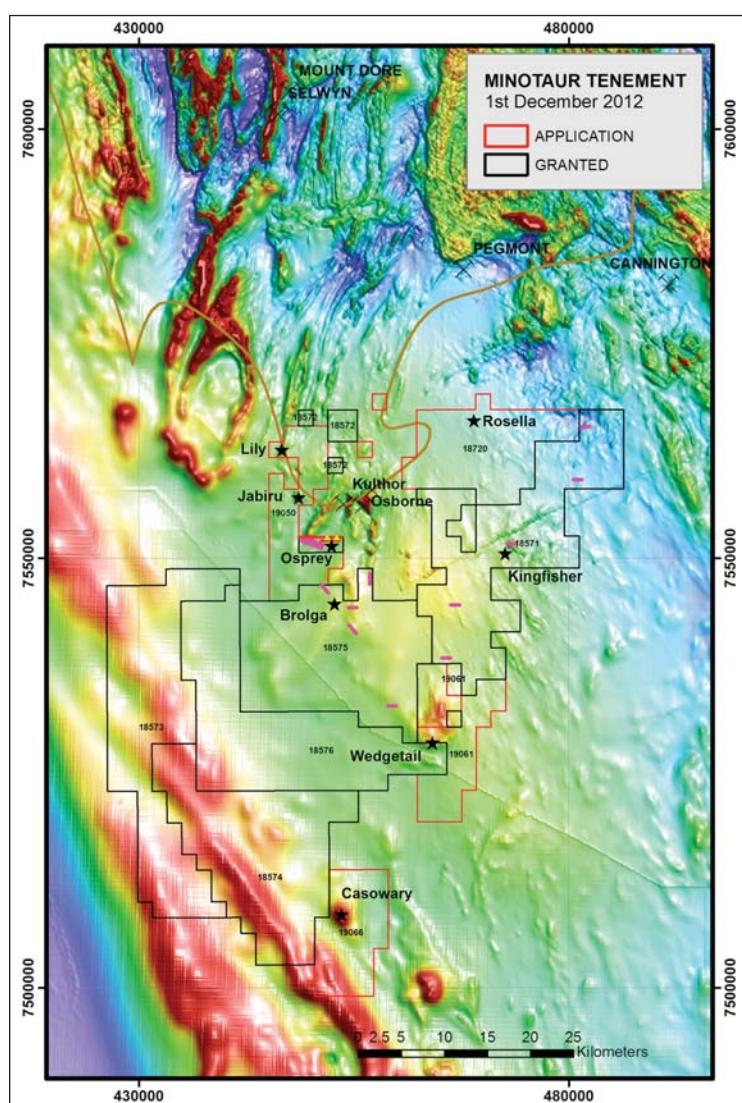


Figure 12: Regional magnetic image for the Osborne area showing location of ground EM surveys (purple lines), positive IP anomalies (yellow triangles) and selected 2013 exploration targets. Southern limit of basement exposure = brown line

An extensive detailed geophysical program incorporating gravity, magnetic and IP surveys is proposed for 2013, after the current wet season, to generate new IOCG targets for drill testing in the region.

³ Ivanhoe Australia upgrades Mineral Resource at Kulthor, ASX release dated 19 September 2012, www.ivanhoeaustralia.com/i/pdf/IVA0078MR-Kulthor_resource_update.pdf

VICTORIA

Lexington Copper Project

EL 5253, 5296, 5402, 5403, ELA 5450 Minotaur 100%

Generative work for copper-gold targets associated with Cambrian volcanic sequences in the Stavely Volcanic belt included evaluation of airborne VTEM survey data acquired by Highlake Resources in 2007 which now coincides with a considerable proportion of tenement EL 5403 (Lexington). More than 40 moderate to very-high ranked targets have been identified.

These require ground checking to ascertain which are attributable to geological rather than cultural sources (Figure 13).

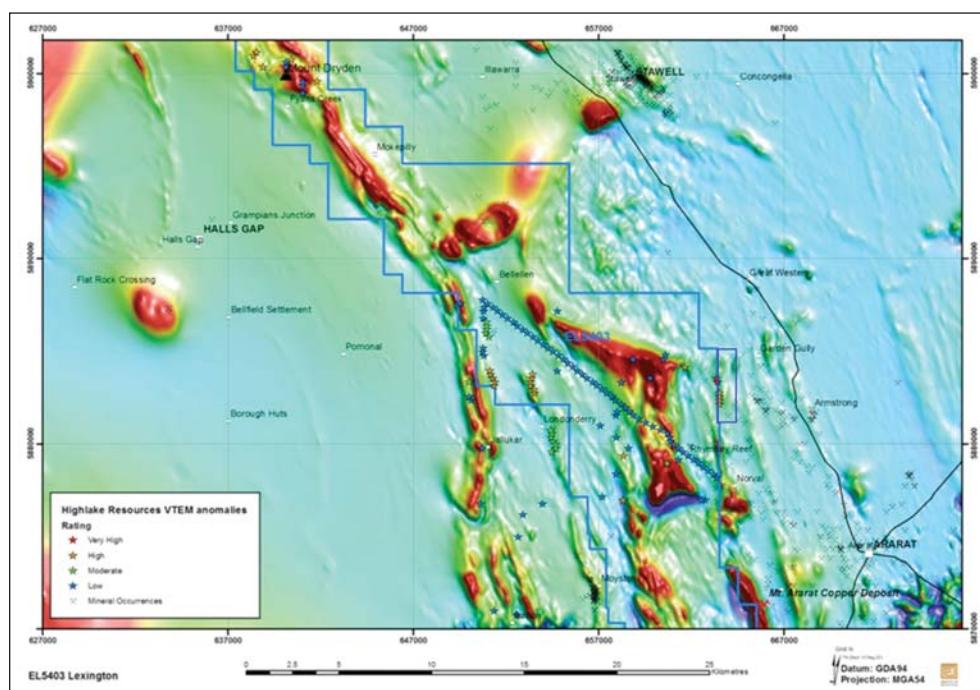


Figure 13: Regional magnetic image and location of airborne VTEM anomalies for Victorian tenements EL 5403 and ELA 5450. Series of NW-trending anomalies are from an underground pipeline.

NOVA SCOTIA, CANADA

Copper Lake

EL 6914 Blackfly Exploration 100%, Minotaur Option to Purchase

Assays for 90 samples from drillhole CL12D01 were received during the Quarter with no results of significance recorded. The future of this project is being reviewed.

Information in this report that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Dr A. P. Belperio, who is a full-time employee of the Company and a Fellow of the Australasian Institute of Mining and Metallurgy. Dr A. P. Belperio has a minimum of five years experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2004 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Dr A. P. Belperio consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

INVESTMENTS

Minotaur maintains exposure to a diverse range of exploration and energy prospects through its holdings in junior listed companies, thereby leveraging its capital employed through proxy exploration while, at the same time, containing its own workforce and administrative regimes.

At the end of December those investments were valued at market at \$3.5 million, as shown in the following Table.

Company	ASX Code	Holding at 31 Dec 2012	Minotaur %	Closing Price @ 31 Dec	Closing Value
ActivEX	AIV	4,549,129	2.1%	\$0.017	\$77,335
Mithril	MTH	21,416,667	9.8%	\$0.04	\$856,667
Mungana	MUX	3,076,923	1.9%	\$0.25	\$769,231
Petratherm	PTR	30,000,000	17.0%	\$0.021	\$630,000
Platsearch	PTS	8,000,000	4.6%	\$0.07	\$560,000
Spencer	SPA	850,000	4.3%	\$0.14	\$119,000
Thomson	TMZ	10,000,000	14.3%	\$0.049	\$490,000
TOTAL					\$3,502,233

Table 1: Summary of Investments in ASX Listed companies.

A brief discussion on each investment is given below.

ActivEX Ltd (ASX: AIV)

ActivEX continues to work on its Cloncurry copper-gold-cobalt projects where its tenements encompass 963km². A seven hole RC drilling campaign on its Barambah epithermal gold-silver prospect in south-east Queensland successfully intersected high grade mineralised zones from 50m below surface. See www.activex.com.au/reports/2012-13/AIV_20130116_ASX_Announ_Barambah_drilling.pdf for the ASX report dated 16 January 2013.

The Company holds 4,549,129 shares (2.1%) in ActivEX. www.activex.com.au

For the company's latest presentation see
www.activex.com.au/?page=announcements@ASX2012-13

Mithril Resources Ltd (ASX: MTH)

Mithril's primary focus is copper-gold exploration at the Yamba area north of, and at the Illogwa area east of Alice Springs, covering 4,670km². Outcropping copper mineralisation and VTEM targets within the Illogwa target area were investigated using surface sampling and IP geophysical surveys. A strong IP chargeability zone was detected at the Mini Me prospect. An aerial VTEM survey was completed over the whole 500km² Illogwa area.

The company completed an initial 8 hole 1,200m RC drill program to test depth and extensional potential at the Spargos Reward Gold Mine west of Kambalda, WA. Assay results issued on January 21 report immediate success. See www.mithrilresources.com.au/pdfs/2013-01-20-23202720130121_High-grade_gold_intersected_at_Spargos_Reward_FINAL.pdf

The Company holds 21,416,667 shares (9.75%) in Mithril. www.mithrilresources.com.au

INVESTMENTS continued

Mungana Goldmines Ltd (ASX: MUX)

Mungana Goldmines' pre-feasibility study into open pit mining of the Tunkillia 800,000 ounce gold resource is nearing completion. By end of 2012 Mungana had earned 70% of the Tunkillia project. At its Tarcoola gold deposit 65km to the north-west the company completed an inaugural round of 2,000m of RC and 760m of diamond drilling. Results included 20m @ 21.5g/t from 17m. A resource estimate is being assembled and Mungana intends that this will be incorporated into the Tunkillia feasibility study.

The Company holds 3,076,923 shares (1.91%) in Mungana. www.munganagoldmines.com.au

Petratherm Ltd (ASX: PTR)

PTR was invited by the Australian Renewal Energy Agency to submit a \$13 million project funding application under the \$126 million Emerging Renewables Program. The AREA's decision on the application is anticipated in the March Quarter.

The Company holds 30,000,000 shares (17%) in Petratherm. www.petratherm.com.au

PlatSearch NL (ASX: PTS)

Platsearch reduced its tenement position and exploration spend levels in Australia in 2012 through joint venture farm-outs, instead pursuing minerals prospects in Europe. It has established an office and geological team in France.

The Company holds 8,000,000 shares (4.56%) in PlatSearch. www.platsearch.com.au

Spencer Resources Ltd (ASX: SPA)

Spencer Resources started exploration in the Southern Gawler Ranges province of SA for silver-lead-zinc mineralisation. Targets generated in October from the August VTEM survey were ranked ready for ground follow up subject to environmental clearances. At its Iron Pot Creek tenement (SPA 75%), near Warwick in south-east Queensland, a single drill hole to 650m depth was started to test unexplained magnetic and IP chargeability anomalies beneath an intensely altered, but barren, cap named Crystal Mount. Refer SPA's ASX release dated 7 December 2012 for details.

The Company holds 850,000 shares (4.26%) and 425,000 options in Spencer Resources.
www.spencerresources.com.au

Thomson Resources Ltd (ASX: TMZ)

Thomson Resources is exploring for Cobar-style targets and intrusive related gold (IRG) systems within the Thomson Fold Belt and Cobar district of northwest NSW. Thomson has confirmed the identification of six IRGs along a 40km zone at Cuttaburra. RC drill targets are being designed for follow up.

The Company holds 10,000,000 shares (14.25%) and 1,500,000 options in Thomson Resources.
www.thomsonresources.com.au