

DE GREY MINING LTD

The Bold Explorer

QUARTERLY REPORT

FOR THE QUARTER ENDING 30 SEPTEMBER 2009

ASX CODE: DEG

Shares on Issue

225,112,350

Board of Directors

Campbell Ansell Chairman

Gary Brabham Managing Director

Darren Townsend

Company Secretary

Dennis Wilkins

Exploration Manager

Dave Hammond

Registered Office

Suite 4, 100 Hay Street

Subiaco, WA 6008

Phone: +61 8 9285 7500 Fax: +61 8 9285 7599

www.degreymining.com.au

A.B.N. 65 094 206 292

Highlights

Turner River (gold, base metals)

- Gold and base metals farm-out agreements executed, securing minimum exploration funding commitments of \$1 million and \$700,000, respectively, over two years.
- Wingina Well gold deposit retained 100% by De Grey.

Pilbara Iron Assets (iron ore)

 De Grey to receive \$4.5 million, plus \$2.25 million in future contingent payments, for sale of its 20% interest in Beyondie magnetite iron ore project to Emergent Resources Limited. De Grey retains rights to all non-iron ore minerals.

Paterson Project (uranium, base metals)

 Compilation of historic exploration results, combined with newly released airborne EM data, highlights potential for Kintyre-style uranium mineralisation and also for copper targets.

Queensland Projects (gold, base metals)

- Letter agreement executed with Teck Australia Pty Ltd under which the Company can earn 100% interest in EPM14142, Apex Project, located north of Cloncurry in Northwest Queensland. The EPM covers an undrilled IOCG target informally called the Apex Magnetic Complex, located 55 kilometres north of Xstrata's Ernest Henry copper-gold mine.
- Application lodged for "Jacky's Creek" EPM, an additional 145km² of ground covering other geophysical targets in the same region.

Corporate

 De Grey remains well funded, with \$3.3 million cash at the end of the September quarter. The Company continues to assess new project opportunities, seeking high quality exploration assets.

TURNER RIVER PROJECT

Turner River Farm-out Agreements

On 14 August De Grey announced that it has entered into binding letter agreements with HJH Nominees Pty Ltd (**HJH**) over the Company's Turner River gold and base metals exploration projects (excluding the Wingina Well gold resource; Figure 1) under which HJH may earn up to 75% interest in each project. HJH is an unlisted Australian company partly funded by Chinese investors.

Under the gold farm-in agreement, HJH may earn 75% interest by sole funding exploration expenditure of \$2.5 million over 4 years and must fund a minimum commitment of \$1 million over the first 2 years prior to withdrawal. Upon HJH earning its interest, a joint venture will be formed and De Grey's 25% interest will be free carried to a decision to mine.

Similarly, under the base metals agreement, HJH may earn 75% interest by sole funding exploration expenditure of \$2 million over 4 years and must fund a minimum commitment of \$700,000 over the first 2 years prior to withdrawal. Should HJH complete its earn-in, a joint venture will be formed and De Grey's 25% interest will be free carried to a decision to mine.

Terms of each of the farm-ins specify that at least 70% of expenditure must be on drilling and associated works. De Grey is to manage exploration for the first 12 months of both farm-ins, in return for which the Company is to receive a management fee comprising 15% of exploration expenditure.

The farm-out agreements provide risk capital at an attractive cost and provide funding sufficient to maintain meaningful exploration momentum at each of the projects. Any additional gold resources discovered by the joint venture will enhance the economics of the Wingina Well deposit where De Grey retains 100% ownership.

Wingina Well Gold Deposit

De Grey retains all rights to the Wingina Well gold deposit and a surrounding 1km x 2.5km area (Figure 1).

As previously reported, preliminary economic evaluations of the Wingina Well gold deposit indicate that at gold prices above about A\$1,400/oz, Wingina may support a mining operation producing 20,000-25,000 ounces of gold per annum for 3-4 years.

Environmental consultants have been approached to establish scopes of work and cost estimates for environmental baseline studies. A surveyor has been contracted to provide a detailed topographic survey for mine layout and hydrological purposes in preparation for mine planning.

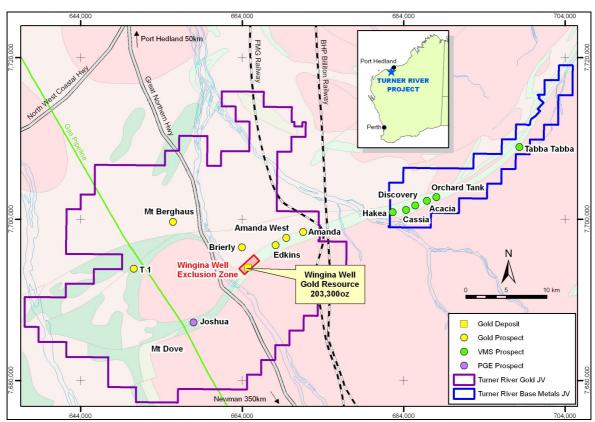


Figure 1: Turner River Gold and Base Metal Farm-out Projects

PILBARA IRON ASSETS

Beyondie Iron

In May 2008 De Grey entered into a farm-in and joint venture agreement with Emergent Resources Limited (Emergent) under which Emergent could earn up to 80% interest in iron ore and associated minerals on exploration licence E52/1806 and exploration licence application ELA52/2215. Those tenements comprised part of De Grey's Beyondie Project.

Emergent has funded a substantial exploration program at Beyondie, leading to definition of an inferred magnetite iron resource and expenditures sufficient to complete its earning of 80% interest in the project.

In July 2009 Emergent announced that it had entered into a non-binding Memorandum of Understanding (MOU) with China Metallurgical Investment Co Ltd (CMIC). The MOU envisages CMIC earning 50% interest in the project by funding \$200 million expenditure on exploration and mine development and taking a placement of Emergent shares, subject to CMIC's satisfactory due diligence.

On 2 October, De Grey entered into a Sale and Purchase Agreement with Emergent under which Emergent will purchase De Grey's 20% free carried interest to decision to mine in the Beyondie Iron Ore Joint Venture. Under the agreement, De Grey is to receive \$4.5 million at completion plus \$2.25 million, plus interest, in future payments after commencement of commercial production at the project. Completion is dependent upon Emergent's proposed issue of shares and options to CMIC, which in turn is dependent on approval by Emergent shareholders and the Foreign Investment Review Board.



Although it is likely that Beyondie will yield a significant magnetite resource mine development will, in De Grey's view, entail considerable risk. Project capital costs are likely to exceed \$3 billion, mine feasibility will be contingent upon completion of transport and energy infrastructure to support other mining operations in the Mid-West iron ore region, and technical risks relating to mining and processing remain unquantified at this stage.

The sale of De Grey's interest enables Emergent to complete its transaction with CMIC at the same time providing funding for De Grey's ongoing exploration and assessment of other project opportunities without the need to further dilute existing shareholders in the immediate future.

De Grey retains the rights to all non-iron ore minerals on the two tenements.

Mount Dove

After an initial drilling program on the Mt Dove tenement, Atlas announced on 19 June 2009 that their "results indicate an exploration target of 2 to 3 million tonnes of DSO at 57% to 60% iron within the target areas drilled to date"¹.

Atlas exercised their option to purchase the rights to iron ore on the Mt Dove tenement and De Grey elected to accept the purchase consideration as \$650,000 cash, which was received on 27 July 2009. De Grey retains a 1% gross value royalty on future iron ore production from the area and rights to all other minerals within the Mt Dove exploration licence.

Fortescue Island Iron

The Fortescue Island Iron Project covers 1,279km² in shallow waters (predominantly less than 20 metres deep) approximately 70km west-southwest of the iron ore port of Dampier. The area is located less than 15km from the Balmoral South Magnetite Project (Australasian Resources) and the Sino Iron Project (Citic Resources Pacific) at Cape Preston.

De Grey retains the right to purchase a majority interest in the area from Geotech International Pty Ltd under an option-to-purchase agreement dated September 2008. Exploration will commence upon the grant of the ELAs.

Iron Ballot Tenement

Initial reconnaissance of recently granted exploration licence E45/3188 downgraded its potential to contain significant channel iron ore (CID) resources and a sale agreement was executed under which De Grey will receive \$10,000 cash.

BEYONDIE BLUFF PROJECT

After reassessment of results from 2008 RC drilling that targeted shale-hosted base metals mineralisation, the Company concluded that further exploration at Beyondie Bluff would not be cost effective and the tenements were relinquished.

-

¹ Refer to Atlas Iron Limited ASX announcement "Continued North Pilbara Exploration Success" dated 19 June 2009



PATERSON PROJECT

The Paterson area of Western Australia is well endowed with gold, copper and uranium deposits that include the Telfer gold mine, Nifty copper mine, Kintyre uranium deposit and Maroochydore copper deposit.

Utilising the results of a regional airborne electromagnetic (AEM) survey by Geoscience Australia, De Grey applied for exploration licences over 2,100km² of ground to the south of Rudall River national park prospective for uranium and base metals.

Compilation of information from historic exploration has identified two specific exploration target areas in this frontier exploration region.

A high priority uranium target lies untested along the direct strike continuation of a known uranium mineralised corridor. The target area lies beneath sand cover but is supported by high tenor lead-copper-bismuth-uranium trace element geochemistry from previous sparse reconnaissance sampling over outcrop to the north. The prospective Yandagooge Formation can clearly be identified as a magnetic anomaly that extends for over 8km strike length within De Grey's Project. The faulted portions of the Formation (Figure 2) represent a geological setting to analogous Kintyre and an exciting uranium exploration opportunity for De Grey in this underexplored region.

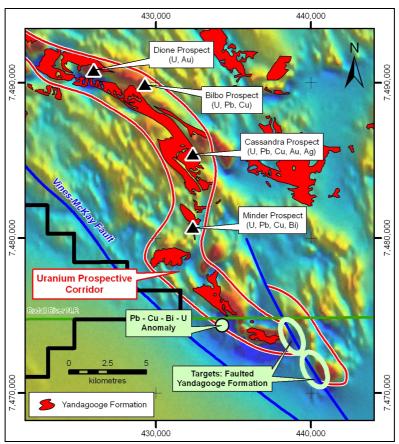


Figure 2: Uranium exploration targets in the Paterson Project



A large, fault-bounded sedimentary basin prospective for Nifty-style base metal mineralisation has also been identified within De Grey's ground. The potential of the 15km x 7km Throssell Range Group sediments is enhanced by base metal anomalism identified during reconnaissance ferruginous lag sampling by CRA Exploration in 1993 (Figure 3). The Nifty copper deposit was discovered by WMC Resources in 1980 when a lead-copper anomaly was identified through a similar ferruginous lag sampling survey. Lead-copper-cobalt-barium anomalism is open and untested along strike. Two discrete conductive anomalies from the AEM survey occur within the Throssell Range Group basin and have yet to be investigated. De Grey will have the opportunity to complete the first systematic evaluation of this prospective sedimentary basin, initially using low cost surface sampling.

These two targets will be the focus of initial exploration programs that will commence once current negotiations with Native Title parties to seek access permissions are concluded.

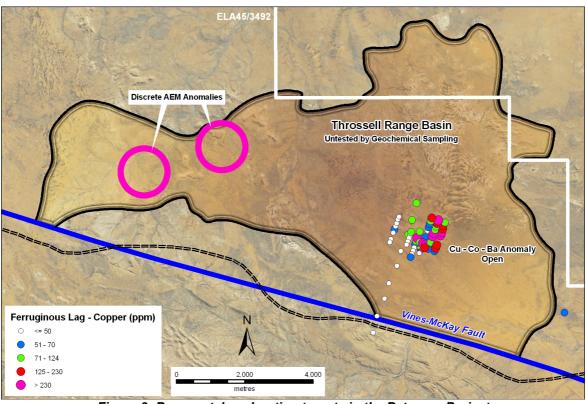


Figure 3: Base metal exploration targets in the Paterson Project

QUEENSLAND PROJECTS

Apex Project Farm-in

In September De Grey announced that it has entered into a non-binding letter agreement with Teck Australia Pty Ltd (**Teck**) under which the Company can earn 100% interest in EPM14142, located north of Cloncurry in Northwest Queensland (Figure 4). De Grey may earn 100% interest in the project by sole funding \$2 million exploration expenditure over 4 years, with a commitment to spend \$250,000 in the first year, with Teck retaining a 1% NSR royalty. Teck retains the right to earn back to 70% interest by incurring a significant premium on De Grey's expenditures at any time up until De Grey has spent \$7.5 million.

EPM14142 covers a geophysical feature informally called the Apex Magnetic Complex, located 55 kilometres north of Xstrata's Ernest Henry copper-gold mine and 90 kilometres south of Falcon Minerals/Anglogold Ashanti's Saxby project, in the covered northern extension of the Eastern Succession of the Mount Isa Inlier.

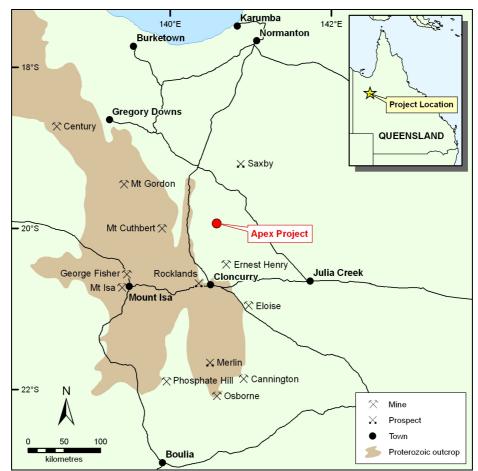


Figure 4: Apex Project location map



In addition to the established deposits such as Ernest Henry (copper-gold), Cannington (silver-lead) and Eloise (copper-gold), the prospectivity of the Eastern Succession has been highlighted by recent discoveries including CuDeco's Rocklands copper deposits, Ivanhoe Australia's Merlin molybdenum-rhenium deposit and both nickel-copper mineralisation and high-grade gold mineralisation at Saxby.

Due to the amount of recent exploration activity around Ernest Henry, the general framework of the basement Proterozoic geology in the area is fairly well understood (Figure 5). The Apex Magnetic Complex is located at the northern extremity of the Ernest Henry Terrain, an area where Na-Ca metasomatism and K-magnetite alteration, driven by magmatic events, have resulted in basement rocks of distinctive magnetic character (Figure 6).

The magnetic signature at Apex is similar to that at Ernest Henry and occurs in an area of structural complexity immediately adjacent to the intersection of major, terrain-bounding structures. The high-amplitude magnetic anomaly is thought to be due to magnetite associated with an IOCG-style alteration system or, alternatively, a mafic intrusive complex similar to that which hosts nickel-copper intercepts reported by Falcon Minerals in their Saxby Project joint venture with AngloGold Ashanti.

The Apex Magnetic Complex has never been drilled. Based on the nearest drilling to basement, about 10 kilometres from Apex, prospective Proterozoic rocks are thought to be overlain by about 250 metres of flat-lying Cretaceous rocks and recent cover.

Considering that Apex represents a frontier exploration target in a covered area of a well-endowed terrain, De Grey believes first-pass drilling may qualify for assistance under the Queensland Government's Collaborative Drilling Initiative (CDI). Under the CDI, companies can apply for government funding for up to half of the cost of an initial drill program in frontier exploration areas, to a limit of \$150,000 for any one program.

A detailed gravity survey has been planned to commence as soon as possible after a formal agreement is signed and permissions have been received from Native Title claimants.

Jacky's Creek EPM Application

In September, De Grey lodged an application for 145km² of ground surrounding the Apex EPM (Figures 5, 6). EPM18296, "Jacky's Creek", covers several discrete geophysical features that may represent alteration associated with IOCG-style copper-gold mineralisation. Proposed work, to include detailed geophysics programs, will commence upon grant of the tenement.

Teck's claw-back rights to the Apex EPM will extend to cover those parts of EPM18296 that lie within one kilometer of the boundary of the Apex farm-in tenement.



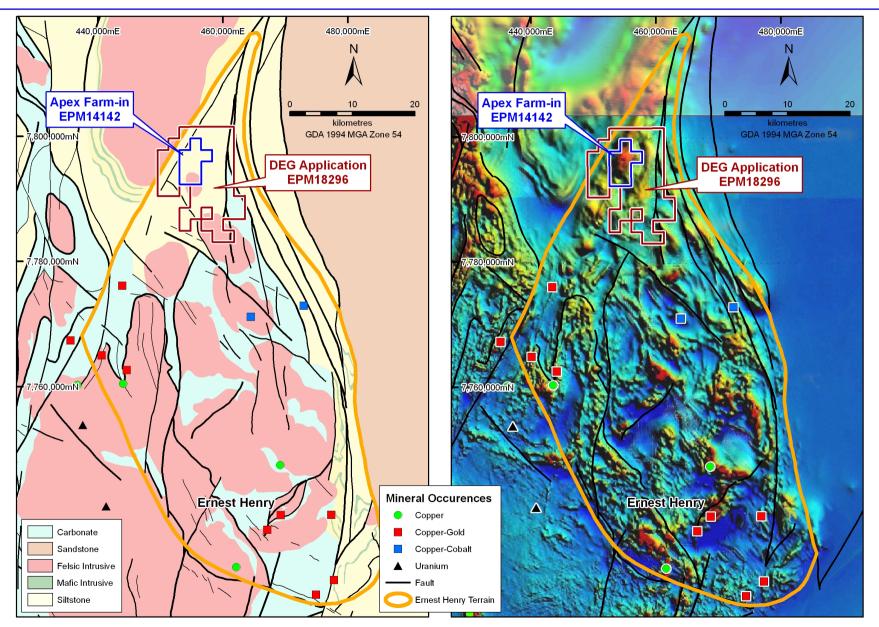


Figure 5: Regional geology and mineral occurrences, Ernest Henry terrain

Figure 6: Regional aeromagnetics, Ernest Henry terrain



NEW TENEMENT APPLICATIONS

Three new tenement applications were made over manganese prospective areas of the Proterozoic Bangemall Basin, between Exmouth and Beyondie, totalling 924km². The applications were filed on an opportunistic basis as the result of De Grey's ongoing monitoring of tenement relinquishment and competitor activity.

The manganese prospectivity of certain shale horizons of the Ullawarra Formation in this area is indicated by results reported by competitor activity along strike and by Geological Survey of Western Australia geochemical sampling datasets.

A short field reconnaissance was completed in September. Surficial secondary manganese enrichment was located on two of the applications, with 5 of 12 samples collected returning >20% Mn (Table 1). Four of these samples returned >30% Mn, to a maximum of 36.8%.

Evaluation of the manganese potential of the new applications is at an early stage. Systematic prospecting of the identified manganiferous horizons (which potentially extend for over 40km strike within the new applications) will be required to determine the potential for more significant bodies of high-grade manganese mineralisation.



TABLE 1 - BANGEMALL MANGANESE RECONNAISSANCE

Surface Rock Sample Results, Tenement Application Areas

Area	SAMPLE ID	East	North	COMMENTS	Mn %	Fe %	Al ₂ O ₃ %	SiO ₂	Р%
Mt Palgrave	550605	403,174	7,411,896	Black Mn on sediment adjacent to dolerite	23.0	17.4	7.45	21.0	0.180
	550606	403,117	7,411,977	Surface Mn replacement of ferruginous shale	36.8	7.04	4.24	20.5	0.148
	550607	406,731	7,405,728	Haematite rich sediment outcrop over 150m x 5m	0.46	54.3	2.45	3.46	0.620
Coodardo Well	550609	461,947	7,366,194	X-cutting calcrete- pyrolusite veins in shale	34.6	1.97	0.75	3.83	0.023
	550610	461,526	7,366,199	Surficial Mn on shale	5.74	11.6	5.3	62.8	0.110
	550611	461,600	7,366,142	Selective sample strong surficial pyrolusite	21.8	12.9	5.34	35.1	0.053
	550612	461,672	7,366,055	Representative sample of Mn mottled shale	7.4	13.4	6.31	56.3	0.089
	550615	446,021	7,372472	Haematite-rich lateritic sediment outcrop	0.09	47.1	5.79	11.7	0.720
	550616	445,716	7,377,856	50cm horizon of Mn nodules / botrioidal Mn	31.1	6.94	3.38	32.5	0.021
	550617	445,674	7,377,890	Mn coated shale horizon, representative	13.5	26.7	4.25	26.7	0.189
	550618	445,664	7,377,883	Massive Mn horizon in shale, 40cm wide	34.3	13.9	2.40	17.0	0.118
	550619	445,769	7,377,744	Representative sample of 4m thick horizon	3.06	26.8	4.31	42.7	0.293
	550620	445,761	7,377,746	Representative sample Mn shale, 15m wide	5.34	33	4.52	29.3	0.249

Note: Samples are surface rock grab samples. Coordinates are MGA zone 50. Analyses are by Ultra Trace Laboratories Perth by glass bead XRF.

The information in the report to which this statement is attached that relates to Exploration Results is based on information complied by Mr David Hammond, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Hammond has sufficient 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 JORC Code Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves". Mr Hammond consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.