

DE GREY MINING LTD

The Bold Explorer

QUARTERLY REPORT

FOR THE MONTHS ENDING 31 DECEMBER 2008

ASX CODE: DEG

Shares on Issue

225,112,350

Board of Directors

Campbell Ansell Chairman

Gary Brabham Managing Director

Darren Townsend

Consultant

Denis O'Meara

Company Secretary

Dennis Wilkins

Exploration Manager

Dave Hammond

Registered Office

5 Bishop Street

Jolimont, WA 6014

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

www.degreymining.com.au

A.B.N. 65 094 206 292

Highlights

Turner River (gold, base metals)

- Assays of one metre re-split samples from September 2008 drilling at Brierly Gold Prospect confirmed the tenor of mineralisation, returning 5m at **7.74g/t gold** from 14m depth within a broad zone of +0.3g/t mineralisation.
- Follow-up aircore drilling in October confirmed the continuity of +1g/t gold anomalism over a strike length of 1,500m, with intercepts including 4m at 6.51g/t and 4m at 1.98g/t gold.

Yandeyarra JV (gold, base metals)

Soil sampling of a virgin area near the Cleaverville Chert Hills has identified a new, high tenor gold-in-soil anomaly with a peak assay of 2.64g/t gold in soils. The anomaly remains open and untested to the north and east.

Yule JV (gold, base metals)

A large program of soil sampling and subsequent field follow-up has downgraded the potential for significant gold and base metals mineralisation at Tambourah. De Grey has terminated the Yule farm-in agreement.

Pilbara Iron Assets (iron ore)

Emergent Resources' first-pass RC drill program at Beyondie Iron JV intersected abundant coarse-grained magnetite mineralisation up to 140m thick over 12km strike. Assays are expected in February.

Corporate

- Several steps have been taken to reduce the Company's cash burn rate whilst retaining our core capabilities. Three staff and one casual employee were made redundant in November, the Company's non-executive directors agreed to a reduction in fees commencing October 2008, and several consulting and facilities support arrangements were modified or terminated. There remain opportunities to reduce overheads costs and these will be taken up as appropriate.
- At a time of constraints on access to risk capital, De Grey's position remains strong in comparison to its peers with a cash balance at the end of the Quarter of A\$3.1M plus 556,694 Atlas Iron shares valued at A\$0.79M (based on 19 January closing price of \$1.42 per share).
- Increasing numbers of new project opportunities are becoming available and the Company continues to maintain an active search and assessment effort.





Figure 1 – Quarterly activity summary, Pilbara Projects, December 2008

TURNER RIVER PROJECT

Brierly Gold Prospect

De Grey's gold exploration at Turner River aims to increase the resource base of the **Wingina Well** gold deposit (current Inferred and Indicated Resource of 3.4 million tonnes at 1.84g/t Au for 203,000oz, *see Table 1*). The Brierly Prospect is located just 3km to the north east of the Wingina Well.

Further sampling and a new aircore drilling program were completed at the Brierly Prospect after drilling in the September Quarter hit a high grade gold intersection of **8m at 6.98g/t gold from 12m** within a broader intersection of 48m at 1.62g/t gold in hole BAC543.



The 8m high grade intersection in BAC543 was calculated using assays of initial 4m speared composite samples. Assay results of 1m speared samples from this interval received during the current quarter show higher gold grades over narrower widths. Using a 1g/t lower grade cut on the assays of the 1m samples and no internal dilution, the 8m intersection becomes:

Drill Hole

Intersection:

BAC543:

1m at 15.9g/t gold from 14m and 2m at 10.9g/t gold from 17m

or, allowing 2m of internal dilution, **5m at 7.74g/t gold from 14m**, within a wider >0.3g/t gold intersection of 46m at 1.32g/t Au from 14m.

A follow-up aircore program of 17 holes for 1,816m was completed on two 200m spaced infill drill traverses, together with a further 400m step out drill line to the east (see *Figures 2 and 3*). The blade refusal drilling returned further encouraging gold mineralised intersections including:

Drill Hole	Intersection:
BAC546:	4m at 1.98g/t gold from 16m and 4m at 6.51g/t gold from 48m
BAC547:	4m at 1.22g/t gold from 96m to end of hole
BAC549:	4m at 1.19g/t gold from 52m and 4m at 1.71g/t gold from 72m and 4m at 1.08g/t gold from 88m

Mineralisation at Brierly is hosted by deeply weathered Mallina Formation shale and siltstone beneath 6m to 14m of recent transported sand and clay. The latest drilling has confirmed the continuity of +1g/t gold anomalism over a strike length of 1,500m. Several higher grade zones are included, as represented by previously reported aircore intersections of 8m at 3.20g/t, 8m at 2.43g/t and 4m at 2.84g/t gold along strike to the west.

To date the gold mineralisation at Brierly has been tested only by blade refusal aircore drilling on 200m spaced traverses. The prospect is now sufficiently well defined for closer spaced RC drilling to evaluate the highest tenor areas of gold anomalism in more detail.





Figure 2: Brierly Gold Prospect aircore drill intersections on aeromagnetic image



Figure 3: Updated cross-section at Brierly showing latest drilling and assay results



YANDEYARRA JOINT VENTURE and OPTION PROJECTS

Gold and base metal exploration continued at Yandeyarra during the December Quarter with soil geochemistry, geological reconnaissance and rock sampling programs undertaken.

Several new gold and base metal occurrences were identified by this work (see rock sampling results, *Table 4*). Despite grades up to 58.6g/t gold, 38g/t silver and 3.10% lead from rock samples, most occurrences were found to be related to wide-spaced veins and narrow felsic dykes and were downgraded as having limited tonnage potential. Nevertheless, De Grey's discovery of so many new mineral occurrences at Yandeyarra over the last 9 months supports the residual prospectivity of the region and the effectiveness of the Company's exploration methods.

Work is now focussing on a large, previously unexplored area near the **Cleaverville Chert Hills** where soil sampling this quarter has identified a new, high tenor gold-in-soil anomaly. Gold anomalism up to **2.64g/t in soils** remains open and untested to the north and east (*Figure 4*). There are no known gold occurrences in the area and a bedrock source to the gold in soil has yet to be identified. The soil anomaly occurs in a structurally favourable position at the western end of a large granite body that intrudes the greenstone rocks of the Cleaverville Chert and underlying felsic volcanic lithologies.

Soil sampling coverage will be extended to define the limits of the gold anomaly when the 2009 Pilbara field season recommences.



Figure 4: December Quarter 2008 surface sampling results, Yandeyarra JV Project



YULE JOINT VENTURE PROJECT

The soil geochemical survey over a large portion of the Tambourah greenstone belt, commenced in September, was completed during the December quarter with a total 2,054 samples collected. Soil sampling targeted felsic volcanic horizons and structures not previously methodically tested for hydrothermal gold and VMS-style base metals mineralisation.

The sampling identified several new gold and base metal anomalies which, together with other areas identified by previous explorers, were assessed by geological reconnaissance and rock-chip sampling. Although some quartz veins containing high gold grades were identified, all the mineral occurrences were assessed as having limited size potential. Sampling over the felsic volcanic horizons regarded as prospective for VMS-style base metals mineralisation did not locate any significant new anomalies and rock sampling of chert horizons in the Surprise North area returned low-grade and sporadic results.

At the end of the quarter De Grey notified Talison Minerals of its intention to terminate the Yule farm-in agreement and the Company retains no interest in the project.

PILBARA IRON ASSETS

Mount Dove

Atlas Iron – under the option-to-purchase agreement announced in April 2008 – has advised that it intends to follow up the gravity survey completed last quarter with drilling at Mt Dove in the first half of 2009. Previously reported surface rock sampling at Mt Dove by De Grey returned up to 62.5% iron in haematite.

De Grey will receive \$650,000 cash or 325,000 Atlas shares (at De Grey's election) should Atlas exercise the option in June 2009 and the Company will also retain a 1% gross royalty on any production.

Beyondie Iron

In December Emergent Resources Limited (Emergent) completed a maiden RC drill program targeting magnetite mineralisation highlighted by the aeromagnetic survey flown in the September 2008 Quarter. Drilling totalled 2210m in 21 holes, located on eight traverses over 12km strike, a small portion of the total target strike length of 45km. Five hundred and fourteen two-metre composite samples have been submitted for assay with results expected in February.

Drilling encountered a series of three chlorite-magnetite schist units, estimated to average up to 140m thick from geophysics interpretations, intercalated with lower-grade, siliceous banded iron formation in a sequence dipping at about 60 degrees to the north. The abundance and coarse-grained nature of magnetite in the schist units provide a preliminary indication of favourable metallurgical characteristics.

Emergent advise that they are progressing a desk-top pre-scoping study that will include investigation of metallurgy, process and engineering aspects of the project and design of a two-stage RC and diamond drilling program to define a resource.

De Grey entered into a joint venture with Emergent in May 2008 to explore for iron ore and related minerals, such as vanadium and manganese, over a portion of De Grey's Beyondie Project. De Grey retains a 20% free-carried interest through to decision to mine, with Emergent managing exploration during the earn-in period.



Iron Ballot Tenement

De Grey was awarded first priority to application **E45/3188** in a ballot of eight applicants in April 2008. The application covers a strike length of approximately 1.6km of a known channel iron deposit that straddles the Great Northern Highway. The application is also strategically placed between other channel iron deposits 17km to the east, 2.5km to the west and 4.5km to the north, on tenements held by Atlas Iron Ltd and FMG Pilbara Pty Ltd.

The tenement is being progressed to grant prior to field work commencing.

Fortescue Island Iron

The Fortescue Island Iron Project covers 1,292km² in shallow waters (predominantly less than 20 metres deep) approximately 70km west-southwest of the iron ore port of Dampier. The area represents a conceptual exploration opportunity, targeting accumulations of unconsolidated iron oxide minerals, derived from erosion from the Brockman Iron Formation, in seabed sediments. Pre-competitive aeromagnetic data clearly show the seaward extension of the bedrock Brockman Iron Formation units and also more subdued magnetic features that may correspond to detrital deposits of iron oxide minerals.

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.



JORC Resource Category	Cut off Grade g/t	Tonnes	Grade (g/t Au)	Ounces Gold	
Measured	0.5	2,141,700	1.97	135,500	
Indicated	0.5	534,500	1.60	27,400	
Inferred	0.5	768,200	1.63	40,400	
Total	0.5	3,444,400	1.84	203,300	

TABLE 1 – WINGINA WELL RESOURCE ESTIMATE

First released 29th October 2004

TABLE 2 – TURNER RIVER PROJECT

1m re-sample results, Aircore Drilling

Initial 4m composites reported in September 2008

Brierly Gold Prospect

HOLE ID	East	North	Hole Depth (m)	From (m)	To (m)	Interval (m)	Gold g/t
	666,970	6,970 7,696,715	122	14	19	5	7.74
BAC543			(incl.	14	15	1	15.9
			and	17	19	2	10.9)

Note: Co ordinates are MGA zone 50. All holes are angled -60° north blade refusal Aircore holes. Samples are speared 1m samples from the high grade portion of the 4m speared composite intersection reported in September 2008 (8m at 6.98g/t gold from 12m). Analysis is by Ultra Trace Laboratories using Aqua Regia and ICP analysis. Intersections calculated using a 1.00g/t gold lower cut with maximum 2m internal dilution.

TABLE 3 – TURNER RIVER PROJECT

October to December Quarter 2008

New Gold Intersections, Aircore Drilling

Brierly Gold Prospect

HOLE ID	East	North	Hole Depth (m)	From (m)	To (m)	Interval (m)	Gold g/t
PACE46	666 700	7,696,700	117	16	20	4	1.98
BAC040	BAC546 666,790			48	52	4	6.51
BAC547	666,790	7,696,620	100	96	100	4	1.22eoh
				52	56	4	1.19
BAC549 666,970	7,696,675	104	72	76	4	1.71	
			88	92	4	1.08	



BAC552	667,170	7,696,800	119	104	108	4	1.63

Note: Co ordinates are MGA zone 50.All holes are angled -60° north blade refusal Aircore holes. Samples are 4 metre speared composite chips. Analysis is by Ultra Trace Laboratories using Aqua Regia and ICP analysis. Intersections calculated using a 1.00g/t gold lower cut with no internal dilution. eoh= 'end of hole' intersection.

TABLE 4 – YANDEYARRA JOINT VENTURE PROJECT

October to December Quarter 2008

Reconnaissance Rock Sampling Results >1.00g/t gold,

Prospect	SAMPLE ID	East	North	Gold, g/t	Silver, g/t	Copper, %	Lead, %	Zinc, %
Gossan Veins	550966	639,672	7,653,035	1.19	38	0.07	2.58	0.64
	550967	639,700	7,653,051	2.26	27	0.05	3.10	0.18
	550969	639,768	7,653,152	6.89	2	0.01	0.05	0.00
	P545047	639,566	7,653,050	1.03	0	0.00	0.00	0.00
Gold Vein	550972	638,541	7,652,298	0.16	16	0.06	1.59	0.02
	550974	638,456	7,652,258	58.6	4	0.01	0.01	0.00
Aplite	550979	638,800	7,654,878	1.58	0	0.00	0.00	0.00
	550981	638,599	7,654,914	4.56	0	0.00	0.00	0.00

20g/t silver or 1% lead

Note: Samples are surface in situ rocks. Coordinates are MGA zone 50. Analyses are by Ultra Trace Laboratories Perth using an Aqua Regia digest and Inductively Coupled Plasma (ICP) Mass or Optical Emission Spectrometry finish.

The information in the report to which this statement is attached that relates to Mineralisation is based on information complied by Mr David Hammond, who is a Member of the Australian 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.

The information in this report that relates to mineral resources is based on information compiled by Mr Steve Hyland who is a member of the Australasian Institute of Mining and Metallurgy. Steve Hyland is a full time employee of Ravensgate. Mr Steve Hyland 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 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Hyland consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.