

DE GREY MINING LTD

The Bold Explorer

QUARTERLY REPORT

FOR THE QUARTER ENDING 31 DECEMBER 2011

ASX CODE: DEG

Shares on Issue

258,862,350

Board of Directors

Darren Townsend Chairman

Gary Brabham Managing Director

> Jason Brewer Director

Company Secretary

Dennis Wilkins

Exploration Manager

Glenn Martin

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A.B.N. 65 094 206 292

Highlights

Argentina Projects (gold, silver)

- Drill targets outlined at Sierra Morena and Pachi projects, plans progressing for De Grey's maiden Argentina drill programs.
- Discovery of SM6 Prospect at Sierra Morena project, a large area of argillic alteration and auriferous quartz veins, peak rock chip assays of 14g/t Au and 24.4g/t Ag.
- Target structure defined over 400 metres strike length at Pachi Project, peak assays of 60.7g/t Ag and 123ppb Au.
- First-pass stream sediment and rock chip sampling completed over the Halcon Project, assays awaited.
- Repeal of "anti-mining" legislation in Rio Negro Province.

Turner River Project (gold, base metals)

 New assay results from diamond core holes completed in the previous quarter at Mt Berghaus (gold), Discovery and Orchard Tank (VMS-style base metals) prospects:

At Mt Berghaus: 1.3m @ 12.26g/t Au

At Discovery: 12m @ 1.17g/t Au, 177g/t Ag, 1.9% Pb and 4.2% Zn

At Orchard Tank: 2m @ 0.23g/t Au, 68g/t Ag, 0.62% Pb and 1.55% Zn and

5.15m @ 0.28g/t Au, 94.45g/t Ag, 1.27% Pb and 2.41% Zn and

4m @ 0.62g/t Au, 63g/t Ag, 0.16% Cu, 0.93% Pb and 5.58% Zn



ARGENTINA PROJECTS

Through agreements and tenement applications in its own right, De Grey has secured mineral rights over approximately 3,750 sq km of ground in Santa Cruz Province, making the Company one of the largest tenement holders in the region (Figure 1).

De Grey's projects lie within the Deseado Massif, a geological region of prolific low-sulphidation epithermal gold-silver mineralisation that has been recognised only relatively recently. Resources and ore reserves discovered in the region since about 1990 total 17.5Moz Au and 525Moz Ag.

Work priorities for the 2011-2012 summer field season have been set based on results of previous work, perceived technical merits of each of the projects and logistical considerations. The Company plans to undertake its first drill programs in Argentina during the current field season.

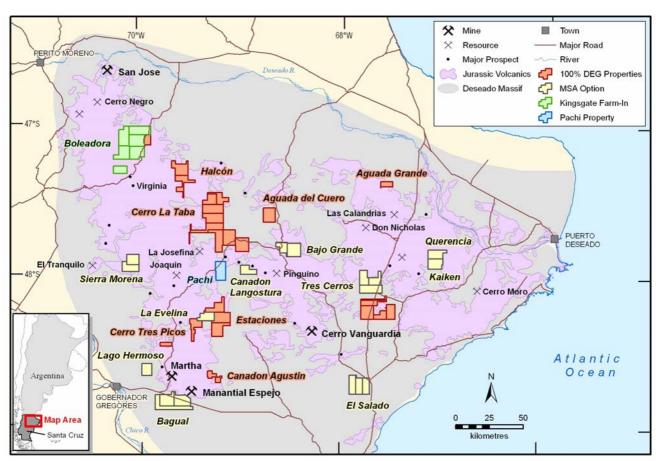


Figure 1: Locations of De Grey's projects, Santa Cruz, Argentina



Santa Cruz Province - Sierra Morena Project

Vein Breccia Target

Sampling in the vicinity of the Vein Breccia target area during the quarter located numerous vein and vein float occurrences that appear to be developed in a duplex fault system. Rock samples returned up to 11.75g/t Au and 96.2g/t Ag accompanied by significant arsenic, lead and zinc over an area of approximately 750 metres by 800 metres (Figure 2; Table 1). A significant portion of the area is overlain by scree and soil that possibly obscure other mineralised structures.

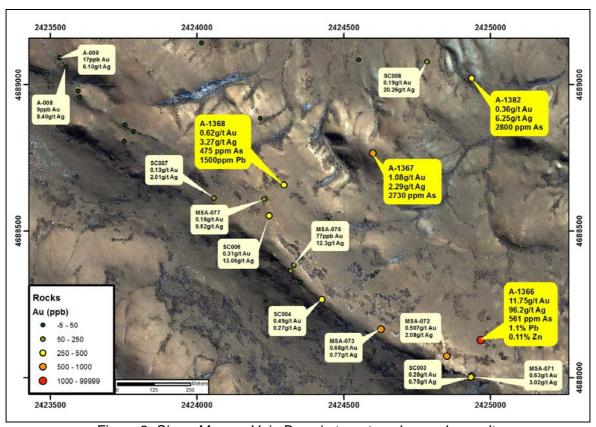


Figure 2: Sierra Morena Vein Breccia target, rock sample results

A program of detailed geological mapping and soil sampling was also completed over the Vein Breccia target and surrounding area during the quarter. Multi-element geochemistry and quartz vein types indicate that the Vein Breccia target represents the upper portion of a preserved epithermal system, with more crystalline quartz types, and associated higher precious metals grades, being expected at depth. Soil sampling results (Figures 2 - 4) have outlined numerous coincident Au-Ag anomalies along the main NW trending fault zone, as well as a large target area to the north.

Drill sites and access will be selected during February in preparation for drilling planned for the June quarter.



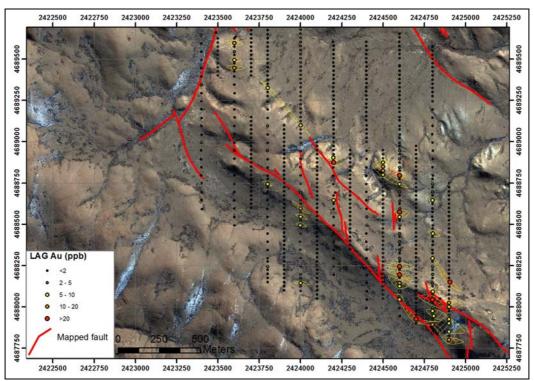


Figure 3: Sierra Morena Vein Breccia target, soil Au (ppb) results

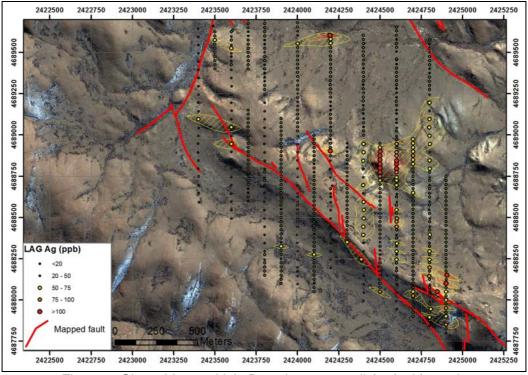


Figure 4: Sierra Morena Vein Breccia target, soil Ag (ppb) results



SM6 Prospect

Follow-up of the SM6 stream sediment geochemical anomaly in the central part of the project area has located exposures of a strong argillic alteration zone in a 700 metre by 500 metre window through transported cover in an area of recessive weathering (Figure 5; Table 1). It appears likely that the zone extends to the north beneath valley fill colluvium.

Parts of the altered zone feature quartz veinlets and strong iron staining, thought to be after disseminated sulphides. First-pass samples from the altered area returned up to 2.44g/t Ag, along with anomalous pathfinder elements including arsenic, antimony and mercury. The alteration and geochemical signature are consistent with the upper levels of an epithermal system.

A number of epithermal quartz vein occurrences and isolated, smaller zones of argillic alteration were also discovered in the area surrounding the main SM6 area. Rock chip samples returned up to 14g/t Au and 24.4g/t Ag.

The entire SM6 area is to be mapped and sampled in more detail during the March quarter to firm up drill targets.

The Sierra Morena project comprises two tenements covering 140 sq km of prospective Jurassic volcanic rocks in the western portion of the Deseado Massif, Santa Cruz Province. De Grey retains the right to enter into an option-to-purchase agreement over the properties on defined terms.



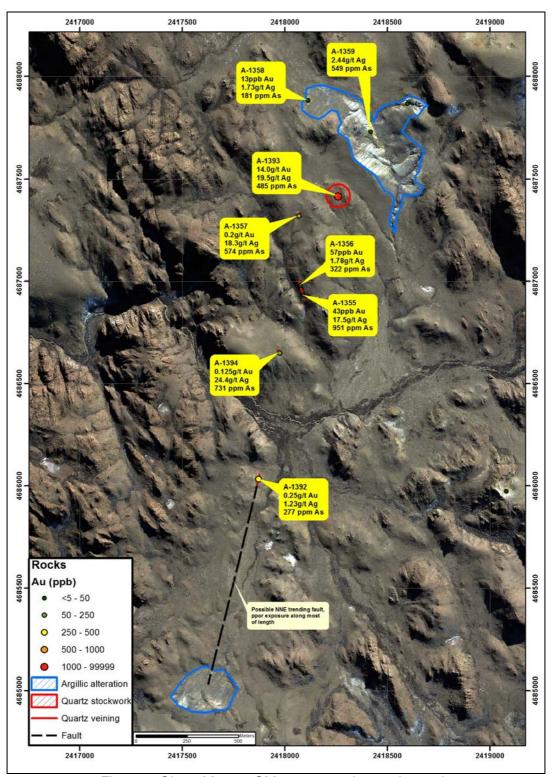


Figure 5: Sierra Morena SM6 target, rock sample results



Santa Cruz Province - Pachi Project

A program of detailed geological mapping and surface rock chip sampling was completed at Pachi during October-November 2011. That work has defined an ENE striking, steeply dipping, mineralised structure outcropping over 400 metres strike where rock chip samples returned up to 60.7g/t Ag and 123ppb Au (Figure 6; Table 2).

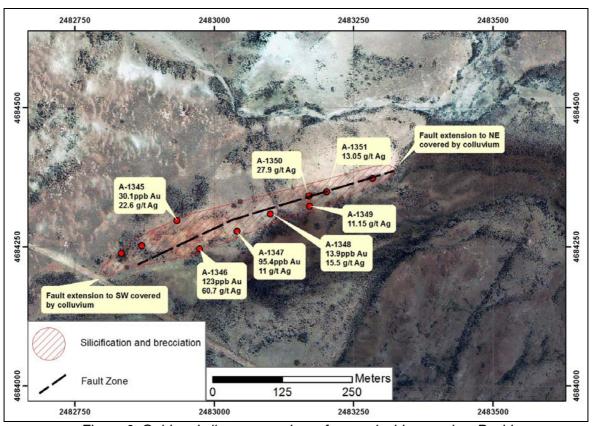


Figure 6: Gold and silver assays in surface rock chip samples, Pachi

Surface exposures of the structure feature pervasively silicified tuff hosting networks of crystalline quartz accompanied by earthy haematite and goethite, including local box-works indicative of sulphide mineralisation associated with the veinlets and disseminated in clay-altered wall rock. At the eastern limit of outcrop, the structure comprises a zone of chalcedony-filled crackle breccias extending over several metres width.

Textural features are consistent with the surface expressions documented at other examples of low-sulphidation epithermal gold-silver mineralisation in the Deseado Massif that in some instances have, when drilled to depth, yielded very high precious metals grades.

The Pachi target structure has been defined to drill-ready status and De Grey plans to test it as part of the drill campaign proposed for completion during the current Argentina field season.



Santa Cruz Province - Halcon Project

A program of stream sediment sampling and surface rock chip sampling was completed over the 180 sq km Halcon project in December 2011. A total of 316 stream sediment samples were collected at 158 sample sites, along with 31 rock chip samples. Samples have been submitted to ALS Laboratories in Mendoza, Argentina and results are expected in early February 2012.

Rio Negro Province - Mining Law Changed

In 2005, the provincial government of Rio Negro enacted law 3981 to ban open cut mining and the use of cyanide in mineral processing in the province. Despite encouraging prospects for discovery of significant base and precious metals deposits, mineral exploration in the province was largely halted in response to the legislation.

The Company's Argentine subsidiary, De Grey Argentina S.A., lodged applications for exploration tenements covering 1,420 sq km in the south-east of Rio Negro Province in August 2011, anticipating that a change of provincial government at the November 2011 elections may lead to changes in the provincial mining law.

On 5 January 2012 the new Rio Negro legislature repealed Law 3981 of 2005, a development welcomed by the Argentine Federal government. The new provincial mining law anticipates responsible mine development being regulated through a new body, the *Consejo Provincial de Evaluacion Ambiental Minera* (Provincial Council for Mining Environmental Assessment; CoPEAM). De Grey regards the changes as very encouraging.

In mid-2011 De Grey commissioned a project generation study to investigate the potential for goldsilver mineralisation in the south-eastern part of the Somuncura Massif, in the district surrounding the town of Sierra Grande, site of an operating iron ore mine. The district was targeted on the basis of its prospective geology, known nearby mineral occurrences, competitor activity and ground availability. The Company knows of no previous modern mineral exploration within the staked areas but numerous fluorite vein occurrences testify to hydrothermal activity in the area.

The Company's tenement applications cover Jurassic volcanic and epiclastic rocks of the Marifil Volcanic Complex, part of the Somuncura Massif. The Somuncura hosts numerous examples of epithermal to mesothermal gold-silver deposits, similar to the Deseado Massif, and the Marifil Formation is regarded as being broadly equivalent to the Chon Aike Formation, host to almost all epithermal gold-silver mineralisation in the Deseado.

The Sierra Grande district is an area of moderate topographic relief with ephemeral drainage systems that ideally suit stream sediment geochemical sampling as a first-pass screening tool. Commencement of exploration activities requires prior liaison with landholders in the area, a process the Company intends to start shortly. Commencement of field reconnaissance and sampling programs is scheduled for the second quarter of 2012, as exploration work in Santa Cruz winds down for winter. It is expected that field work in Rio Negro will be possible throughout winter.



TURNER RIVER PROJECT

In May 2011 De Grey entered into agreements with Lansdowne Resources Pty Ltd, an unlisted Australian mineral exploration company, over the Company's Turner River gold and base metals exploration projects (Figure 7) under which Lansdowne may earn up to 75% interest in each project.

Lansdowne completed their first drill program during the September quarter, targeting specific positions on both the gold and base metals projects. Assays for the diamond core portions of holes were received during the quarter and are reported herein; results for the RC holes and pre-collars were received and reported in the September 2011 quarter.

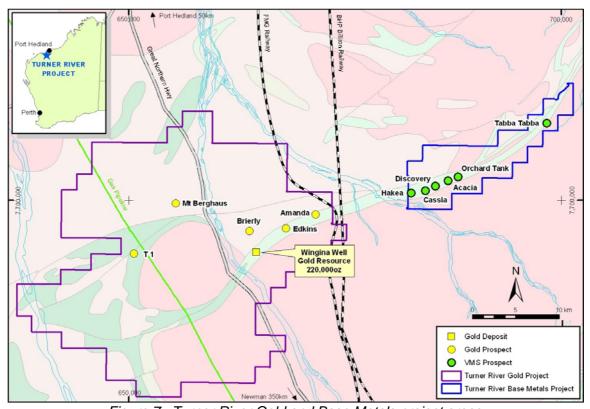


Figure 7: Turner River Gold and Base Metals project areas

Turner River Gold

One diamond core hole (MBHDD001) was drilled at Mount Berghaus prospect where previous work by De Grey outlined gold mineralisation associated with intermittent quartz veining over about 2km strike length. Primary control on the mineralisation is the Mallina Shear Zone but highest grades appear to be associated with splay structures oblique to the main shear. Intercepts from previous work by De Grey include 24m at 2.6g/t Au, 12m at 33.4g/t Au (including 1m at 354g/t Au), 2m @ 16.0g/t Au and 2m@ 11.9g/t Au.

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¹ Refer to De Grey Mining Limited June 2005 quarterly report for drill hole locations and details of drill intercepts.



Diamond drill hole MBHDD001 (Figure 8, Table 3) was designed to test down dip of previously reported high grade intercepts in BGRC039 (3m at 25.74g/t Au, 3m at 21.12g/t Au and 2m at 1.18g/t Au) and to provide structural information for resource modelling. The hole successfully intersected the target and returned 1.3m @ 12.26g/t Au.

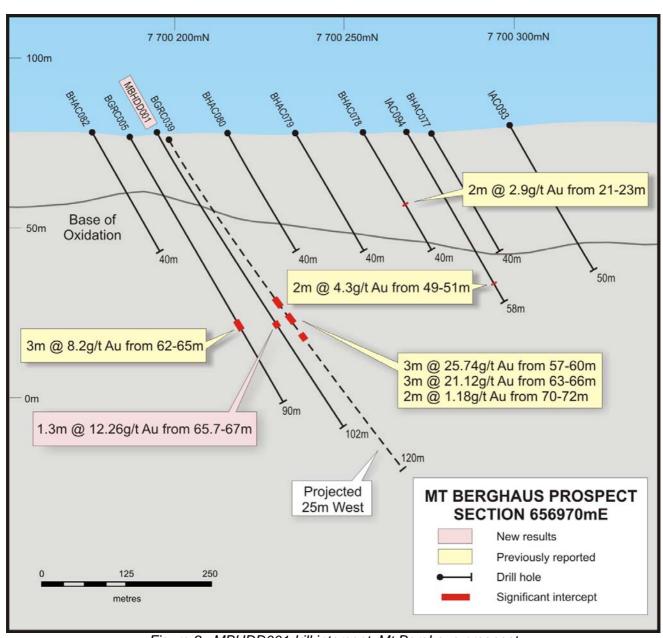


Figure 8: MBHDD001drill intercept, Mt Berghaus prospect



Turner River Base Metals

Previous work by De Grey discovered VMS-style Zn-Pb-Ag-Au and subordinate copper mineralisation at a number of prospects over a strike length of 18 km in the eastern part of the Turner River project. Previous drilling has achieved intersections such as²:

- 4.90m at 12.7% Zn, 331g/t Ag, 7.31% Pb, 2.54g/t Au and 0.35% Cu at the Orchard Tank prospect;
- 16m at 3.79% Zn, 167g/t Ag, 1.81% Pb, 1.19g/t Au and 0.16% Cu at the Discovery prospect.

During the September quarter, Lansdowne drilled two RC holes and two pre-collared diamond core holes at the Discovery prospect, with a third hole pre-collared but the diamond core tail remaining to be drilled. One pre-collared core hole was also drilled at the Orchard Tank prospect.

During the December quarter the remaining assay results were received for the pre-collared diamond core holes which were not reported in the September quarter.

At Discovery, drill hole **DISRD005W3** (Figure 9, Table 3) was designed to test down-dip of WARC022 (16m at 1.19g/t Au, 166g/t Ag, 0.16% Cu, 1.81% Pb, 3.79% Zn) and up-dip of WARC044 (7m @ 0.35g/t Au, 59g/t Ag, 0.55% Pb, 1.56 % Zn). The hole successfully intersected the target and returned:

• 12m @ 1.17g/t Au, 177g/t Ag, 1.9% Pb and 4.2% Zn

At Orchard Tank, drill hole **ORCRD002** (Figure 10, Table 3) was designed to test up-dip of a previous significant intercept in WADH015 (21m at 1.08g/t Au, 137g/t Ag, 0.08% Cu, 2.1% Pb and 4.65% Zn). The hole successfully intersected the target and returned:

- 2m @ 0.23g/t Au, 68g/t Ag, 0.62% Pb and 1.55% Zn and
- 5.15m @ 0.28g/t Au, 94.45g/t Ag, 1.27% Pb and 2.41% Zn

As noted in the previous quarterly report, a less sheared and coarser-grained massive sulphide lens was intersected in the footwall of the main massive sulphide zone in ORCRD002, and this zone returned:

4m @ 0.62g/t Au, 63g/t Ag, 0.16% Cu, 0.93% Pb and 5.58% Zn

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² Refer to De Grey Mining Limited 2007 Annual Report for drill hole locations and details of drill intercepts.



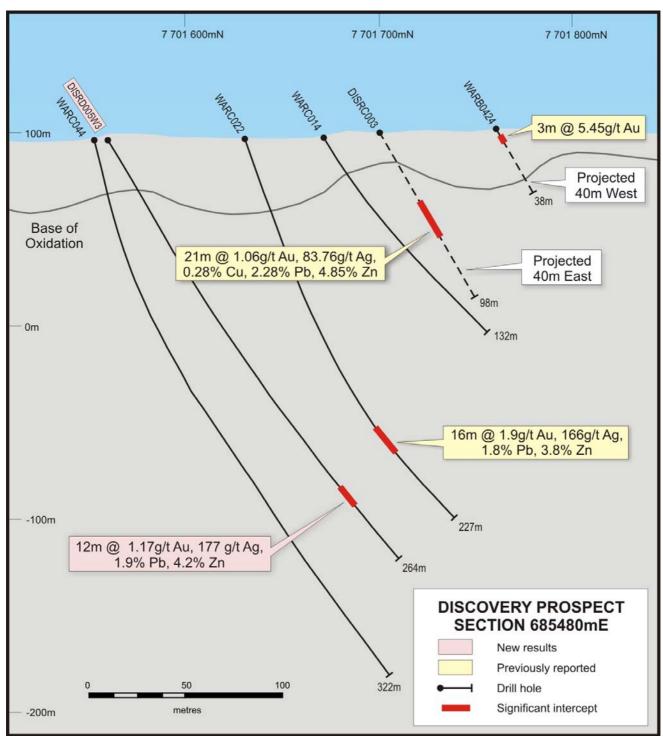


Figure 9: DISRD005W3 drill intercept, Discovery prospect



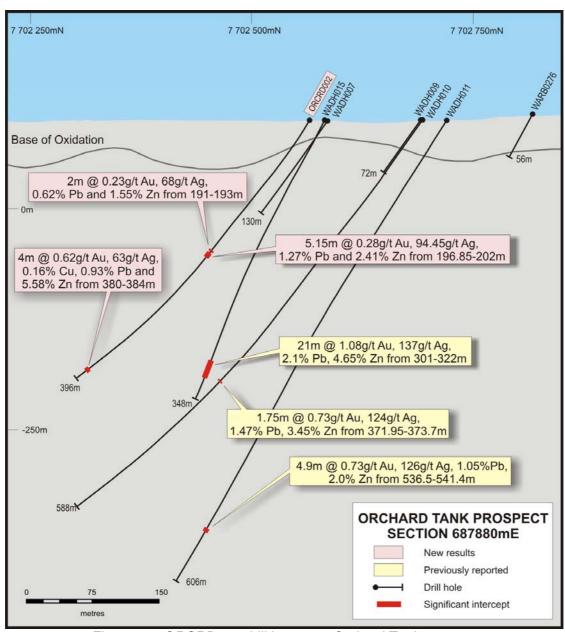


Figure 10: ORCRD002 drill intercept, Orchard Tank prospect



TABLE 1 - SIGNIFICANT ROCK CHIP SAMPLE RESULTS, SIERRA MORENA PROJECT

Sample	East	North	Au	Ag	As	Hg	Mo	Pb	Sb
			(ppb)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)	(ppm)
A-1355	2418088	4686933	43	17.5	951	0.028	54.1	21.3	25.3
A-1356	2418074	4686981	57	1.78	322	0.324	3.40	8.4	3.07
A-1357	2418068	4687321	204	18.3	574	0.181	74.2	38.5	6.33
A-1358	2418113	4687884	13	1.73	181	0.49	15.0	18.7	6.21
A-1359	2418418	4687732	<5	2.44	549	0.320	3.08	77.2	0.239
A-1366	2424967	4688127	11750	96.2	561	12.55	566	11000	201
A-1367	2424599	4688765	1085	2.29	2730	0.061	13.75	13.25	38.7
A-1368	2424297	4688657	620	3.27	475	0.342	97.8	1500	19.95
A-1382	2424936	4689021	361	6.25	2800	0.051	8.81	59.7	80.1
A-1392	2417871	4686034	257	1.23	277	0.018	1.67	12.25	4.87
A-1393	2418259	4687418	14000	19.5	485	5.28	3.96	444	39.4
A-1394	2417974	4686653	125	24.4	731	0.35	45.1	89.6	12.45

Note: Coordinates are Campo Inchauspe datum Zone 2. Analyses by ALS Minerals Laboratories, Mendoza, Argentina. ICP Mass Spectrometer analysis of 30g sample split from original 500gm (minimum) sample after Aqua Regia digestion for ultra-low determinations. Basic suite of elements consisted of 51 elements including those listed above. Note that some elements will report partial concentrations due to the presence of refractory minerals. Samples that returned >10000ppb Au (>10g/t Au) were re-assayed using 30g Fire Assay with gravimetric finish.

TABLE 2 - SIGNIFICANT ROCK CHIP SAMPLE RESULTS, PACHI PROJECT

Sample	East	North	Au (ppb)	Ag (ppm)
A-1345	2482933	4684297	30.1	22.6
A-1346	2482974	4684246	123	60.7
A-1347	2483041	4684278	95.4	11
A-1348	2483101	4684309	13.9	15.5
A-1349	2483171	4684323	2.9	11.15
A-1350	2483170	4684341	6.2	27.9
A-1351	2483202	4684349	1.2	13.05

Note: Coordinates are Campo Inchauspe datum Zone 2. Analyses by ALS Minerals Laboratories, Mendoza, Argentina. ICP Mass Spectrometer analysis of 30g sample split from original 500gm (minimum) sample after Aqua Regia digestion for ultra-low determinations. Basic suite of elements consisted of 51 elements including those listed above. Note that some elements will report partial concentrations due to the presence of refractory minerals.



TABLE 3 – BASE & PRECIOUS METAL INTERSECTIONS, MT BERGHAUS, DISCOVERY AND ORCHARD TANK PROSPECTS

HOLE ID	East	North	From (m)	To (m)	Interval (m)	Gold g/t	Silver g/t	Copper %	Lead %	Zinc %
MBHDD001	656970	7700195	65.7	67	1.3	12.26	NSR	NSR	NSR	NSR
DISRD005W3	685480	7701560	216	228	12	1.17	177	NSR	1.9	4.2
ORCRD002	687880	7702565	191	193	2	0.23	68	NSR	0.62	1.55
and			196.85	202	5.15	0.28	94.45	NSR	1.27	2.41
and			380	384	4	0.62	63	0.16	0.93	5.58

Note: Coordinates are MGA zone 50. Holes at Discovery and Mt Berghaus drilled to the north at -60°. Hole at Orchard Tank drilled to the south at -60°. RC samples collected in uniform one metre intervals. Analysis is by Intertek Laboratories using Fire Assay analysis for gold and Inductively Coupled Plasma (ICP) on mixed acid digest for zinc, silver, lead and copper. "NSR" denotes no significant results.

The information in the report to which this statement is attached that relates to Exploration Results is based on information compiled by Mr Glenn Martin, who is a Member of the Australasian Institute of Mining and Metallurgy and is an employee of De Grey Mining Ltd. Mr Martin 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" (the "JORC Code"). Mr Martin consents to the inclusion in the report of the matters based on his information in the form and context in which it appears

Rule 5.3

Appendix 5B

Mining exploration entity quarterly report

Introduced 01/07/96 Origin Appendix 8 Amended 01/07/97, 01/07/98, 30/09/01, 01/06/10, 17/12/10

Name of entity

ABN	Quarter ended ("current quarter")
65 094 206 292	31 December 2011

Consolidated statement of cash flows

De Grey Mining Limited

		Current quarter	Year to date
Cash f	lows related to operating activities	\$A'000	(6 months)
			\$A'000
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for (a) exploration & evaluation	(449)	(690)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(251)	(582)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature	14	31
	received		
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	-	-
	Net Operating Cash Flows	(686)	(1,241)
	Cash flows related to investing activities		
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	(2)	(2)
1.9	Proceeds from sale of: (a) prospects	-	500
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	=	-
		(2)	40.0
	Net investing cash flows	(2)	498
1.13	Total operating and investing cash flows		
	(carried forward)	(688)	(743)

⁺ See chapter 19 for defined terms.

Appendix 5B Mining exploration entity quarterly report

1.13	Total operating and investing cash flows	(40.0)	
	(brought forward)	(688)	(743)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	_	_
1.15	Proceeds from sale of forfeited shares	<u>-</u>	-
1.16	Proceeds from borrowings	_	_
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other (provide details if material)	-	-
	Net financing cash flows	-	-
	Net increase (decrease) in cash held	(688)	(743)
1.20	Cash at beginning of quarter/year to date	1,294	1,376
1.21	Exchange rate adjustments to item 1.20	29	2
1.22	Cash at end of quarter	635	635

Payments to directors of the entity and associates of the directors Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	117
1.24	Aggregate amount of loans to the parties included in item 1.10	-

1.25 Explanation necessary for an understanding of the transactions

Item 1.23 includes aggregate amounts paid to directors including salary, directors' fees, consulting fees and superannuation.

Non-cash financing and investing activities

Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows				
share in projects in which the				

Financing facilities available

Add notes as necessary for an understanding of the position.

		Amount available \$A'000	Amount used \$A'000
3.1	Loan facilities	Nil	Nil
3.2	Credit standby arrangements	Nil	Nil

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⁺ See chapter 19 for defined terms.

Estimated cash outflows for next quarter

4.1	Exploration and evaluation	\$A'000 455
4.2	Development	-
4.3	Production	-
4.4	Administration	275
	Total	730

Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.		Current quarter \$A'000	Previous quarter \$A'000
5.1	Cash on hand and at bank	61	257
5.2	Deposits at call	574	1,037
5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
	Total: cash at end of quarter (item 1.22)	635	1,294

Changes in interests in mining tenements

6.1	Interests in mining
	tenements relinquished,
	reduced or lapsed

6.2	Interests in mining
	tenements acquired or
	increased

Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter

⁺ See chapter 19 for defined terms.

Issued and quoted securities at end of current quarterDescription includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	Preference +securities (description)			, , ,	,
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3	⁺ Ordinary securities	258,862,350	258,862,350		
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5	⁺ Convertible debt securities				
7.6	(description) Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	Options (description and conversion factor)	10,000,000 10,500,000		Exercise price 6.5 cents 6.5 cents	Expiry date April 2014 June 2014
7.8	Issued during quarter	10,000,000		6.5 cents	April 2014
7.9	Exercised during quarter				
7.10	Expired/cancelled during quarter	3,250,000		25 cents	June 2012
7.11	Debentures (totals only)				•
7.12	Unsecured notes (totals only)				

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⁺ See chapter 19 for defined terms.

Compliance statement

- This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 5).
- This statement does /does not* (delete one) give a true and fair view of the matters disclosed.

Sign here:

Date: 31 January 2012

(Company secretary)

Devin within

Print name: **Dennis Wilkins**

Notes

- The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position.

 An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- The definitions in, and provisions of, AASB 6: Exploration for and Evaluation of Mineral Resources and AASB 107: Statement of Cash Flows apply to this report.
- Accounting Standards ASX will accept, for example, the use of International Financial Reporting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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⁺ See chapter 19 for defined terms.