

ASX Release: 25 January, 2011

Quarterly Activities Report - for the period ended 31 December 2010

ASX Code: RXM

Shares on Issue: 150.3 million

Options on Issue: 3.7 million

Cash on hand at 31 Dec 2010: \$103.7m

Market Cap at 24 Jan 2011: \$452m

Share range in quarter: 215c to 293c

Website: www.rexminerals.com.au

*New zone of shallow high
grade copper and gold
identified.*

*Hillside Resource grows by more
than 70%*

*Primary copper recoveries at
Hillside of 90%.*

For further information, please contact:

Steven Olsen (Managing Director)
or Amber Rivamonte (Company Secretary)
Phone: 03 5337 4000
E-mail: info@rexminerals.com.au

Media enquiries to:

Simon Jemison
Collins Street Media
03 9224 5319
E-mail: simon@collinsstreetmedia.com.au

HIGHLIGHTS

Pine Point Copper Belt, Yorke Peninsula, South Australia:

Hillside Project

- Increase in Hillside Inferred Resource to 170Mt @ 0.7% copper and 0.2g/t gold for contained metal of 1.2Mt copper and 1.1Mozs gold.
- New zone of shallow high grade copper and gold intersected.
- Initial metallurgical testing indicates primary copper recoveries of 90%.
- Five drill rigs on site and 11,929 metres drilled in quarter.
- Best results include:
 - 51m @ 2.8% copper and 1.6 g/t gold (from 78m below surface)
 - 17m @ 1.1% copper and 0.1 g/t gold (from 106m below surface)
 - 9m @ 1.2% copper and 0.2 g/t gold (from 200m below surface)
 - 6m @ 1.1% copper and 0.4 g/t gold (from 256m below surface)
 - 46m @ 0.6% copper and 0.1 g/t gold (from 34m below surface)
 - 59m @ 0.5% copper and 0.1 g/t gold (from 234m below surface)

Note: Intersections are down hole lengths

Regional Exploration Program

- 3D inversion modelling of magnetic and gravity data continued during the quarter with Rex to begin testing the higher priority targets over next few months.

Corporate:

- Capital raising of \$87.7 million via a private placement and a share purchase plan was completed during the quarter. Cash at the end of the quarter was \$103.7 million.

SUMMARY COMMENTS

At Hillside, drilling capacity increased to 5 rigs during the quarter with work programs focussed on upgrading the Hillside Mineral Resource and defining a new body of shallow high grade copper and gold. In both instances Rex was successful. The Hillside Mineral Resource grew substantially to 1.2Mt of contained copper. Whilst a new zone of shallow high grade copper was discovered from only 78m below the surface. (51m @ 2.8% copper and 1.6 g/t gold).

OUTLOOK

Drilling capacity will be increased in 2011 with 8 rigs on the ground by early February 2011. Drilling will continue to expand the known copper mineralisation at Hillside leading to a further Resource update in mid 2011. In addition, Rex will focus some of the drilling towards the multiple shallow high grade parts of the Resource to optimise a Stage 1 open pit design. Regionally, a number of high priority targets will be tested in the coming months, with the potential for another "game changing" discovery for Rex.

PROJECTS

Hillside Prospect - Pine Point Copper Belt (Yorke Peninsula, South Australia)

During the quarter, drilling continued to focus on extending the strike continuity of copper mineralisation. Drilling targeted both secondary and primary mineralisation along the Zanoni, Parsee and Songvaar zones with notable copper intersections received during the quarter (Table 1 and Figure 1).

Based on the drilling results received up to the end of November 2010, an upgrade to the Inferred Mineral Resource was completed in December 2010 (announced 6 December 2010). The Inferred Mineral Resource now stands at 170Mt @ 0.7% copper and 0.2g/t gold (up more than 70%). Contained metal is now at 1.2 million tonnes of copper and 1.1 million ounces of gold. Drill testing continues to demonstrate the strong relationship observed between copper mineralisation and a large magnetic anomaly. This continues to support the Company's previously documented total target size of between 1.5Mt and 2.8Mt of contained copper at Hillside.

A new shallow high grade copper and gold discovery was made this quarter. The result from HRC-123 (Figure 1) of 51m @ 2.8% copper and 1.6g/t gold shows there is a significant (previously unidentified) shallow high grade ore zone concentrated on a shallow portion of the Parsee magnetic anomaly. The extent of this shallow portion of the Parsee magnetic anomaly stretches from around 6174600N to 6175000N and hence the potential for shallow, high grade copper mineralisation to exist for up to 400m in length. Furthermore, internal to this section was the highest grade continuous zone of mineralisation identified at Hillside to date. (8m @ 15% copper and 8g/t gold).

Initial metallurgical test results were received this quarter. Testing confirmed conventional processing options with primary copper recoveries estimated at 90% and gold recoveries estimated at 75%. Testing of the oxide copper material was also completed with recoveries estimated to be between 70% and 80%. Initial test work also suggests that a magnetite concentrate (iron ore) of a saleable quality could be produced from reject material after processing a copper concentrate. Indications are that a magnetite concentrate is recoverable using magnetic separation techniques with the magnetite concentrate containing 65% iron.

Pine Point Copper Belt (Yorke Peninsula, South Australia)

Most of the regional exploration on the Yorke Peninsula was confined to desktop studies in preparation of a more extensive drilling campaign planned for 2011. A number of new high priority targets have been defined in close proximity to Hillside, including the Equis target (Figures 3, 4 and 5) which is 3km to the north-east of Hillside. Many of these targets display combined magnetic and gravity anomalies (typically offset from each other). Such characteristics are all considered to be important attributes of the Olympic Dam, Prominent Hill, Carapateena and the Hillside discoveries.

Of particular note is that many of the recently defined targets have greater magnetic and/or gravity anomalies than the Hillside project. The Rex team remains confident that the Yorke Peninsula will host multiple large scale copper-gold deposits. All of the existing data continue to indicate that this is the case, with the substantial diamond drilling campaign over 2011/12 designed to prove this concept.

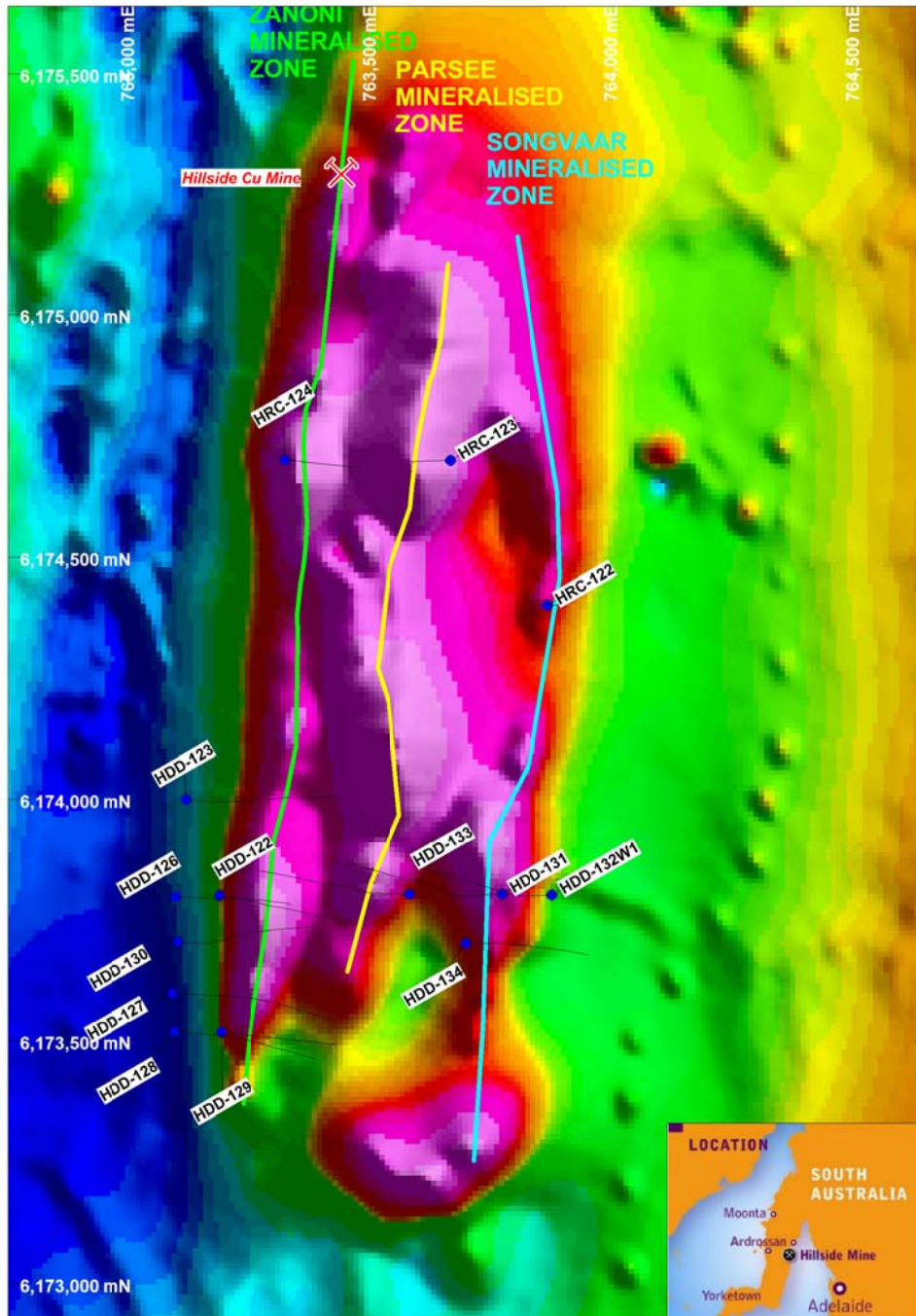


Figure 1: High resolution magnetic image at Hillside highlighting the location of drilling completed during the December 2010 quarter.

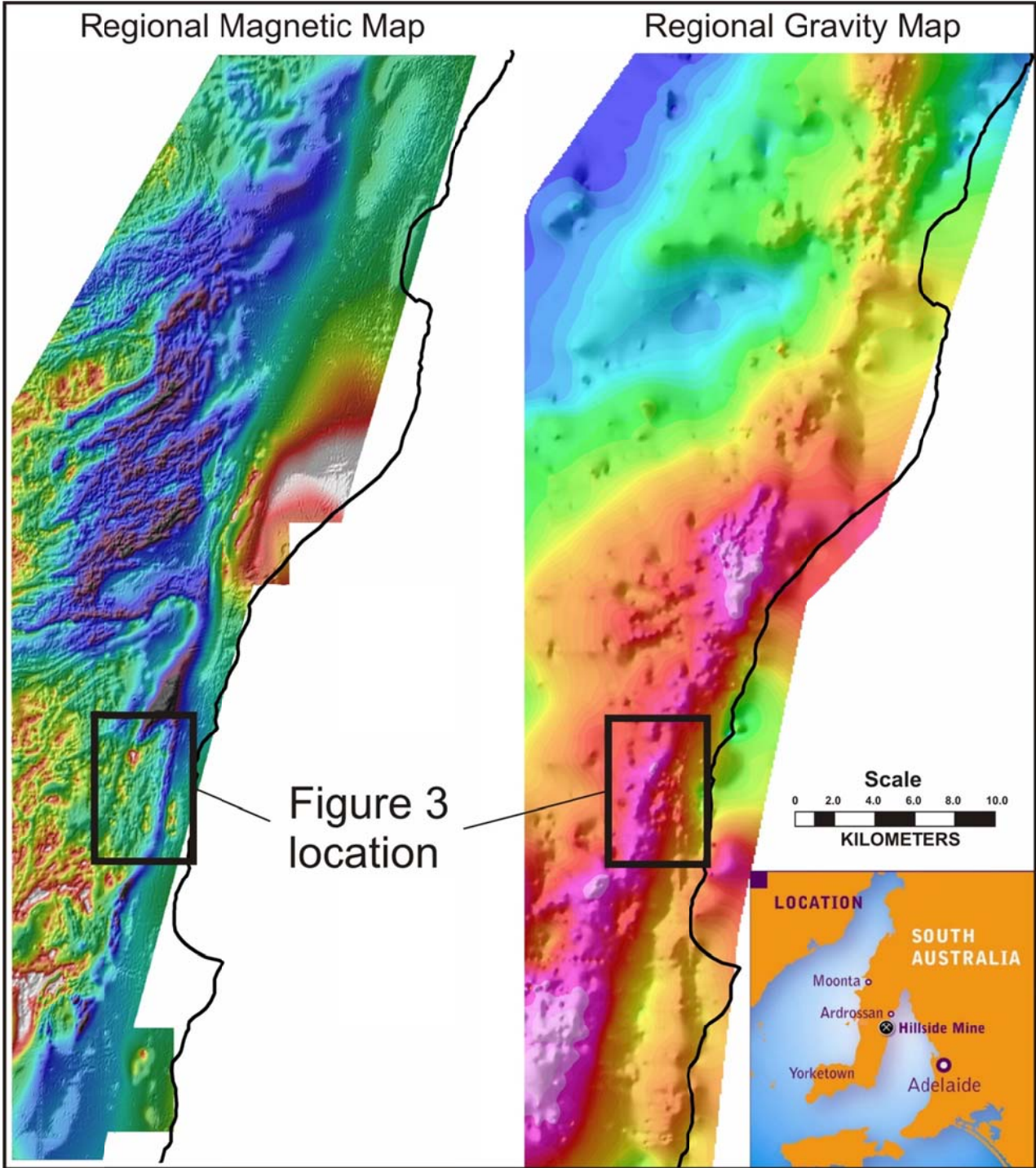


Figure 2: Regional gravity and magnetic maps of the Pine Point Copper Belt with location of Figure 3 area.

Magnetic Map

Gravity Map

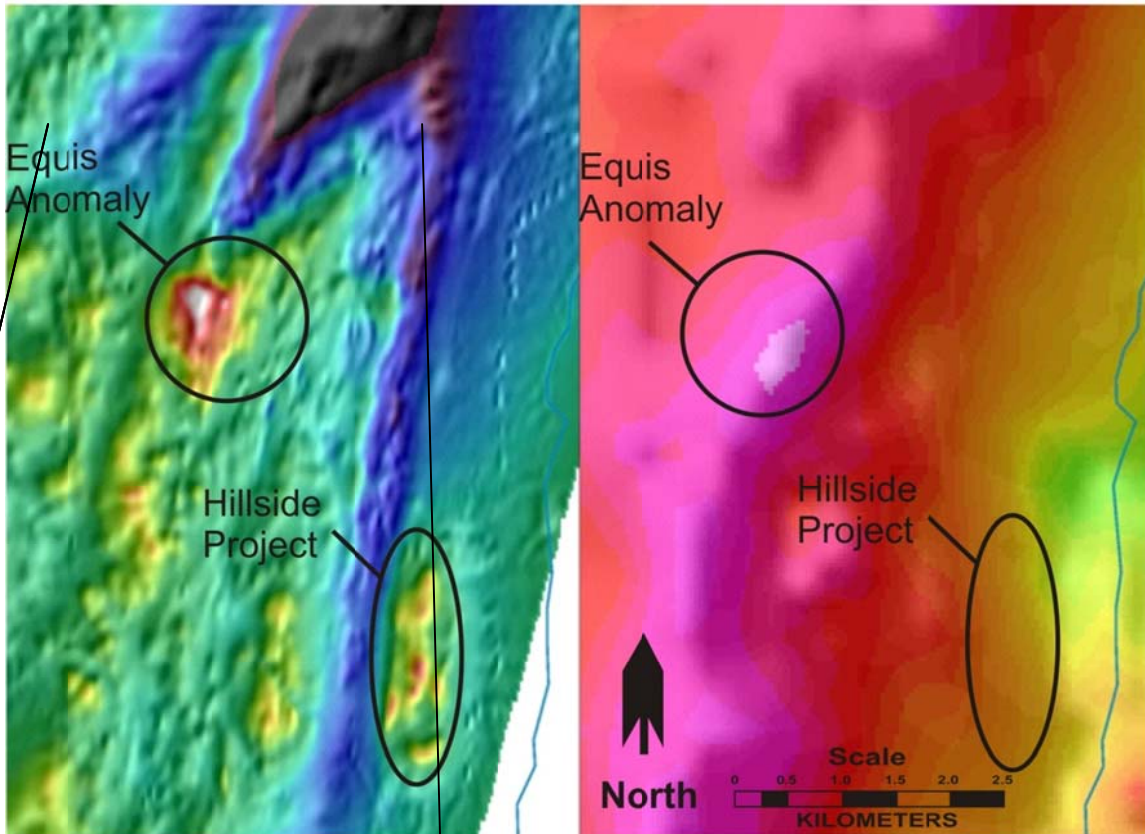


Figure 3: Location of the Equis target and relative magnetic and gravity anomalies compared to the Hillside project.

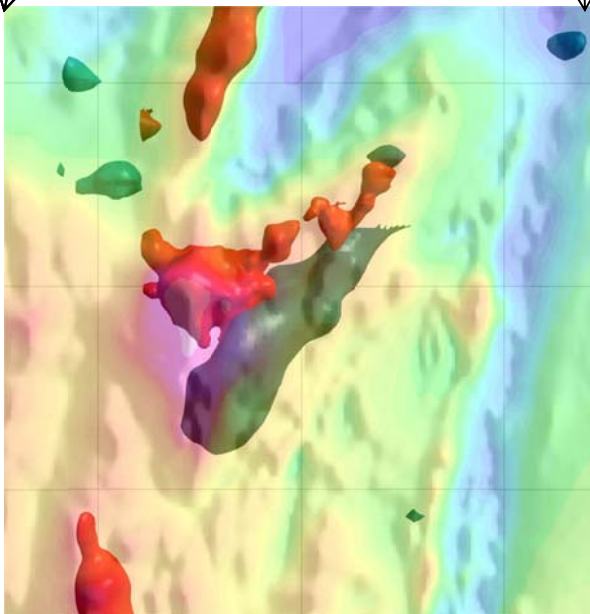


Figure 4: Equis magnetic anomaly (transparent) with inversion modelling of magnetic data (red bodies) and gravity data (adjacent blue bodies).

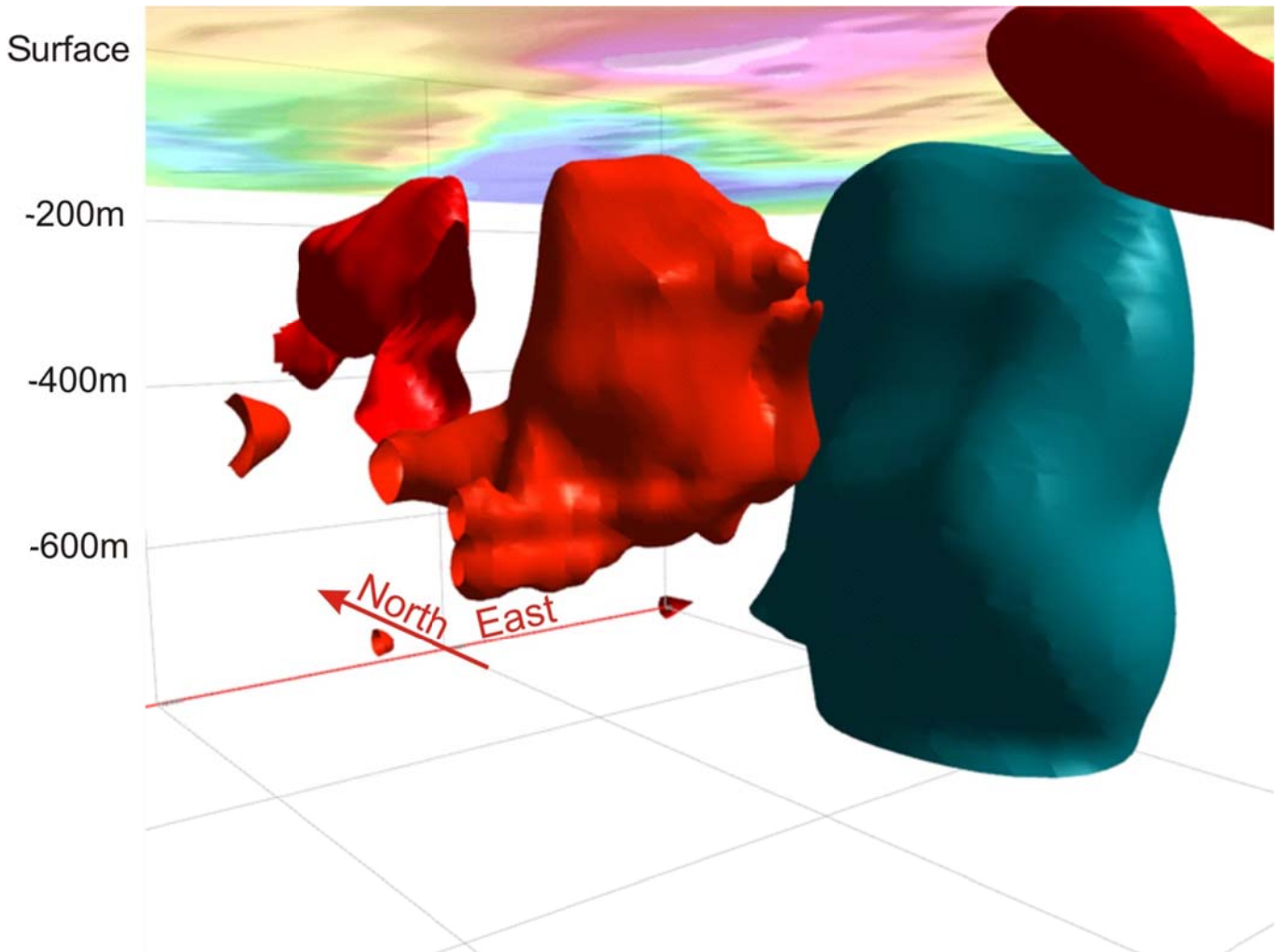


Figure 5: Inversion modelling of the Equis Anomaly, with magnetic body shown in red and gravity body in blue. View is to NW from underneath. Total width (NW-SE) of combined bodies is approximately 1.2km.

CORPORATE

Capital Raising and Share Purchase Plan

On 24 November 2010, Rex announced that it had completed a Share Purchase Plan (SPP) following the receipt of \$2.7 million. The SPP was offered to all shareholders at a price of \$2.50.

After approval from Rex shareholders at the companies AGM, Rex announced the completion of an \$85 million capital raising on 3 December 2010, at a price of \$2.50 per share to sophisticated and institutional investors. The money raised is to be used over 2011 and 2012 to complete a full-feasibility study at Hillside and expand the regional exploration program on the Yorke Peninsula in South Australia.

ACTIVITIES PLANNED FOR MARCH 2011 QUARTER

Hillside: Rex has 4 diamond drill rigs and 1 RC drill rig currently located at the Hillside project. Rex's focus over the March 2011 quarter at Hillside will be to continue to expand on the Inferred Resource base utilising these rigs. Rex will be concentrating the bulk of the drilling outside of the current Inferred Mineral Resource whilst a small proportion of the drilling will also be dedicated to areas with shallow, high grade copper that can easily be upgraded to Indicated status.

Pine Point Copper Belt: Rex will undertake a number of regional exploration programs during the March 2011 quarter. Diamond drilling on the regional targets is expected to recommence in early February 2011 as the total drilling capacity on the Yorke Peninsula increases from 5 to 8 rigs. In addition, regional soil sampling will commence to help assess which of the major magnetic and gravity anomalies in the region are related to high grade copper and gold mineralisation.

Table 1: Significant assay results from drill holes completed at the Hillside Project during the December 2010 quarter.

HOLE ID	FROM (m)	TO (m)	INTERVAL (m)	Cu (%)	Au (g/t)	Structure
HDD-122	166	196	30	0.3	-	Dart? (p)
	228	239	11	0.7	0.4	Dart/Zanoni? (p)
	304	342	38	0.5	0.1	Zanoni (p)
HDD-123	346	366	20	0.6	0.1	Dart (p)
	387	408	21	0.3	-	Zanoni (p)
	500	513	13	0.6	0.1	Zanoni (p)
HDD-126	356	443	87	0.4	-	Zanoni (p)
HDD-127	259	318	59	0.5	0.1	Zanoni (p)
<i>including</i>	294	305	11	1	0.1	Zanoni (p)
HDD-128	230	265	35	0.6	-	Dart (p)
<i>including</i>	251	257	6	1.5	0.1	Dart (p)
<i>including</i>	263	265	2	1.5	0.1	Dart (p)
	295	301	6	1.1	0.4	Dart (p)
HDD-129	111	115	4	0.6	-	Dart (p)
	124	141	17	1.1	0.1	Dart (p)
HDD-130	378	381	3	1	0.1	Dart (p)

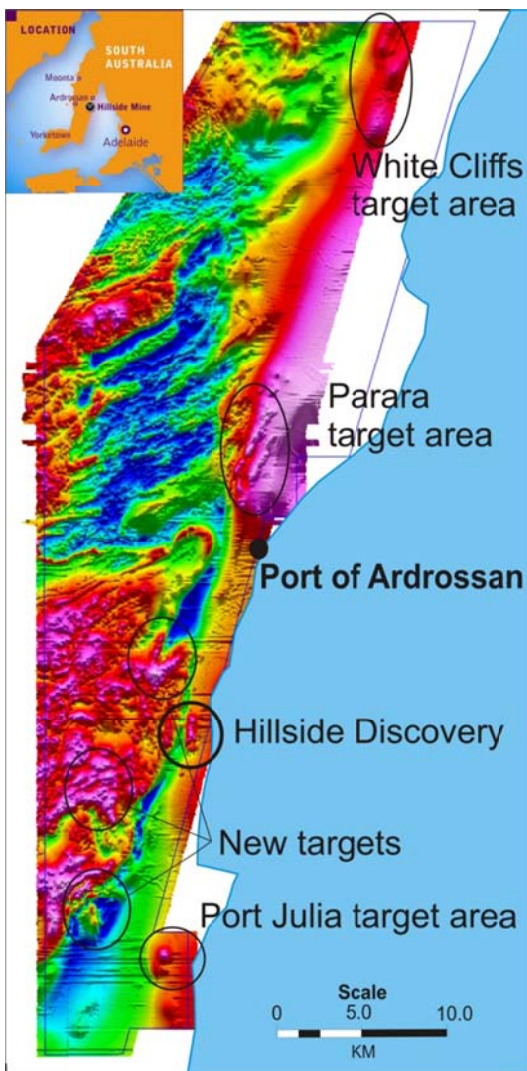
	409	436	27	0.5	0.1	Dart (p)
HDD-131	109	122	13	0.4	0.4	Songvaar (p)
	172	180	8	0.7	0.1	Songvaar (p)
<i>including</i>	176	179	3	1	0.2	<i>Songvaar (p)</i>
	183	190	7	0.9	0.2	Songvaar (p)
	199	213	14	0.4	0.3	Songvaar (p)
	270	277	7	0.6	0.2	Songvaar (p)
	559	587	28	0.4	0.1	Songvaar (p)
HDD-132W1	432	445	13	0.5	0.1	Songvaar (p)
	474	480	6	0.5	-	Songvaar (p)
HDD-133	442	449	7	0.7	0.5	Zanoni (p)
<i>including</i>	443	445	2	1.3	1.1	<i>Zanoni (p)</i>
HDD-134	40	86	46	0.6	0.1	Songvaar (s)
<i>including</i>	63	72	9	1.1	-	<i>Songvaar (s)</i>
	112	147	35	0.4	-	Songvaar (s)
HRC-122	46	64	18	0.4	0.3	Songvaar (s)
HRC-123	93	144	51	2.8	1.6	Parsee (s)
<i>including</i>	94	102	8	15	8	<i>Parsee (s)</i>
HRC-124	230	234	4	1	0.1	Zanoni (p)
	246	255	9	1.2	0.2	Zanoni (p)

(p) = Primary Mineralisation (s) = Supergene Mineralisation

* All intercepts reported are down hole unless otherwise specified

About the Hillside Copper Project and the Pine Point Copper Belt

Rex is an Australian minerals exploration company focussed on the discovery of large scale copper in South Australia. Rex seeks to discover multiple copper deposits leading to the development of a large scale, low cost and long life mining operation on the Yorke Peninsula in South Australia.



The presence of copper on the Yorke Peninsula was first highlighted by a number of small and high grade historical copper mines that exist within a large regional fault known as the Pine Point Fault Zone.

Rex considers that most of the copper was not discovered by early prospectors as it lies underneath 10 to 50 metres of cover sediments and were effectively “hidden” from earlier explorers.

Rex commenced exploring at Hillside in late 2007, soon after listing on the ASX. After a number of drilling programs leading to the discovery of large-scale copper mineralisation at Hillside, Rex commenced Resource definition drilling in January 2010. After six months of dedicated Resource drilling, Rex completed an updated Mineral Resource estimate at Hillside in December 2010 of 170Mt @ 0.7% copper and 0.2g/t gold.

The Hillside project and the other copper targets on the Yorke Peninsula have a number of key advantages compared to many other new copper development opportunities around the world. These include:

Infrastructure - A major highway connects the Hillside project to numerous major ports (closest within 12kms).

People and Equipment - The Hillside project is connected by a major highway (within a 2 hour drive) to the city of Adelaide (population 1.2 million). The Hillside project has the potential to draw most of the required skilled labour and equipment from Adelaide.

Power - The area is connected to the State’s main power grid.

Port and Town - The Hillside project is 12 kms from the Port and Town of Ardrossan. Ardrossan is a community familiar with mining given that an open cut dolomite mine is nearby and ships product through the Port.

Competent Persons Report

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mr Patrick Say who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Rex Minerals Ltd. Mr Say 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 Say consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

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

REX MINERALS LTD

ABN

12 124 960 523

Quarter ended ("current quarter")

31 DECEMBER 2010

Consolidated statement of cash flows

Cash flows related to operating activities	Current quarter \$A'000	Year to date (6 months) \$A'000
1.1 Receipts from product sales and related debtors		
1.2 Payments for (a) exploration & evaluation (b) development (c) production (d) administration	(5,484)	(10,214)
1.3 Dividends received	(443)	(1,480)
1.4 Interest and other items of a similar nature received	858	1,260
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	(5,069)	(10,434)
Cash flows related to investing activities		
1.8 Payment for purchases of: (a) prospects (b) equity investments (c) other fixed assets	(242)	(316)
1.9 Proceeds from sale of: (a) prospects (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)		
Net investing cash flows	(242)	(316)
1.13 Total operating and investing cash flows (carried forward)	(5,311)	(10,750)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(5,311)	(10,750)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	87,718	87,852
1.15	Proceeds from sale of forfeited shares		
1.16	Proceeds from borrowings		
1.17	Repayment of borrowings		
1.18	Dividends paid		
1.19	Other (provide details if material)	(4,911)	(4,911)
	Net financing cash flows	82,807	82,941
	Net increase (decrease) in cash held	77,496	72,191
1.20	Cash at beginning of quarter/year to date	26,170	31,475
1.21	Exchange rate adjustments to item 1.20		
1.22	Cash at end of quarter	103,666	103,666

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	212
1.24	Aggregate amount of loans to the parties included in item 1.10	

1.25 Explanation necessary for an understanding of the transactions

Non-cash financing and investing activities

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

2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Financing facilities available

Add notes as necessary for an understanding of the position.

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

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

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	10,173
4.2 Development	
4.3 Production	
4.4 Administration	230
Total	10,403

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	103,666	26,170
5.2 Deposits at call		
5.3 Bank overdraft		
5.4 Other (provide details)		
Total: cash at end of quarter (item 1.22)	103,666	26,170

Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1	Interests in mining tenements relinquished, reduced or lapsed			
6.2	Interests in mining tenements acquired or increased			

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

Issued and quoted securities at end of current quarter

Description 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 <i>(description)</i>				
7.2 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3 +Ordinary securities	150,284,460	150,284,460		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	500,000 90,000 35,079,000 6,000	500,000 90,000 35,079,000 6,000	\$0.102 \$0.217 \$2.50 \$1.222	\$0.102 \$0.217 \$2.50 \$1.222
7.5 +Convertible debt securities <i>(description)</i>				
7.6 Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7 Options <i>(description and conversion factor)</i>	594,000 240,000 60,000 60,000 1,000,000 1,750,000	- - - - - -	<i>Exercise price</i> \$1.222 \$2.052 \$0.552 \$0.217 \$0.152 \$0.102	<i>Expiry date</i> 24/5/2013 31/10/2012 31/5/2012 30/6/2011 30/6/2011 30/6/2011
7.8 Issued during quarter				
7.9 Exercised during quarter	500,000 90,000 6,000		\$0.102 \$0.217 \$1.222	\$0.102 \$0.217 \$1.222

+ See chapter 19 for defined terms.

7.10	Expired during quarter				
7.11	Debentures (totals only)				
7.12	Unsecured notes (totals only)				

Compliance statement

- 1 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).
- 2 This statement does give a true and fair view of the matters disclosed.

Sign here:  Date: 25 January 2011
(Company secretary)

Print name: Amber Rivamonte

Notes

- 1 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.
- 2 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.
- 4 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.
- 5 **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.

== == == == ==

+ See chapter 19 for defined terms.