

ASX Release: 15 October, 2009

Quarterly Activities Report - for the period ended 30 September 2009

ASX Code: RXM

Share range in quarter: 45.5c to 260c

Shares on Issue: 80.87 million

Website: www.rexminerals.com.au

Geophysical surveys and new assay results support large scale copper potential at Hillside

HIGHLIGHTS

Pine Point Copper Belt, Yorke Peninsula, South Australia:

- Detailed magnetic survey and electromagnetic (EM) survey highlights potential for large scale copper mineralisation at Hillside
- High grade copper defined for over 500m of strike in Zanoni Fault Zone
- 3,372 metres drilled in quarter
- Best results include:
 - 60 metres @ 3.0% copper*
 - 52 metres @ 3.0% copper*
 - 57 metres @ 1.7% copper*
 - 53 metres @ 1.7% copper*
 - 29metres @ 1.0% copper*

**not true width – see figures 3 and 4*

Mt Carrington, NSW:

- Extensive shallow silver mineralisation discovered at White Rock North with potential for large scale copper-gold mineralisation at depth
- 1,883 metres drilled in quarter

Corporate:

- Cash position of \$10.6 million at quarter's end

SUMMARY COMMENTS

The completion of detailed geophysical surveys combined with recent confirmation drill holes provide further evidence supporting the interpretation that large-scale mineralisation exists at Hillside. In addition, new shallow supergene copper mineralisation has been discovered at Hillside. This is interpreted to be the cause of a series of EM anomalies identified from an EM survey completed this quarter.

Outside of the Hillside project a detailed magnetic survey over the entire Pine Point Copper Belt (60km in length) has revealed multiple large scale copper targets.

OUTLOOK

The Company has two diamond drill rigs at Hillside which will remain there for most of the December 2009 quarter. Further drill testing of the shallow copper recently identified on the Parsee magnetic anomaly will be a significant focus over the next few months.

Rex will continue to broadly assess where the most significant copper mineralisation is likely to occur at Hillside in preparation for a more detailed infill drilling program in 2010.

For further information, please contact:

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PROJECTS

Pine Point Copper Belt (South Australia)

Drilling results at Hillside in the first half of 2009 identified a strong relationship between the iron mineral magnetite and copper mineralisation (predominantly the copper mineral chalcopyrite). This association is significant, as detailed magnetic surveys have the ability to accurately define where large concentrations of magnetite exist under cover. Given that the copper host rocks on the Pine Point Copper Belt occur almost exclusively below a thin layer (over 10m) of cover rocks, this has the potential to open up a new frontier of discovery on the Yorke Peninsula. All drilling to date (42 drill holes to date) continues to show a strong relationship between magnetite and copper mineralisation.

With this knowledge a large regional high-resolution magnetic survey was flown over the entire Pine Point Copper Belt. This survey was completed in early October with the results shown in figure 1. Multiple large scale targets were identified, some of which are highlighted in figure 1. At the Parara and White Cliffs targets, there are distinct analogies to Hillside with high-grade historical copper mines in close proximity to large magnetic anomalies.

Hillside Prospect - Pine Point Copper Belt (South Australia)

Key activities completed at Hillside during the quarter included a high resolution magnetic survey and an electromagnetic (EM) survey. The results from the magnetic survey revealed three major features that are interpreted to be three continuous faults known as the Zanoni, Parsee and the Songvaar. The majority of the high grade copper results returned from drilling to date at Hillside are interpreted to be related to the Zanoni Fault Zone, which is located underneath the western magnetic feature (Figure 2).

The largest magnetic feature is known as the Parsee magnetic anomaly (Figure 2) which had not been drill tested at the time the new magnetic survey was completed. Drilling commenced in September close to the peak of the Parsee magnetic anomaly. The first drill hole (HDD042) was immediately successful, intersecting shallow secondary (chalcocite) copper mineralisation at a depth of 79.5m down hole, followed by significant primary copper mineralisation (chalcopyrite) hosted by magnetite from 100m to 145m down hole. Assay results from HDD042 are expected to be received in early November.

The continued association between the magnetite and copper has significant implications for the Hillside project. This result now opens up the potential for additional large scale copper mineralisation on the Parsee structure which is broadly defined by a large magnetic anomaly extending for over 1.5km in length (Figure 2).

Drilling on the Zanoni Fault Zone on broadly 100m spaced sections, has continued to successfully define high-grade copper mineralisation for a strike length of over 500m (Figure 2). A number of significant assay results were received during the quarter and are summarised in table 1. Figures 3 and 4 show two cross sections which have been defined from drilling completed during the quarter.

The mineralisation on the Zanoni Fault Zone remains open both to the north and to the south. The magnetic anomaly attributed to the Zanoni Fault Zone is interpreted to extend for up to 2km, based on a recently completed high resolution magnetic survey (Figure 2).

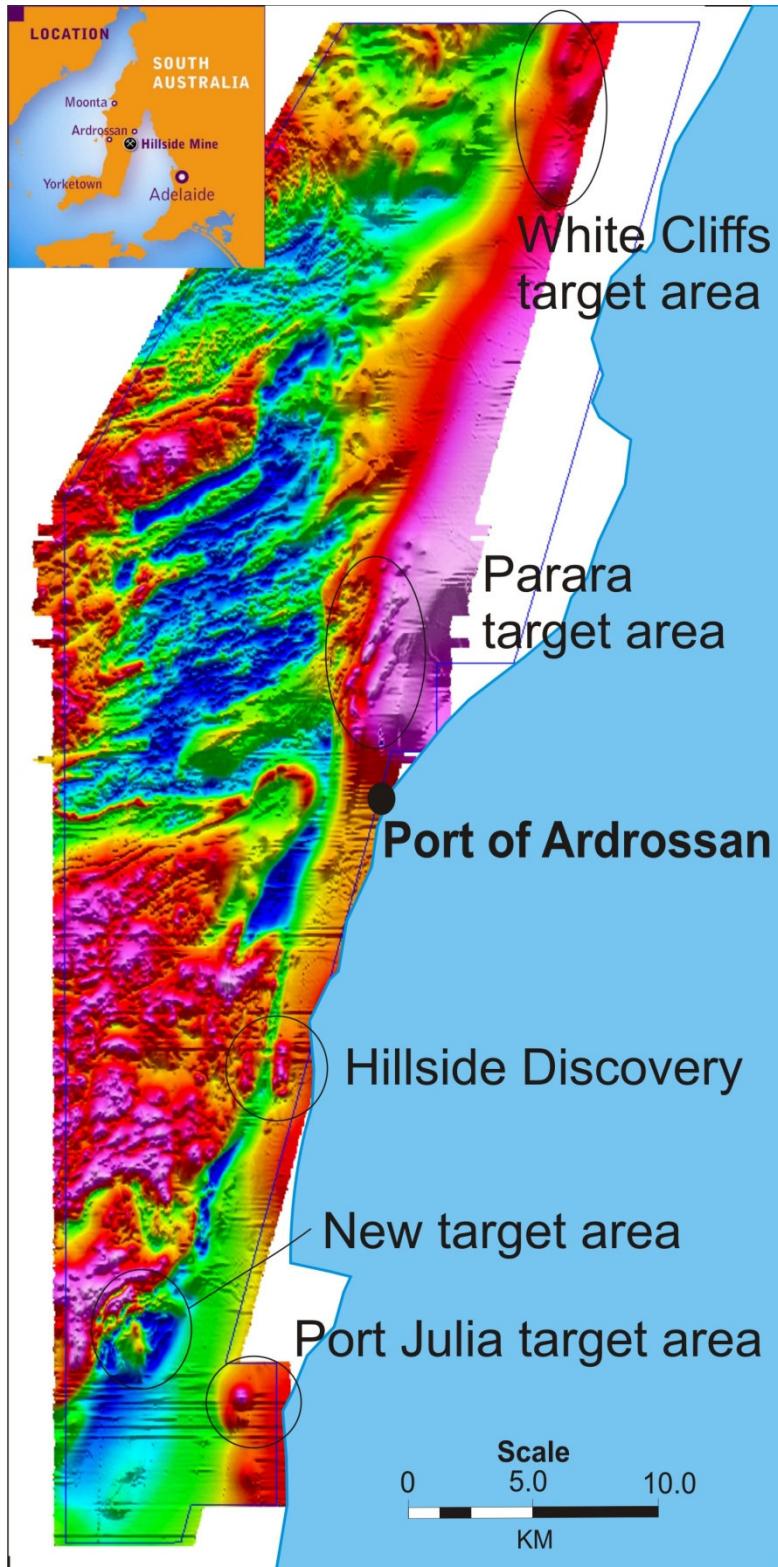


Figure 1: New high resolution magnetic image (raw data only) over the entire Pine Point Copper Belt on the Yorke Peninsula in South Australia.

HOLE ID	FROM (m)	TO (m)	INTERVAL (m)	Cu (%)	Au (g/t)	STRUCTURE
HDD027	84	101	17	1.5	0.3	Zanoni
<i>Including</i>	92	99	7	3.2	0.6	Zanoni
	218	235	17	0.3	-	New
HDD030	108	114	6	0.5	0.1	Zanoni
HDD032	135	137	2	0.6	-	Zanoni
	228	239	11	-	-	Zanoni
HDD033	144	151	7	1.2	0.3	Zanoni
	280	340	60	3.0	0.5	Zanoni
HDD033W1	275	426	151	1.5	0.3	Zanoni
<i>Including</i>	275	335	60	1.2	0.2	Zanoni
<i>Including</i>	374	426	52	3.0	0.6	Zanoni
HDD034	158	215	57	1.4	0.2	Zanoni
<i>Including</i>	158	190	32	1.7	0.2	Zanoni
<i>Including</i>	198	215	17	1.3	0.3	Zanoni
HDD035	97	104	7	0.6	0.1	Dart
	153	163	10	1.4	0.2	Zanoni
	201	213	12	1.8	0.3	Zanoni
HDD036	201	207	6	0.5	0.1	Dart
	264	279	15	1.0	0.1	Zanoni
<i>Incl.</i>	271	279	8	1.6	0.1	Zanoni
HDD037	180	188	8	0.5	0.3	Zanoni
	244	297	53	1.7	0.2	Zanoni
<i>Incl.</i>	263	273	10	4.7	0.8	Zanoni
<i>Incl.</i>	279	282	3	6.8	0.6	Zanoni
	366	372	6	0.5	0.1	Zanoni
HDD038	134	163	29	1.0	0.2	Zanoni
<i>Incl.</i>	153	163	10	2.5	0.4	Zanoni

Table 1: Tabulated assay results from the Hillside Project in South Australia. Results have been grouped based on the interpreted structure within which they occur. For an interpretation of the mineralisation see figures 3 and 4.

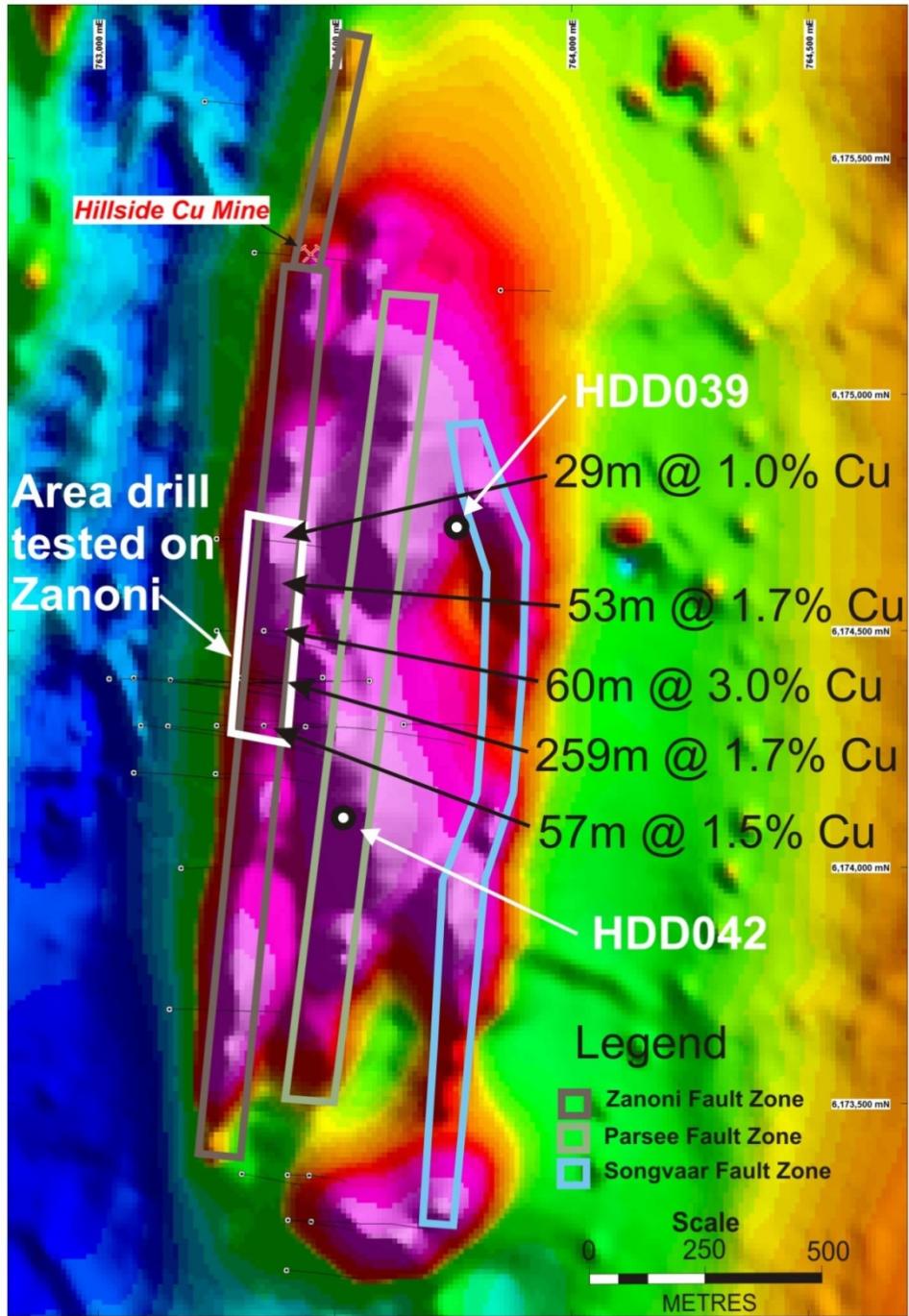


Figure 2: High resolution magnetic image at Hillside highlighting some of the drill intersections returned from the Zanoni Fault Zone and the location of drill hole HDD042 which has recently tested the Parsee Fault Zone.

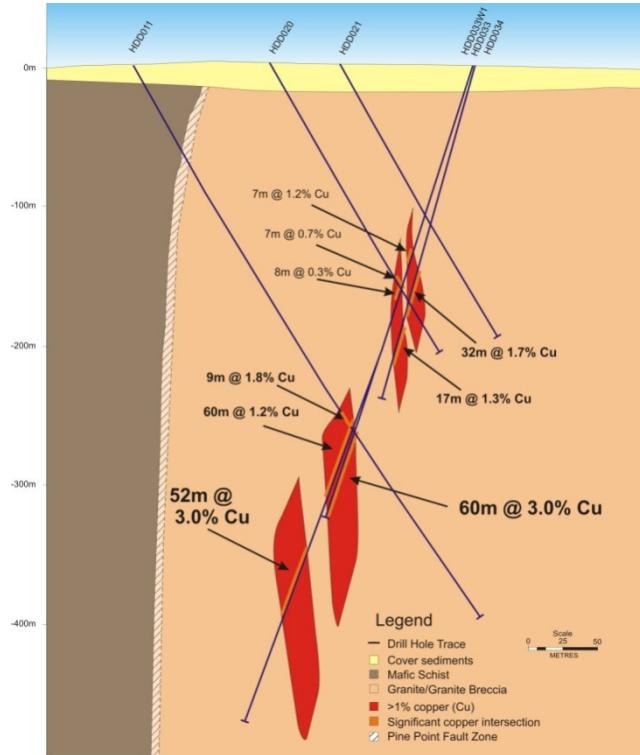


Figure 3: Drilling results and interpreted geology of cross section 74500N at the Hillside Project, SA.

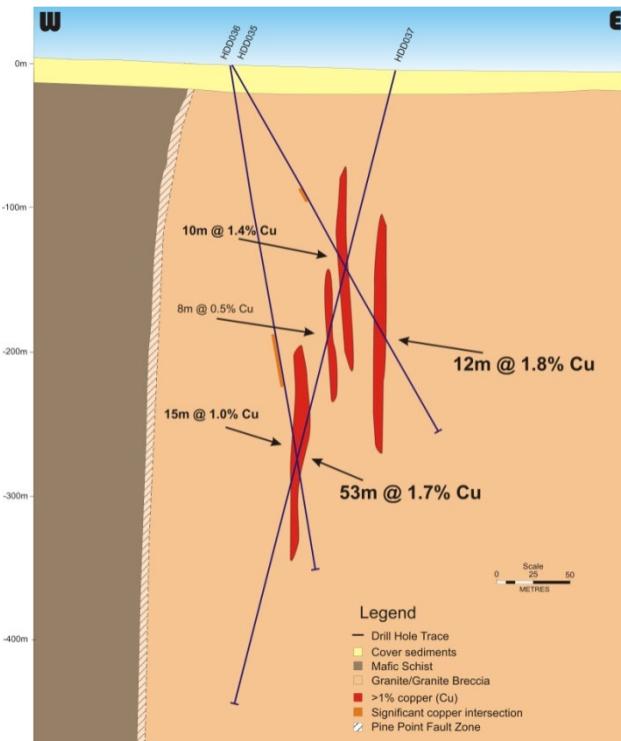


Figure 4: Drilling results and interpreted geology of cross section 74600N at the Hillside Project, SA

Hillside Prospect – Discovery of secondary copper

Rex Minerals has completed drill testing of the first of several shallow EM anomalies which were defined from a recently completed survey at Hillside (Figure 5). The initial drill hole (HDD039) intersected a sequence of weathered rocks to a greater depth than previously encountered. Within the weathered rocks a range of secondary copper minerals were identified including native copper, atacamite and chalcocite. Although only small amounts of native copper were intersected in the drill hole, the EM response indicates that additional significant native copper could occur at this location.

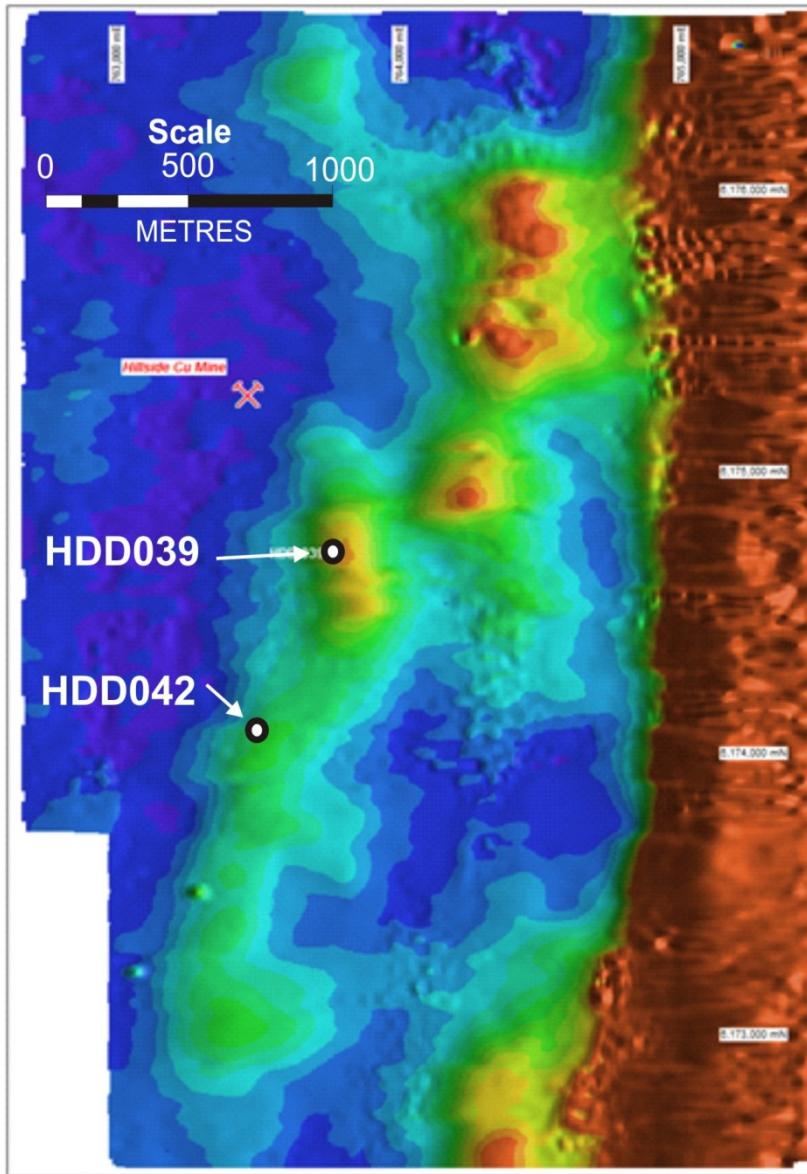


Figure 5: Detailed view of the new airborne time domain electromagnetic (EM) survey and the location of drill hole HDD039 relative to the adjacent prospective EM anomalies.

Drill hole HDD039 returned an intersection of 108m @ 0.2% copper from 33m, including 34m @ 0.4% copper from 83m down hole. This does not include the assay for the section of drill core that contained the largest occurrence of native copper (figure 1 below), which is being validated with further assays. Anomalous levels of uranium, gold and silver were also identified in this drill hole, with the following results; 15m @ 2.0g/t gold from 54m, 44m @ 3.1g/t silver from 28m and, 50m @ 92.4ppm U3O8 from 33m.

Rex considers that this result has identified a separate type of copper target, from the primary copper mineralisation that has been discovered to date at Hillside. The presence of secondary copper mineralisation near the surface in close proximity to a large primary copper deposit is not unusual and has been reported previously on the Yorke Peninsula associated with the large historical Moonta/Wallaroo copper deposits. Other large deposits within Australia such as the Ernest Henry copper deposit also contain similar primary and secondary mineralisation, with an EM anomaly interpreted to be associated with native copper mineralisation. A total thickness of 108m of shallow copper mineralisation, combined with the size of the EM anomalies at Hillside indicate that significant secondary copper mineralisation could exist at Hillside.

Mt Carrington Gold-Silver Project (New South Wales)

During the quarter two drilling programs were completed at Mt Carrington. Drilling for copper was completed at the All Nations prospect which was designed to follow up the mineralisation intersected by Rex earlier in the year in drill hole KYDD001, which intersected 18.7m @ 5.9% copper from 52.25m, and 10.1m @ 6.3% copper from 88.0m (announced 30 March 2009).

Interpretation of the drilling indicates that the copper and gold mineralisation occurs as narrow high grade zones at depth, enveloped and overlain by larger shallow lower grade secondary copper zones. Evaluation of previous drilling and mining data indicates that strong potential exists to define further shallow copper zones within a broader area encompassing the All Nations – Gladstone – Pioneer Prospects and covering some 4km². Mineralisation modelling also suggests potential for deeper copper – gold mineralisation in this region.

A program of four drill holes was also completed at the White Rock North prospect. This program was designed to confirm high grade silver intersections recorded in drilling undertaken in the 1980's, and as a preliminary test of the large IP chargeability anomaly defined on the prospect area (announced 27 August 2009). All four drill holes intersected widespread shallow silver mineralisation within and on the margins of a large rhyolitic porphyry intrusion. It is interpreted that this porphyry intrusion may underlie an area as large as 1km² with potential for large scale shallow silver and deeper copper-gold mineralisation.

The drilling at White Rock North has provided important information on the style and potential extent of the silver mineralisation. The mineralisation is related to at least two zones of north-east-trending stockwork quartz-sulphide veining and brecciation. The highest grade silver is observed where the vein sets intersect the margins of the rhyolite porphyry (Figure 5) and the mineralisation has been intersected in drilling as shallow as 9m below the surface. Previous surface rock chip sampling of outcropping quartz veining in porphyry 100m north of this drilling by Rex returned silver values in excess of 100 g/t.

Geological comparisons with similar porphyry-related gold-silver-copper mineralisation at White Rock indicates that the silver mineralisation has formed at elevated levels in the hydrothermal system and good potential exists to define gold – copper mineralisation at deeper levels both within and marginal to the porphyritic intrusion defined. The geological setting of the White Rock prospect bears a number of similarities to the Cadia – Ridgeway gold-copper deposits in the Lachlan Fold Belt in central NSW.

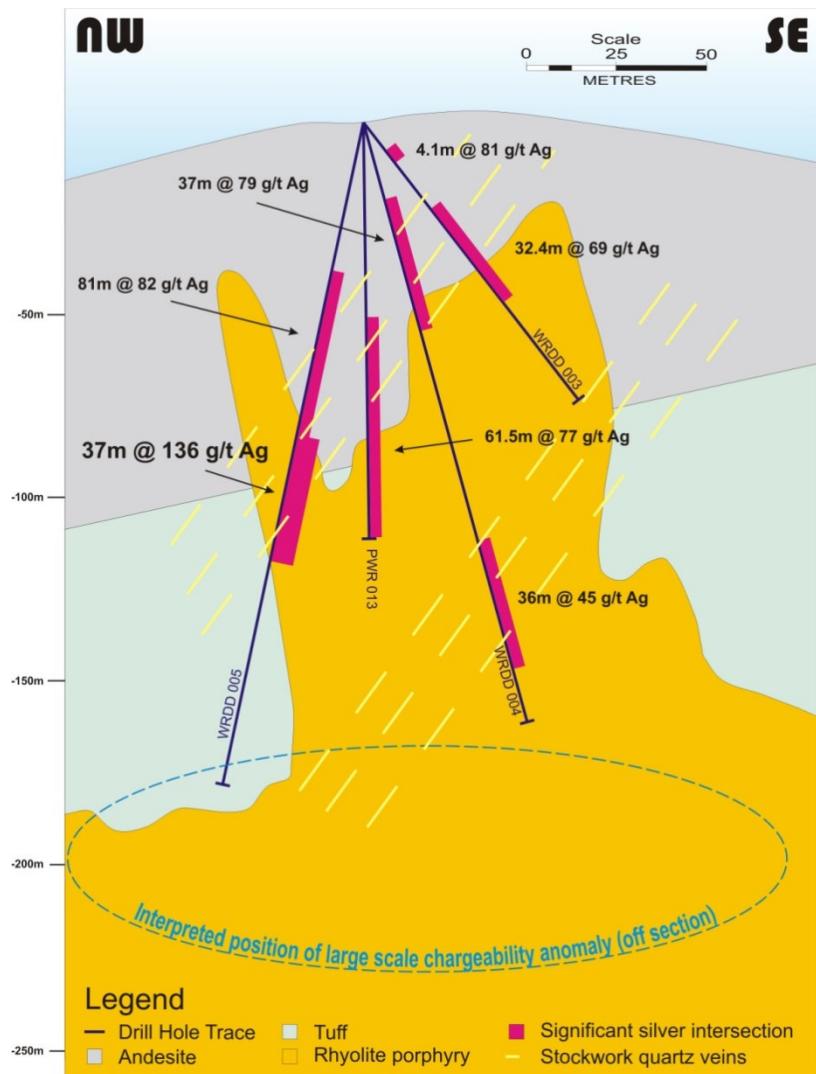


Figure 6: Geological cross section displaying drill holes WRDD003 – 005 along with previous drill hole PWR013.

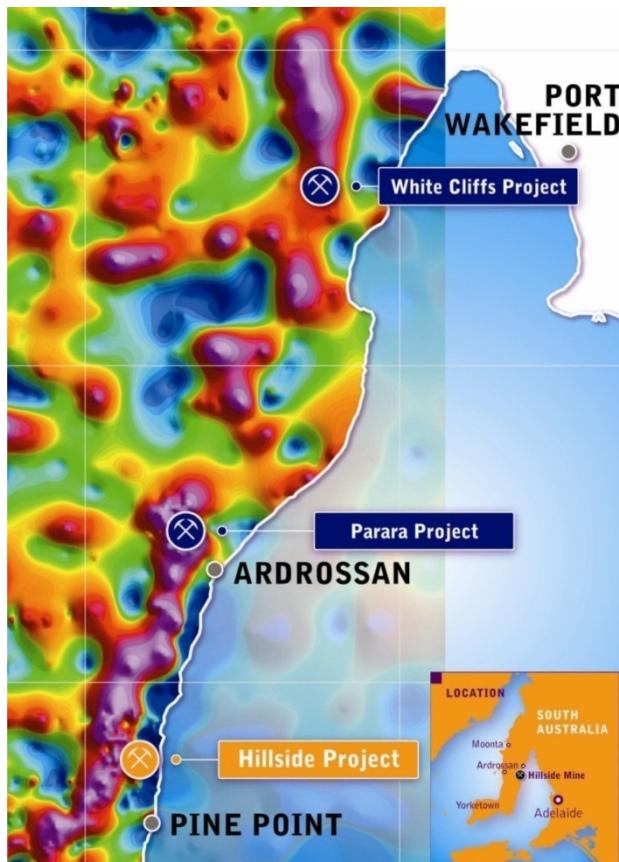
ACTIVITIES PLANNED FOR NEXT QUARTER

Hillside: Rex has two diamond drill rigs located at the Hillside project. The drilling program at Hillside is expected to continue throughout the next quarter, focussing on the larger magnetic anomaly which is associated with the Parsee Fault Zone. Towards the end of the quarter it is expected that Rex will place one drill rig on at least one of the high priority targets that have been identified from the recently completed regional magnetic survey.

Mt Carrington: A detailed magnetic survey at Mt Carrington is currently underway. Results from the detailed magnetic program and recently completed induced polarisation (IP) surveys will be combined with all the recently compiled historical and new geological information. A review of Mt Carrington is anticipated during the next quarter given the large volume of new and detailed information that has been gathered there. Substantial evidence is building for larger scale silver, gold and copper potential at Mt Carrington.

About Rex Minerals

Rex is an Australian minerals exploration company with recent copper discoveries in South Australia and New South Wales. 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. Existing gold and silver Resources and a shallow copper discovery at Mt Carrington in NSW also provide Rex with a shorter term development option. The project portfolio is therefore expected to provide Rex with a sustainable pipeline of development opportunities.



Rex is exploring for multiple large scale copper-gold-uranium deposits on the Yorke Peninsula, 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 is undertaking a number of geophysical surveys that enable geologists to "see through" the shallow cover sediments to identify potential sites for large scale copper-gold-uranium mineralisation. As part of this work, recent gravity surveys have highlighted a large number of targets that exist along the Pine Point Fault Zone (shown in purple on adjacent image).

Highlights from drilling at the first of these targets at Hillside include:

259m @ 1.7% copper and 0.4g/t gold
57m @ 1.5% copper and 0.4g/t gold
57m @ 1.4% copper and 0.2g/t gold
60m @ 3.0% copper and 0.5g/t gold

In NSW, Rex has recently acquired 100% ownership of the Mt Carrington gold-silver project. Mt Carrington has 190,000ozs of gold and 10.5Mozs of silver with additional shallow gold and silver potential. Recent exploration at Mt Carrington has also identified some significant high-grade copper mineralisation within 100m of the surface, including 18.7m @ 5.9% copper and 10.1m @ 6.3% copper.

Competent Persons Report

The information in this report that relates to Exploration Results or Mineral Resources is based on information compiled by Mr Geoffrey Lowe who is a Member of the Australasian Institute of Mining and Metallurgy and is a full time employee of Rex Minerals Ltd. Mr Lowe 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 Lowe 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 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001.

Name of entity

REX MINERALS LTD

ABN

12 124 960 523

Quarter ended (“current quarter”)

30 SEPTEMBER 2009

Consolidated statement of cash flows

		Current quarter \$A'000	Year to date \$A'000
Cash flows related to operating activities			
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for <ul style="list-style-type: none"> (a) exploration and evaluation (b) development (c) production (d) administration 	(1,609)	(1,609)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	96	96
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (lump sum Payment for Drilling Services, refer corporate activities report)	-	-
Net Operating Cash Flows		(1,729)	(1,729)
Cash flows related to investing activities			
1.8	Payment for purchases of: <ul style="list-style-type: none"> (a)prospects (b)equity investments (c) other fixed assets 	-	-
1.9	Proceeds from sale of: <ul style="list-style-type: none"> (a)prospects (b)equity investments (c)other fixed assets 	(83)	(83)
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (provide details if material)	-	-
Net investing cash flows		(83)	(83)
1.13	Total operating and investing cash flows (carried forward)	(1,812)	(1,812)

+ See chapter 19 for defined terms.

Appendix 5B
Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(1,812)	(1,812)
1.14	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.	161	161
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)	-	-
	Net financing cash flows	161	161
	Net increase (decrease) in cash held	(1,651)	(1,651)
1.20	Cash at beginning of quarter/year to date	12,286	12,286
1.21	Exchange rate adjustments to item 1.20	-	-
1.22	Cash at end of quarter	10,635	10,635

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	85
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.

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

+ See chapter 19 for defined terms.

Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	1,500
4.2 Development	-
Total	1,500

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	10,635	12,286
5.2 Deposits at call	-	-
5.3 Bank overdraft	-	-
5.4 Other (provide details)	-	-
Total: cash at end of quarter (item 1.22)	10,635	12,286

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	80,870,000	80,870,000		
7.4 Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	500,000 30,000	500,000 30,000	\$0.30 \$0.365	\$0.30 \$0.365
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>	300,000 180,000 150,000 1,000,000 5,700,000	- - - - -	<i>Exercise price</i> \$0.70 \$0.40 \$0.365 \$0.30 \$0.25	<i>Expiry date</i> 31/5/2012 30/6/2011 30/6/2011 30/6/2011 30/6/2011
7.8 Issued during quarter				
7.9 Exercised during quarter	500,000 30,000	500,000 30,000	\$0.30 \$0.365	\$0.30 \$0.365
7.10 Expired during quarter				
7.11 Debentures <i>(totals only)</i>				

+ See chapter 19 for defined terms.

7.12	Unsecured notes (totals only)	
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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 4).
- 2 This statement does give a true and fair view of the matters disclosed.



Sign here: (Company secretary) Date: 15 October 2009

Print name: Janet Mason

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 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting 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.