

## Report for Quarter Ended 30 June 2010

### Alchemy drills VTEM targets at Magnus Copper-Gold Project and progresses development of Wilgeena and Hermes Gold Projects

#### Highlights

- Alchemy continues sustained drilling program at Magnus Copper-Gold Project targeting anomalies in the Narracoota Formation directly west of Sandfire's tenements
- Drilling at the Hermes and Wilgeena Gold Projects increases areas of gold mineralisation,
- Drilling at Hermes Gold Project in June 2010 includes best results of:
  - 16m @ 6.95g/t gold
  - 4 m @ 16.30g/t gold
  - 11m @ 5.65 g/t gold
- Maiden JORC resource estimate of over 49,000 ounces contained gold at Wilgeena Gold Project with intention to start production in March 2011 quarter
- Diamond drilling at Hermes and Wilgeena Gold Projects progressing with metallurgical testing of core next quarter to assist with commencement of production
- Drilling at Big Bell North Project in the Murchison District highlights large area of gold mineralisation
- Alchemy continues to control costs while actively exploring its project areas with \$5.85 million cash at hand at 30 June 2010
- Conversion of listed 31 August 2010 options expected to significantly increase cash on hand in September 2010 quarter by approximately \$5 million.

#### Details

##### Gascoyne Projects (Alchemy 100%)

##### Magnus Copper-Gold Project

Alchemy has now collected and integrated a number of key datasets over the Magnus project area. Surface mapping has been completed at 1:10,000 scale and this information has been integrated with results from soil sampling, gravity surveys, ground EM and the VTEM results.

In addition, a number of first pass Aircore and RC drilling programs have been completed. An extensive project wide RC drilling program is continuing to test targets prospective for DeGrussa style copper/gold mineralisation.

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Alchemy completed 7 RC holes for 1,679m in April 2010 targeting VTEM conductors identified in an airborne EM survey flown in December 2009. All results of 4m-composite samples and 1m splits from intervals with weakly copper anomalous intervals identified using a portable Niton XRF instrument have been received and summary details were reported on 25 May 2010.

An RC program of up to 20 holes for approximately 4000m commenced in early July 2010 and to date, 12 RC holes for 2018 metres have been completed, including a fence of 8 RC holes for 1106 metres. Difficult drilling conditions resulted in two holes being abandoned short of their target depth but these will be retested with a different drilling rig.

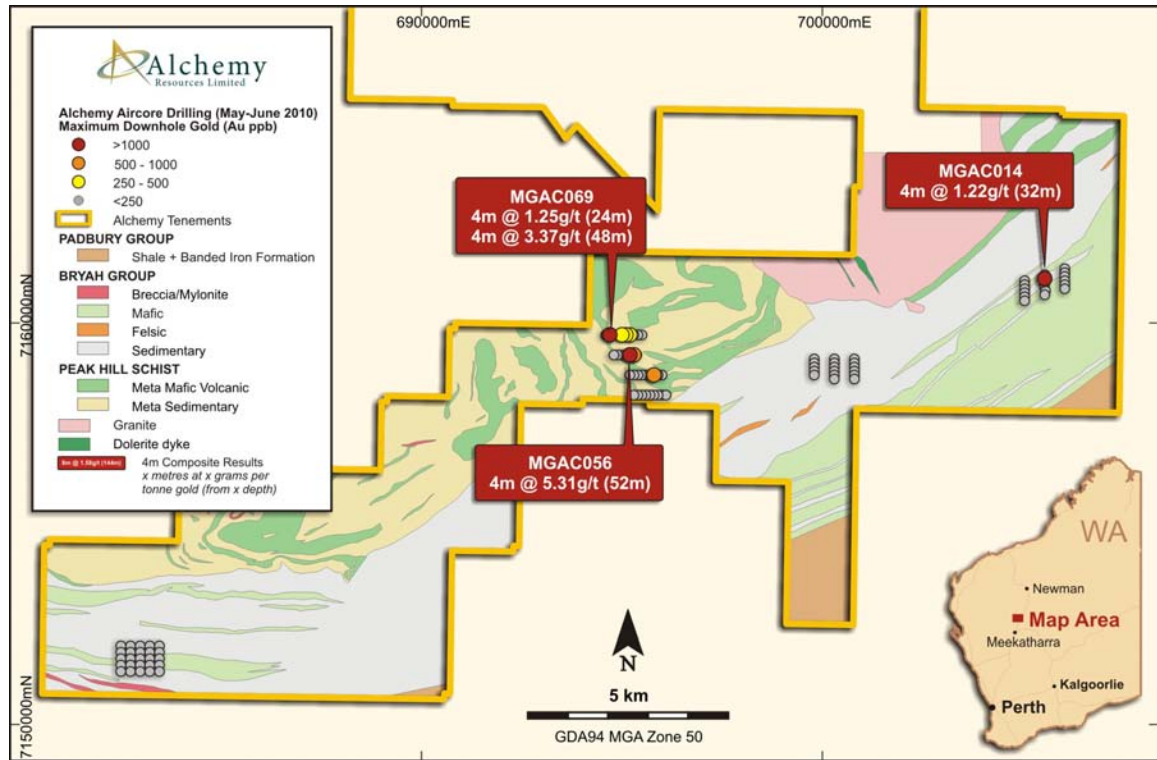


Figure 1. – Magnus Aircore Drilling May-June 2010

Downhole EM surveys have been conducted on selected RC holes (all holes drill testing modelled VTEM conductors). The results from the downhole EM surveys and integration with VTEM and ground EM surveys is continuing.

Ground EM surveys have been undertaken on six profiles (four in east Magnus and two in west Magnus) to complement the results of the VTEM survey and identify exploration targets at depth.

An Aircore drill program of 95 holes for a total of 6,456m were drilled in May 2010 (Figure 1) and are reported in Table 1. Results of 4m-composite samples have been received. Gold anomalism has been identified in two areas. Assay results of 1m-resplits are pending.

A surface geochemistry program over the eastern Magnus project area was completed in early July, with sampling conducted at 400m x 200m spacing. To date, only partial results have been received. A consultant has been contracted to interpret the results and integrate with historic surface geochemistry over the project area.

A gravity survey over the entire Magnus project was completed during the June 2010 Quarter. Interpretation with other geological and geophysical datasets is continuing. The initial interpretation, in conjunction with surface geochemistry data has resulted in the generation of additional copper-gold targets in the western Magnus area.

### **Hermes and Wilgeena Gold Projects – Gold Processing**

In 2009 Alchemy reported it had entered into a non-binding Memorandum of Understanding with Barrick (Plutonic) Limited, the operator of the Plutonic Gold Mine to provide a framework for a future binding toll treatment or ore sale agreement between the two companies.

Alchemy is planning to develop an excavate, load and haul operation to mine Hermes and Wilgeena gold ore and transport via a haul road for treatment at the Plutonic processing plant.

In conjunction with this plan, Alchemy is also considering the merits of a small processing plant to enhance the economics of recovering not only Hermes and Wilgeena gold but also any additional gold resources that may be discovered in the near future. Alchemy has commenced diamond drilling to provide samples for metallurgical test work to determine the optimum processing method for Hermes and Wilgeena gold ore.

### **Hermes Gold Project**

Following the March 2010 drilling campaign at Hermes (previously reported on 3 May 2010), Alchemy completed 2 RC holes for 235m in April 2010 and 21 RC holes for 1,562m in June 2010. The results of 4m-composite assays have been received for the June 2010 RC drill program and are reported in Table 2. Assay results from 1m re-splits of significant intersections are pending.

Best results from this drilling at the Trapper West and Winchester prospects included (Figure 2):

- 16m @ 6.95g/t gold
- 4m @ 16.30g/t gold
- 8m @ 1.35g.t gold
- 11m @ 5.65g/t gold
- 20m @ 1.52g/t gold
- 19m @ 1.07g/t gold
- 12m @ 1.69g/t gold

The June 2010 RC drilling program also included 2 RC holes that tested a copper anomaly South West of Hermes. Measurements from a portable Niton XRF instrument on 1m samples identified moderate copper anomalism in both holes up to 0.2% copper. Assay results from the intervals with copper anomalism are pending. This copper anomalism warrants further investigation and will be drill tested in September 2010.

A ground magnetic survey comprising 165 line kilometres was undertaken over the Hermes Gold Project at 25m line-spacing. This survey will identify the sediments/volcanic contact over the Hermes Gold Project area known to host the gold resource at Hawkeye and Trapper.

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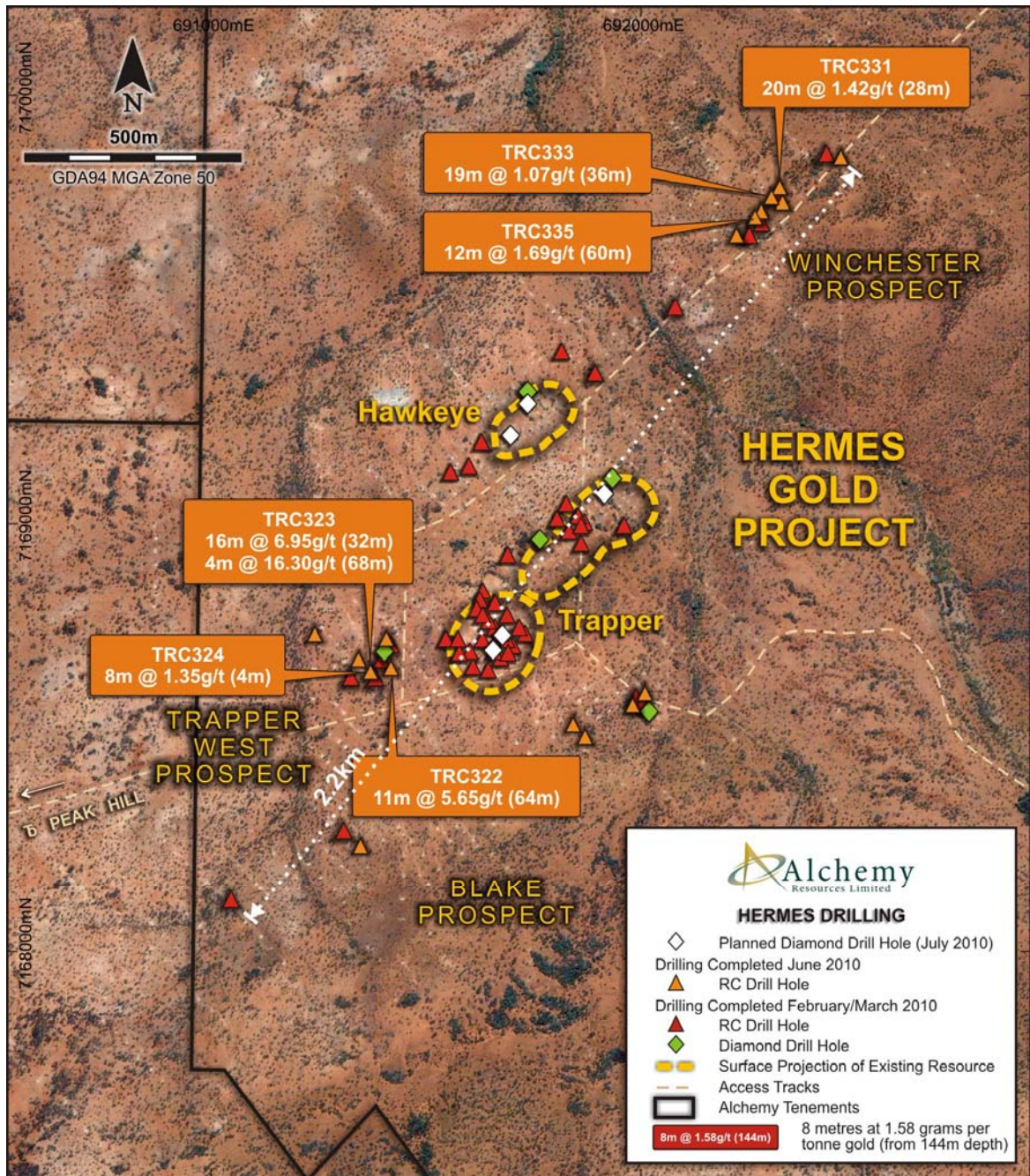


Figure 2. – Hermes Gold Project Significant Intersection from June 2010 RC Drilling

A program of 5 diamond drill holes (for 410m including 70m of RC pre-collar) commenced in late July 2010 to obtain material for metallurgical testing.

Alchemy will undertake a re-estimation of the JORC code compliant resource in the September 2010 quarter using current gold prices and mining costs. The maiden JORC resource estimate was undertaken in 1998 by Snowdens using a gold price of A\$550/oz.

Alchemy will include in the updated resource estimate all drilling undertaken since Alchemy took ownership of the Hermes Project in July 2008.

## Wilgeena Gold Project

A 20 hole RC program for 1,315m was undertaken in April 2010 (Figure 3). All results of 4m-composite samples and 1m-resplits were reported on 15 June 2010.



Figure 3. – Wilgeena Gold Project Significant Intersections RC Drilling June 2010

Following this program a JORC Code Compliant Indicated Resource was estimated for Wilgeena of **659,480t @ 2.34g/t gold** (equivalent to **49,536 ounces** of gold) (Figure 4)

A program of 3 diamond drill holes (for 195m) commenced in July 2010 to obtain material for metallurgical testing.

A ground magnetic survey will be undertaken over the Wilgeena Gold Project in August 2010 to identify the potential structural controls on gold mineralisation.

Follow the estimation of the maiden JORC resource, a Mining Lease application covering the Wilgeena Gold Project was submitted in July 2010.

## Robinson Range Iron Project

Alchemy has undertaken a ground magnetic and gravity survey on M52/844 covering a portion of the Robinson Range. This information will be reviewed in the September 2010 quarter.

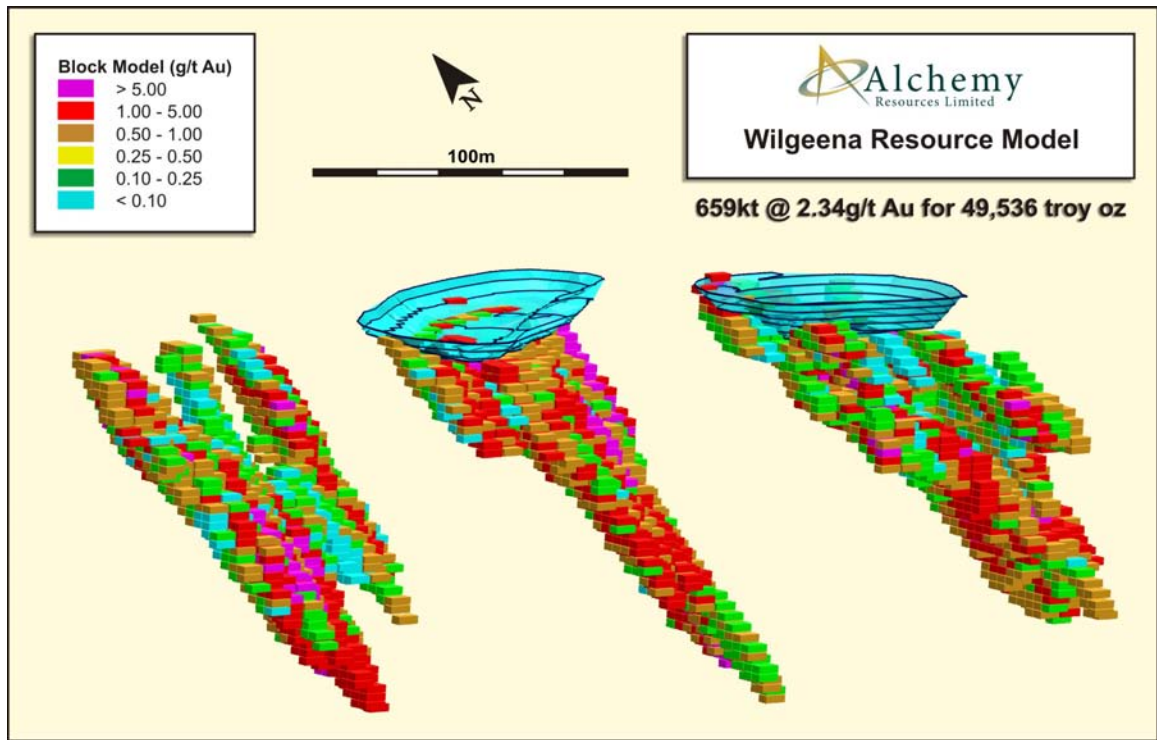


Figure 4. – Wilgeena 3D Resource Model

#### Murchison Projects (Alchemy 80%, Jindalee 20%)

##### Big Bell North Gold Project

A program of 67 Aircore drill holes for 3,640m was completed in May 2010 (Figure 5). All results for 4m-composite samples have been received and results were released on 10 June 2010.

A follow up program of 6 RC drill holes for 906m was completed in June 2010 and reported on 23 July 2010. An in-fill Aircore drilling program is planned for the September 2010 Quarter.

##### Gidgee Gold Project

A 7 hole RC program for 980m was completed in May/June 2010. All results for 4m-composite samples have been received and no significant gold assays were reported.

The RC drilling undertaken at the Big Bell North and Gidgee Gold Project were funded 50% from a grant under the WA state government's Exploration Incentive Scheme.

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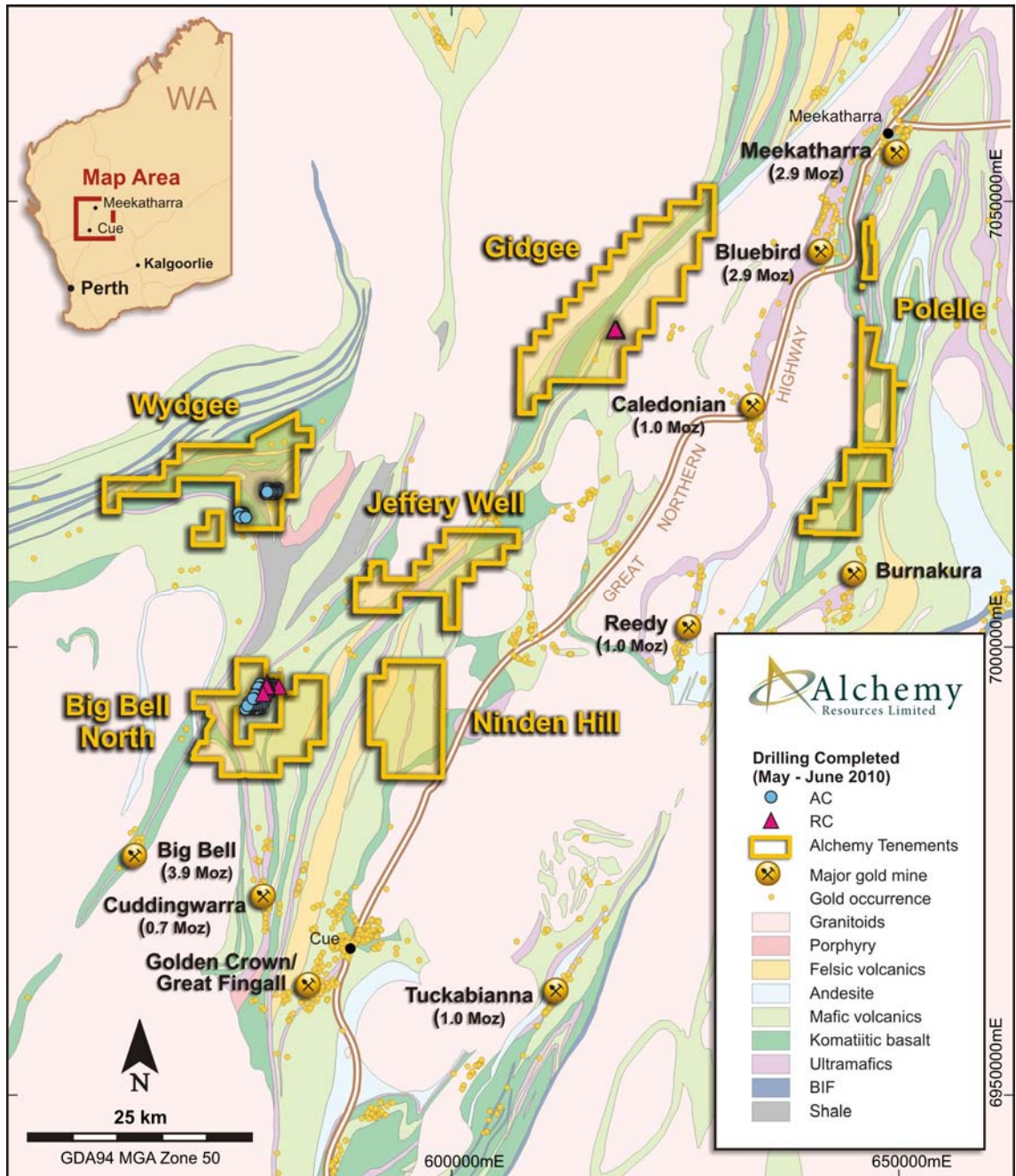


Figure 5. – Murchison Projects Drilling Completed May/June 2010

**Wydgee, Polelle, Ninden Hill and Jeffery Well Gold Projects**

At the Wydgee gold project a 33 hole Aircore drilling program for 2,769m was completed in May 2010. All results for 4m-composite samples returned no significant assays, with the exception of a single 4m-composite assay of 0.66g/t gold.

At the Polelle gold project a surface geochemistry program (89 soil samples) was undertaken over the southern tenements. All samples returned low responses in gold and no significant gold anomalism was identified.

At the Ninden Hill gold project a surface geochemistry program (150 soil samples) was undertaken over the southwest portion of the tenement. The results outline a discrete 3.3km by 1km NE-trending gold and copper anomaly (>2.4ppb gold and >65ppm copper).

Further mapping will be undertaken to determine the nature of the soil cover and determine if the anomaly crosses the stratigraphy and could possibly be related to a north-east striking mineralised structure.

At the Jeffery Well gold project an Aircore drilling program is planned to drill test potential gold mineralisation in structural targets in the September 2010 quarter.

### **Corporate activity**

Alchemy continues to control costs while actively exploring its project areas with \$5.85 million cash at hand at 30 June 2010.

In June 2010 Alchemy received a refund of \$0.24 million from the Australian Tax Office under its 3D model driven R&D program in the Murchison District. Alchemy was also awarded grants totalling \$194,000 under the WA Government's Exploration Incentive Scheme Co-funded Drilling Program.

The Conversion of listed 31 August 2010 options is expected to significantly increase cash on hand in the September 2010 quarter by approximately \$5 million.

Alchemy is focussing expenditure on field based activities as highlighted by its drilling campaign at the Magnus Copper-Gold Project and the Hermes and Wilgeena Gold Projects.

Alchemy is focussed on exploring and developing three key areas; the Magnus Copper-Gold Project, the Hermes and Wilgeena Gold resources and the Big Bell North Gold Project in the Murchison District.

Each of these projects is at a different stage in its evaluation. The Hermes and Wilgeena Gold Projects are the most advanced, each with a JORC code compliant resource and an active drilling campaign.

The Magnus Copper-Gold Project is at the beginning of a concerted RC drilling campaign to evaluate the potential for DeGrussa style copper/gold mineralisation and the Big Bell North Gold Project is part way through a number of small exploration drilling campaigns.

In less than three years, Alchemy has grown to explore on three separate and highly prospective areas.

Alchemy has also considered the potential to acquire additional tenements surrounding its Gascoyne Projects and on 26 July 2010 announced an action commenced in the West Australian Warden's Court to seek forfeiture of ground held by Grosvenor Gold Pty Ltd. If this action is successful and Alchemy acquires Grosvenor's ground, it will triple Alchemy's exploration tenure in the Gascoyne District.

During the June 2010 quarter Alchemy spent approximately \$1.8 million on drilling and evaluation of its tenements.

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## Competent Persons Statement

*The information in this report that relates to Exploration Results is based on information compiled by Dr Kevin Cassidy, who is a Fellow of the Australian Institute of Geoscientists and is a full-time employee of Alchemy Resources Limited. Dr Cassidy has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that 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 Resource and Ore Reserves'. Dr Cassidy consents to the inclusion in this 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 at the Wilgeena Gold Project is based on information compiled by Mr Simon Coxhell of Cocksrocks Pty Ltd, who is a Member of the Australian Institute of Geoscientists and a Member of the Australasian Institute of Mining and Metallurgy and is a consultant to Alchemy Resources Limited. Mr Coxhell has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that 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 Resource and Ore Reserves'. Mr Coxhell consents to the inclusion in this 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 at the Hermes Gold Project is based on information compiled by Mr Shaun Hackett, who is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of Snowden Mining Industry Consultants Pty Ltd. Mr Hackett has sufficient experience that is relevant to the style of mineralisation, type of deposit under consideration and to the activity that 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 Resource and Ore Reserves'. Mr Hackett consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.*

**Table 1. Magnus AC drilling program – Significant results >0.10g/t gold – May 2010**

Hole ID	Easting (m)	Northing (m)	From (m)	To (m)	Interval (m)	Au (ppm)
MGAC013	705550	7161200	36	40	4	0.110
MGAC014	705550	7161100	<b>32</b>	<b>36</b>	<b>4</b>	<b>1.220</b>
MGAC047	695800	7158700	52	60	8	0.370
MGAC054	695372	7159206	20	24	4	0.205
			60	64	4	0.166
MGAC055	695300	7159200	44	48	4	0.57
			60	64	4	0.335
			72	80	8	0.400
MGAC056	695200	7159200	36	44	8	0.417
			<b>52</b>	<b>56</b>	<b>4</b>	<b>5.31</b>
			68	72	4	0.414
			104	112	8	0.395
			116	120	4	0.138
MGAC061	695500	7159700	52	56	4	0.168
			68	69	1	0.174
MGAC064	695200	7159700	24	28	4	0.36
MGAC065	695100	7159700	24	28	4	0.482
			48	56	8	0.141
MGAC066	695000	7159700	16	20	4	0.408
MGAC067	694900	7159700	52	60	8	0.143
			92	96	4	0.134
MGAC069	694700	7159700	<b>24</b>	<b>28</b>	<b>4</b>	<b>1.25</b>
			<b>48</b>	<b>52</b>	<b>4</b>	<b>3.37</b>
			88	98	10	0.281
MGAC081	682980	7151960	36	40	4	0.193
MGAC090	683220	7151320	68	72	4	0.105

**Calculation of Assay Results:**

Quoted drill intersections are based on a lower cut-off of 0.25g/t gold with no internal dilution (i.e., samples with less than 0.25g/t gold). Assay results were obtained from geochemical analysis of 4 metre composite samples, except where 2 or 3 metre composite samples were required at end of hole. Sampling was undertaken following logging of geological boundaries within the drill hole. All samples were analysed at ALS Global Laboratories in Perth. Samples are prepared using single stage pulverization of the entire sample. Gold assays are obtained using a 30g lead collection fire assay digest and atomic absorption spectrometry analysis techniques. Full analytical quality assurance - quality control is achieved using a suite of certified standards, laboratory standards, field duplicates, laboratory duplicates, repeats, blanks and grind size analysis.

The location of drill holes is determined using a handheld 3D differential GPS achieving less than 1m accuracy and using the MGA datum (Zone 50). All drill holes were drilled at -60 degrees to 135 MGA azimuth (with the exception of TRC318, TRC319, TRC325, TRC326 and TRC377 which were drilled to 315 MGA azimuth).

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**Table 2: Hermes Gold Project Significant RC Drilling Results, >0.25g/t gold, June 2010**

Prospect	Hole ID	Easting (m)	Northing (m)	From (m)	To (m)	Interval (m)	Grade (g/t Au)	Comments
Hot Lips	TRC319	697097.5	7168070.4	92	96	4	1.45	
Trapper West	TRC320	691408.0	7168726.3	4	12	8	0.36	
Trapper West	TRC321	691241.6	7168736.9	56	60	4	0.28	
Trapper West	TRC322	691418.6	7168658.3	16	20	4	0.44	
				52	56	4	0.30	
				64	75 EOH	11	5.65	incl. 4m @ 14.5g/t Au
Trapper West	TRC323	691371.1	7168649.5	24	28	4	0.40	
				32	48	16	6.95	incl. 4m @12.15g/t Au
				60	64	4	0.36	
				68	72	4	16.30	
Trapper West	TRC324	691343.1	7168678.1	4	12	8	1.35	
Blake	TRC325	692009.0	7168599.6	40	48	8	0.41	
				80	84	4	0.27	
Blake	TRC326	691980.4	7168571.6	40	48	8	0.30	
Blake	TRC328	691841.9	7168526.9	88	96	8	0.87	
Winchester	TRC329	692464.4	7169851.5	24	28	4	0.35	
				48	50 EOH	2	0.35	
Winchester	TRC331	692322.1	7169782.1	28	48	20	1.42	incl. 8m @ 2.67g/t Au
				56	64	8	0.69	
Winchester	TRC332	692328.8	7169746.7	0	8	8	0.77	
Winchester	TRC333	692300.5	7169760.9	0	4	4	0.28	
				36	55 EOH	19	1.07	
Winchester	TRC334	692279.0	7169725.9	48	52	4	1.06	
				64	76	12	0.72	
Winchester	TRC335	692264.7	7169711.9	0	4	4	0.61	
				36	48	12	0.44	
				60	72	12	1.69	incl. 4m @ 4.21g/t Au
				80	84	4	1.10	
Winchester	TRC336	692221.8	7169669.8	4	8	4	0.29	
				64	70 EOH	6	0.84	
OPR	TRC337	690781.1	7166705.3	16	20	4	0.26	

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Quoted drill intersections are based on a lower cut-off of 0.25g/t gold with no internal dilution (i.e., samples with less than 0.25g/t gold). Assay results were obtained from geochemical analysis of 4 metre composite samples, except where 2 or 3 metre composite samples were required at end of hole. Sampling was undertaken following logging of geological boundaries within the drill hole. All samples were analysed at ALS Global Laboratories in Perth. Samples are prepared using single stage pulverization of the entire sample. Gold assays are obtained using a 30g lead collection fire assay digest and atomic absorption spectrometry analysis techniques. Full analytical quality assurance - quality control is achieved using a suite of certified standards, laboratory standards, field duplicates, laboratory duplicates, repeats, blanks and grind size analysis.

The location of drill holes is determined using a handheld 3D differential GPS achieving less than 1m accuracy and using the MGA datum (Zone 50). All drill holes were drilled at -60 degrees to 135 MGA azimuth (with the exception of TRC318, TRC319, TRC325, TRC326 and TRC377 which were drilled to 315 MGA azimuth).