Falcon Minerals Ltd

ACN 009 256 535

Company Announcement

Suite 19, 100 Hay Street, Subiaco WA 6008 Telephone: +61 8 9382 1596
PO Box 8319 Subiaco East WA 6904 Facsimile: +61 8 9382 4637

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SECOND QUARTERLY ACTIVITY REPORT TO 31st DECEMBER 2010

HIGHLIGHTS FOR THE QUARTER

- ***Diamond drilling intersected further massive Ni-Cu-PGE sulphides to the south of the main mineralised zone at the Olympia Prospect. Better down-hole assay results from CLD208 include:***

  2m @ 0.96% Ni, 1.25% Cu and 3.49g/t PGE (Pt+Pd) from 143m.
  6.79m @ 0.34% Ni, 0.24% Cu and 0.51g/t PGE (Pt+Pd) from 163.9m.

- ***Detailed geochemical sampling has defined at least four high-calibre poly-metallic drill targets at the Spartacus Prospect, 6 kilometres along strike north from the Olympia mineralised zone. These targets will be the subject of further diamond drilling in early 2011.***

- ***High-grade gold intersections from drill hole SXDD014 at the Saxby Prospect, NW Queensland have been significantly upgraded following check analysis by Fire Assay. Revised results include:***

  15.0 m @ 9.09 g/t Au and 5.96 g/t Ag from 701m
  (including 8.0 m @ 15.09 g/t Au and 9.63 g/t Ag)

- ***Drillhole planning is underway to test two significant gravity targets at Spring Hill and Davenport Creek in the Peake-Denison inlier of the northern Gawler Craton. Both targets have potential to host a large iron-oxide-copper-gold mineralised system such as those associated with the Prominent Hill and Osborne copper-gold deposits.***

COLLURABBIE PROJECT – W.A.

(**Nickel, Copper and Platinum Group Elements)**
(Falcon 100%)

During the December Quarter, Falcon completed its second drilling programme at the Collurabbie nickel-copper-PGE Project in the Duketon greenstone belt of Western Australia. Down-hole electro-magnetic surveying was also carried out on 5 of the drill holes to test for significant conductors possibly associated with massive nickel sulphides.

This drilling campaign intersected further massive Ni-Cu-PGE sulphides at Olympia in drill hole CLD208 which was drilled to test the continuity of mineralisation to the south of the main mineralised ore horizon (Figure 1). Better down-hole assay results from CLD208 include:

- **2m @ 0.96% Ni, 1.25% Cu and 3.49g/t PGE (Pt+Pd) from 143m.**
- **6.79m @ 0.34% Ni, 0.24% Cu and 0.51g/t PGE (Pt+Pd) from 163.9m.**

Importantly, the strongly faulted zone of massive to brecciated Ni-Cu-PGE sulphide in CLD208 is interpreted to sit in a hanging-wall position above the main mineralised horizon (Figure 1). The down-hole EM survey also indicated a reasonably large off-hole conductor down-dip from CLD208 in the vicinity of the interpreted ore horizon. In conclusion, the southern extension of the mineralised zone at Olympia remains to be fully tested by drilling.

Drill hole CLD207 was drilled to test the interpreted down-plunge extent of the Olympia massive sulphide zone and reached a target depth of 318m. No massive sulphides were intersected however the down-hole EM survey identified two large conductive sources immediately off-hole and to the south of CLD207. The attitude of both conductors suggests a steeply dipping zone through the main nickel sulphide body and continues beneath discovery hole CLD159 (5.77m @ 3.00% Ni, 1.86% Cu, 5.29g/t/ PGE).

A further two drill holes, CLD205 and CLD206 were drilled to test for nickel sulphides associated with two large EM conductors to the north of the Olympia Prospect. Both holes intersected barren volcanic-hosted massive sulphides (VMS) related to seafloor exhalative processes. It is now recognised that these VMS most likely provided the sulphur necessary for the formation of nickel sulphides and provide a valuable vector to additional ore-forming environments.

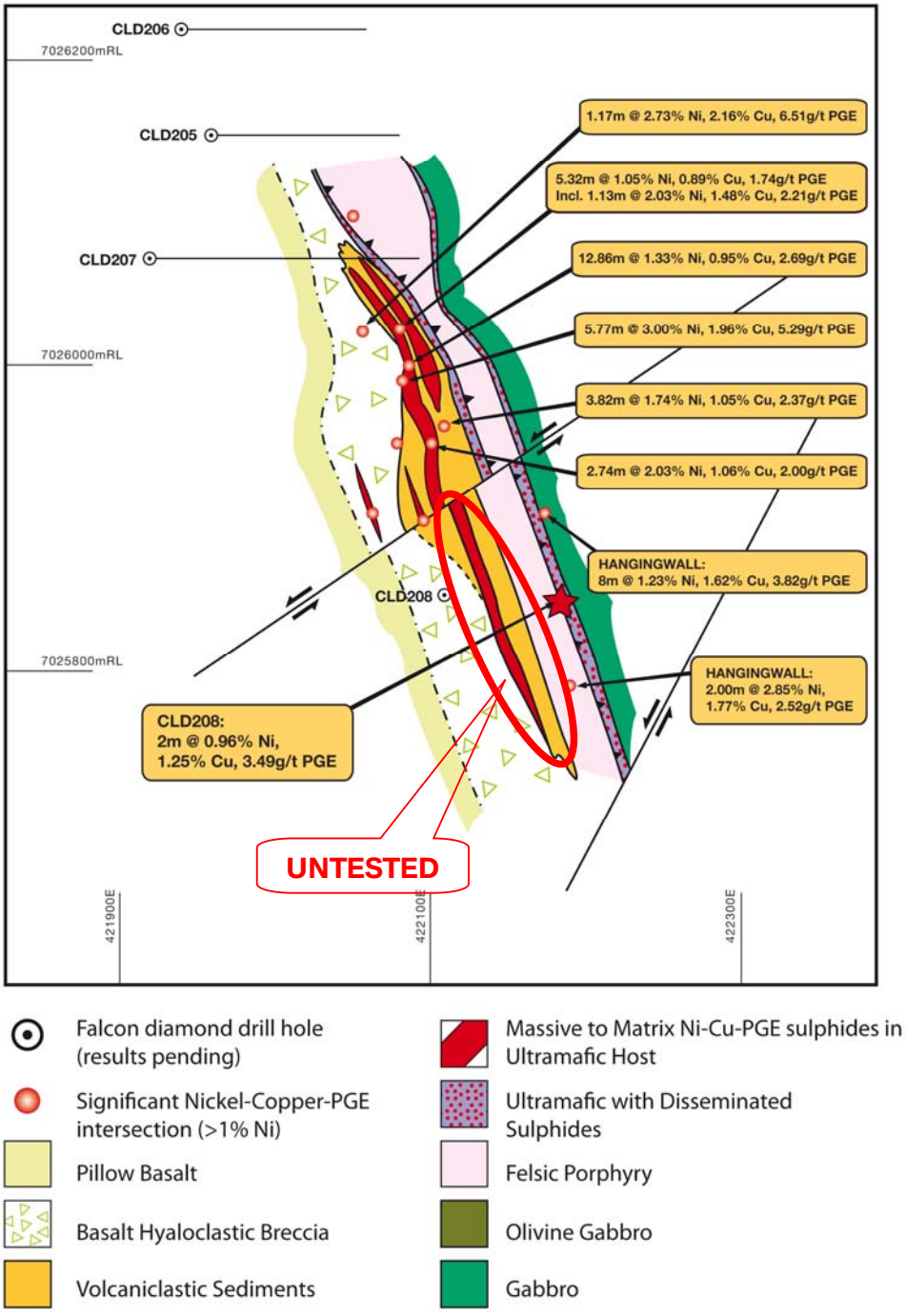

Figure 1 – Olympia Prospect geological interpretation (at 300m RL) showing drill result to date and location of recent Ni-Cu-PGE intersection in CLD208.

Two step-out drill holes, CLD209 and CLD210, were drilled at the Argus Prospect to the north of Olympia where previous drill hole CLD12 intersected 4m @ 1.00% Ni, 0.55% Cu and 0.97g/t PGE from 82m. CLD209 intersected a thick ultramafic body with disseminated nickel-copper sulphides and the down-hole EM survey detected several off-hole conductors to the north and down-dip from CLD209 that warrant further investigation.

CLD210 was drilled almost entirely in felsic porphyry and therefore did not test the interpreted ore horizon.

The drilling completed by Falcon in 2010 has shed significant light on the controls on Ni-Cu-PGE sulphide mineralisation at the Collurabbie Project. A robust exploration model has been developed and is being used to identify volcanic vent zones with VMS development and coincident Ni-Cu-PGE mineralisation in drilling or surface geochemistry (Figure 2). At least 5 prospects have been highlighted and will be the subject of an aggressive drill campaign commencing in early 2011.

In the meantime, detailed geochemical sampling was conducted at the **Spartacus Prospect** in December 2010 and defined at least four, highly prospective poly-metallic drill targets**,** 6 kilometres along strike north from the Olympia mineralised zone.

A total of 604 infill soil samples were taken on a detailed 50m x 25m grid to test a highly prospective ultramafic horizon over a strike length of 2km with known disseminated nickel-copper-PGE sulphides intersected in previous broad-spaced drilling. The soil geochemistry indicates several areas of highly-anomalous, coincident nickel-copper-PGEs with maximum nickel result of 1170ppb Ni (Figure 3).

Importantly, each target also shows strong evidence for anomalous base metal (Cu-Zn) concentrations that may reflect a nearby volcanogenic exhalative environment.

Re-processing of ground and drill hole electro-magnetic data has also shown that several strong untested conductors are clearly associated with areas of anomalous geochemistry and will provide a strong 3D focus for follow-up drilling.

On the back of these results, drill hole planning and permitting is underway and a diamond/RC drilling campaign is scheduled to commence in February 2011. The Company feels that the **Spartacus Prospect has excellent potential to host several zones of massive nickel-copper-PGE sulphide** and significantly contribute to a resource base at Collurabbie.

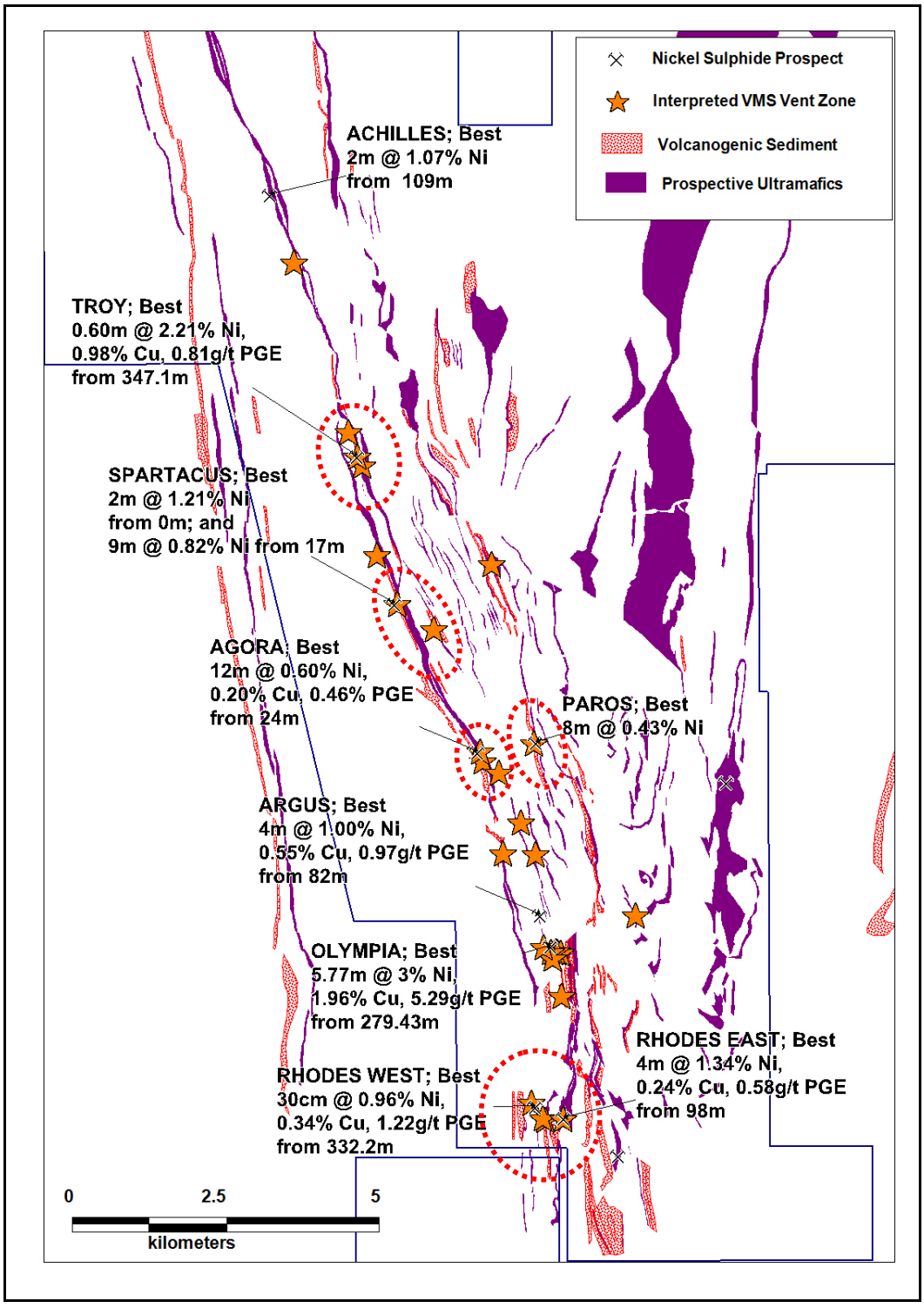

Figure 2 – Collurabbie Belt showing possible VMS vent zones and coincident nickel-copper-PGE in drilling.

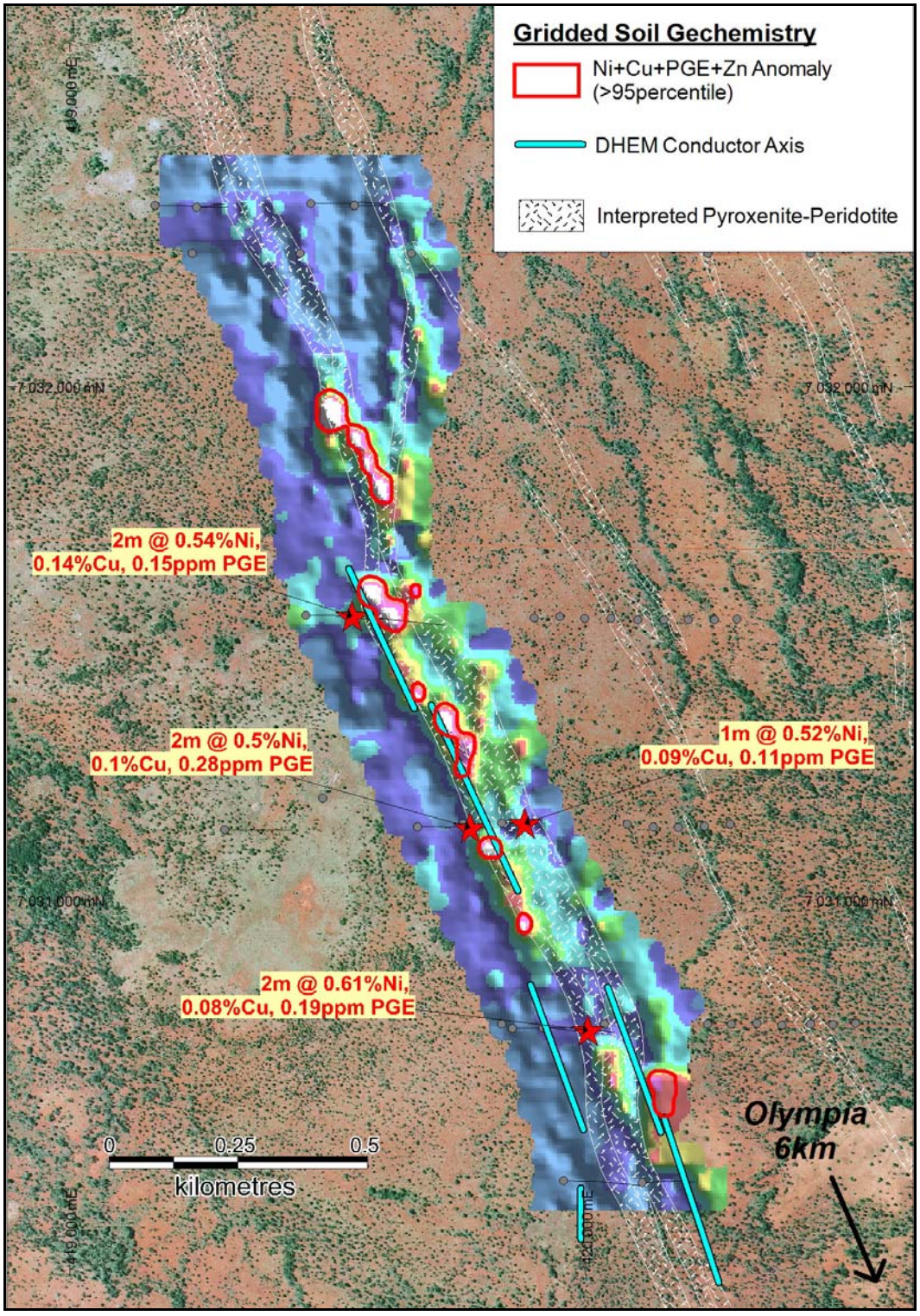

Figure 3 – Spartacus Prospect. Interpreted ultramafics and previous drilling results on gridded Ni+Cu+PGE+Zn soil geochemistry image.

SAXBY JOINT VENTURE – QUEENSLAND

(Gold, Nickel and Copper)

(Falcon 49%, AngloGold Ashanti Australia Limited 51 % earning 70%)

During the December Quarter, Falcon announced that recent high-grade gold intersections of 14m @ 4.61 g/t Au and 6.22 g/t Ag in SXDD014 released to the ASX on November 4th 2010 have been significantly upgraded following re-assaying by Fire Assay methodology with the revised gold results shown below.

Drill Hole	East	North	From	To	Width (m)	Au (g/t)	Ag (g/t)	Intercept
SXDD014	**488145**	**7865870**	**701.00**	**716.00**	**15.0**	**9.09**	**5.96**	**15.0 m @ 9.09 g/t Au**
		including	***701.00***	***709.00***	***8.0***	***15.09***	***9.63***	***8.0 m @ 15.09 g/t Au***

NOTE: Check gold assays were performed using Fire Assay (50g) digest with an AAS finish.

SXDD014 was part of a 5 hole diamond drilling programme completed in August 2010 to test for gold mineralised structures away from previous AngloAmerican drill hole SXDD005 that intersected 17m @ 6.75g/t gold from 631m to 648m (Figure 4). High-grade gold mineralisation has now been intersected over a strike length of at least 300m and is open in all directions.

In particular, it is encouraging to note that the mineralised intervals contain a high-grade gold component with several 1m intervals grading over 10g/t. It is felt that the disparity between the earlier Aqua Regia analyses and the recent Fire Assay results is due to incomplete digestion of the gold by the acid digest in the presence of abundant iron sulphides (and/or graphite).

Patchy anomalous gold up to 0.95g/t was also returned from SXDD013. No significant gold mineralisation was returned from the other three diamond drill holes completed in 2010 (SXDD011, SXDD012 and SXDD015).

Leachwell check analyses of the main mineralised zone in SXDD014 indicate that about 90% of the gold is cyanide-soluble; that is, mineralisation does not appear to be refractory because of the association with telluride.

Intervals of strongly anomalous copper (but without significant gold) included

- 8m @ 0.11% Cu from 744m in SXDD012
- 3m @ 0.12% Cu from 781m in SXDD013

On the back of these results it is felt that the Saxby JV project has excellent potential to host a major Tier 1 gold (+/-copper) deposit and will be the subject of further drilling in 2011.

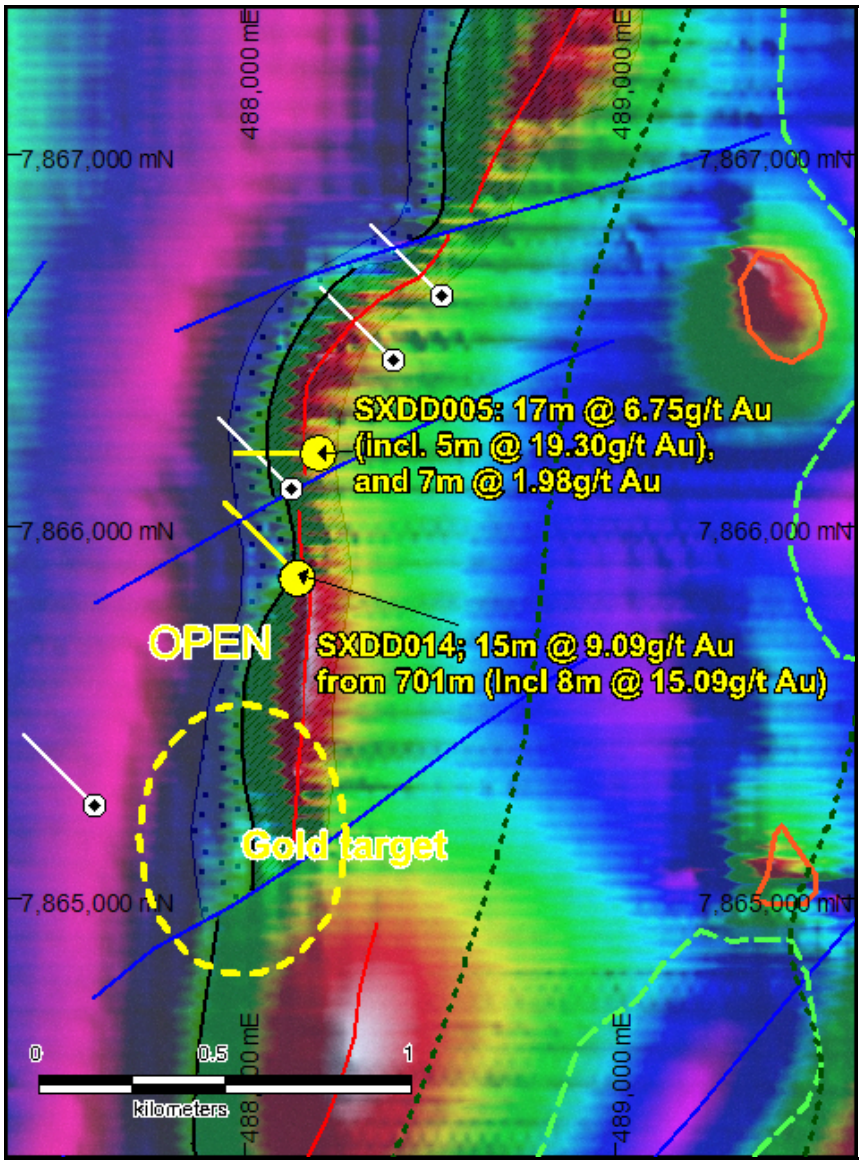

Figure 4 – Aeromagnetic image with interpreted geology and 2010 diamond drill holes

PEAKE-DENISON PROJECT – GAWLER CRATON, S.A.

(Copper-Gold-Iron, Uranium)
(Falcon 100%)

Regional targeting for iron oxide-copper-gold systems within the Gawler Craton was completed in 2009 using fully-integrated geophysical, geochemical and geological

datasets to identify key controls on major mineralising systems. High-priority targets were identified and were used to guide the acquisition of new projects in the region.

Four large exploration licences have been acquired within the Peake-Denison Inlier of the northern Gawler Craton. The Peake-Denison represents a major uplifted Proterozoic basement block with discrete gravity-magnetic anomalies associated with major basement fault intersections. The geology of the Peake-Denison Inlier is thought to be analogous to the Olympic Dam and Prominent Hill geological settings.

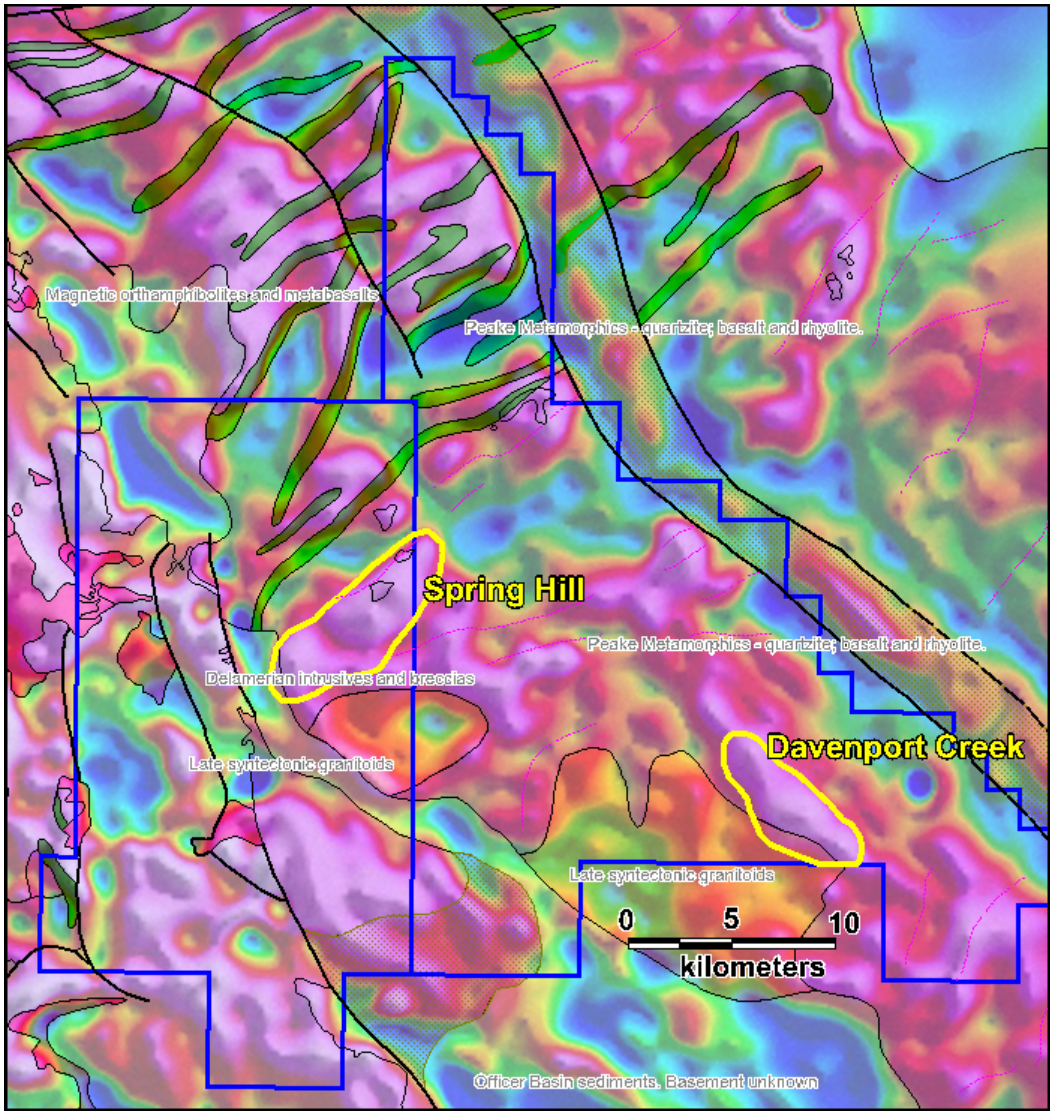

Figure 5 – Residual Bouger gravity image showing Spring Hill and Davenport Creek gravity anomalies on Falcon Mt Margaret and Mt Charles ELs.

Falcon has completed 3D geophysical (inversion) modelling of detailed gravity data which defined two significant anomalies at Spring Hill and Davenport Creek (Figure 5). These targets comprise elongate to pipe-like bodies with densities of 3.1 to 3.6 g/cc and coincident, offset magnetic anomalies with susceptibilities up to 2.0 SI units (See Figure 6 and Figure 7). The geophysical expressions of the targets are

consistent with known large iron-oxide-copper-gold alteration systems such as those associated with the Prominent Hill and Osborne copper-gold deposits.

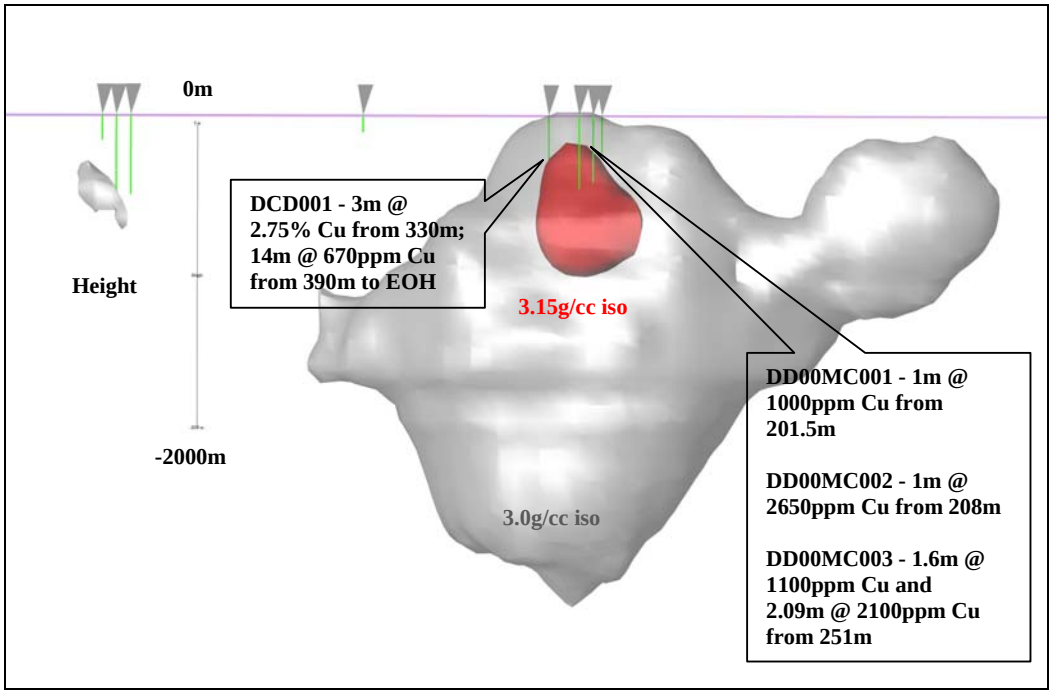

Figure 6 – Davenport Creek 3D gravity inversion model showing >3.0g/cc isosurfaces and previous drilling results (looking to the north-east).

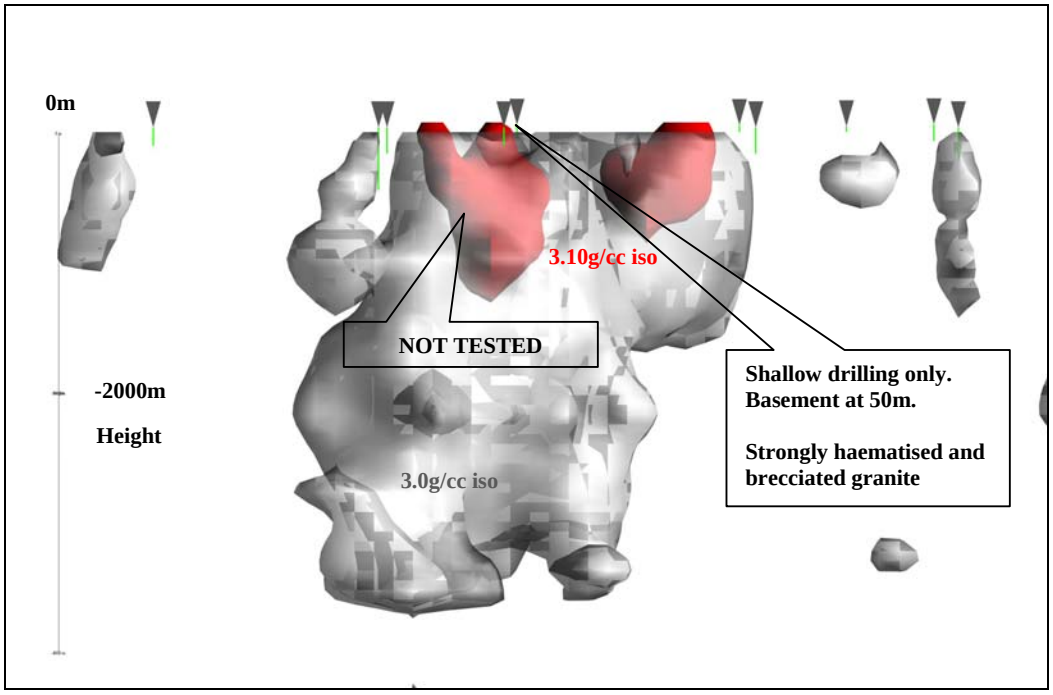

Figure 7 – Spring Hill 3D gravity inversion model showing >3.0g/cc isosurfaces and previous drilling results (looking to the north-west).

Previous exploration by RGC Exploration, BHP and Rio Tinto Exploration between 1996 and 2000 comprised limited drill testing only. Widespread copper anomalism (>0.1% Cu) was encountered in earlier drill holes at both the Spring Hill and Devonport areas, although it is clear from the 3D modelling that the historic drilling failed to test the core of the detailed gravity targets.

One historic drillhole, DCD001 at the Davenport Creek prospect reported an interval of 3m @ 2.75% Cu from 330m associated with magnetite-haematite-chalcopyrite-bornite breccias in basement rocks, and a further 14m of anomalous copper averaging 670ppm was intersected in altered pegmatite from 390m to the end of the hole. A downhole EM survey was completed and indicated an off-hole conductor away from DCD001.

Falcon is currently planning a drill programme and seeking an Exploration Work Approval from Primary Industris and Resources South Australia to test the Spring Hill and Devonport Creek targets in the first half of 2011.

DELETA JOINT VENTURE - DUKETON AND NORTH DUKETON PROJECTS - W.A.

(Gold and Nickel-Copper-Platinum Group Elements)
(Regis 80%, Falcon 20%)

The North Duketon Joint Venture comprises a large area of about 100 square kilometres within the Duketon greenstone belt, located directly south of the Collurabbie Project and to date, has returned broadly anomalous Ni-Cu-PGE drilling results from several prospects along the Collurabbie Ultramafic trend. The Duketon project lies immediately due north of the Regis Resources' regionally significant Moolart Well gold operation (2.22Moz).

No fieldwork was completed during the December Quarter.

WINDANNING HILL JOINT VENTURE – W.A.

(Gold, Iron Ore)
(Minjar Gold Pty Ltd 78.5%, Falcon 21.5% diluting)

The Windanning JV is located within the Yalgoo-Singleton greenstone belt, 400 km north-north-east of Perth. The Yalgoo belt contains the world class Gossan Hill and Scuddles base metal deposits at Golden Grove and the Mt Gibson gold project.

In March 2009, Golden Stallion Resources bought Minjar Gold Pty Ltd and the Minjar gold asset (including the Windanning JV) from collapsed entity Monarch Gold Mining Company. In accordance with an earlier agreement with Monarch, Falcon retains its 21.5% equity in two separate joint ventures at Windanning Hill, each with Minjar Gold (gold and base metals) and Gindalbie Metals (iron ore).

The Windanning Hill JV hosts the Keronima gold deposit comprising a JORC-compliant Inferred Resource of 281,000 tonnes @ 2.2 g/t gold for 19,900 ounces of contained gold.

Minjar Gold has conducted the following mine development work during the June quarter;

- Open pit optimisation study,
- Strategic pit size and fleet configuration options review,
- Open pit design,
- Mine schedule and
- Mineral Reserve Statement development.

Falcon is continuing to review its options for the Windanning JV.

PALTHRUBIE AND ACRAMAN – SOUTH AUSTRALIA

(Gold, Uranium)
(Falcon 100%)

The Palthrubie and Lake Acraman Projects are located in the prospective Gawler Craton region of South Australia. The primary target within the project has been high-grade "Tunkillia-style" gold mineralisation hosted within Hiltaba Suite granites which intrude the area.

No fieldwork was conducted during the December Quarter 2010.

MULGARRIE JOINT VENTURE – W.A.

(Nickel, Gold)
(Hemisphere 70%, Falcon 30% diluting)

The Mulgarrie JV Project comprises tenement E27/314, covering prospective komatiite stratigraphy, 15 - 20km north and along strike from the Silver Swan nickel deposit.

No fieldwork was conducted at Mulgarrie during the December Quarter 2010.

NEW PROJECT GENERATION

Mt Isa Inlier – Queensland

(Copper, gold)
(Falcon 100%)

Regional targeting for Ernest Henry- and Osborne-style Iron Oxide Copper-Gold (IOCG) systems was completed for the Mt Isa Inlier. Several new Tier-1 exploration licences have been acquired in the Cloncurry region and three exploration permits have been granted by the Queensland DME.

Historic data is currently compiled and a review is continuing to determine the nature and significance of these targets.

The information in this report to which this statement is attached that relates to Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Mr Graeme Cameron, Technical Director for Falcon Minerals Ltd. Mr Cameron is a Member of the Australasian Institute of Mining and Metallurgy (AusIMM) and 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 Cameron consents to the inclusion in the report of the matters based on his information, in the form and context in which it appears.

Please note that this report is available on our website:
www.falconminerals.com.au

Yours faithfully

Richard Diermajer
Managing Director

For further details contact:

Graeme Cameron
Technical Director
Falcon Minerals Limited
Telephone: (61) 08 9382 1596

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, 01/06/10.

Name of entity

FALCON MINERALS LIMITED

ABN	Quarter ended ("current quarter")
20 009 256 535	31 DECEMBER 2010

Consolidated statement of cash flows

		Current quarter $A'000	Year to date (6 months) $A'000
	Cash flows related to operating activities		
1.1	Receipts from product sales and related debtors		
1.2	Payments for (a) exploration & evaluation	(414)	(636)
	(b) development		
	(c) production		
	(d) administration	(72)	(242)
1.3	Dividends received		
1.4	Interest and other items of a similar nature received	26	175
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	(460)	(703)
	Cash flows related to investing activities		
1.8	Payment for purchases of: (a) prospects		
	(b) equity investments		
	(c) other fixed assets	(18)	(26)
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	(18)	(26)
1.13	Total operating and investing cash flows (carried forward)	(478)	(729)

+ See chapter 19 for defined terms.

1.13	Total operating and investing cash flows (brought forward)	(478)	(729)
	Cash flows related to financing activities		
1.14	Proceeds from issues of shares, options, etc.		
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 (share issue costs)		
	Net financing cash flows		
	Net increase (decrease) in cash held	(478)	(729)
1.20	Cash at beginning of quarter/year to date	5,208	5,459
1.21	Exchange rate adjustments to item 1.20		
1.22	**Cash at end of quarter**	4,730	4,730

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	109
1.24	Aggregate amount of loans to the parties included in item 1.10	NIL

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

N/A

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

N/A

+ See chapter 19 for defined terms.

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

Estimated cash outflows for next quarter

		$A'000
4.1	Exploration and evaluation	600
4.2	Development	
4.3	Production	
4.4	Administration	150
	Total	**750**

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	53	56
5.2	Deposits at call	4,677	5,152
5.3	Bank overdraft		
5.4	Other (provide details)		
	Total: cash at end of quarter (item 1.22)	4,730	5,208

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	N/A			

+ See chapter 19 for defined terms.

6.2	Interests in mining tenements acquired or increased	N/A			

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** *(description)*				
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3	+**Ordinary securities**	163,578,935	163,578,935		Fully Paid
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs				
7.5	+**Convertible debt securities** (*description)*				
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	**Options** *(description and conversion factor)*	1,000,000 1,000,000		*Exercise Price* $0.20 $0.30	*Expiry Date* 30 September 2012 30 September 2012
7.8	Issued during quarter				
7.9	Exercised during quarter				
7.10	Expired during quarter				
7.11	**Debentures** *(totals only)*				

+ See chapter 19 for defined terms.

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 4).

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

Sign here: Date: 18 January 2011

(Company secretary)

Print name: Dean Calder

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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