

## ASX Code: AIV

### Issued Capital

581,812,672 ordinary shares (AIV)  
26,350,000 unlisted options

### Market Capitalisation

\$8.15M (30 October 2014, \$0.014)

### Directors

Min Yang (Chairman, NED)  
Grant Thomas (Managing Director)  
Geoff Baker (NED)  
Dongmei Ye (NED)  
Craig James (Company Secretary)

## About ActivEX

ActivEX Limited is a Brisbane based mineral exploration company committed to the acquisition, identification and delineation of new resource projects through active exploration.

The ActivEX portfolio is focussed on copper and gold projects, with substantial tenement packages in north and southeast Queensland and in the Cloncurry district of northwest Queensland.

The Company also has an advanced potash project in Western Australia where it is investigating optimal leaching methods for extraction and production of potash and by-products.

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## ACTIVITIES REPORT

### QUARTER ENDED 30 SEPTEMBER 2014

Brisbane-based gold and copper explorer ActivEX Limited (ASX: AIV) ("ActivEX" or "the Company") provides the following summary of activities undertaken during the quarter ended 30 September 2014.

#### Highlights

- **Exploration on the Coalstoun prospect commenced** with extensive portable X-Ray Fluorescence (pXRF) soil geochemical surveys over the central Coalstoun porphyry including the area of the historical supergene copper target. **Results show a strong, coherent copper anomaly coincident with the mapped intrusive, highlighting exploration targets to extend known copper mineralisation.**
- **Collation and validation of data from previous explorers has also been carried out at Coalstoun.** Validation has, in part, included re-assaying of selected drill core from seven historic drill holes stored in the Queensland Government's Exploration Data Centre. **These assay results have closely agreed with historical assays.**
- **Barambah Gold Project secured funding of \$85,000 from the Queensland State Government.** Drilling planned to target geophysical anomaly at depth with potential to significantly expand known zones of gold and silver mineralisation.
- **Follow-up leach testing at Lake Chandler** returned encouraging results, with a simplified leaching and crystallisation technique **achieving up to 93% crystallisation of potassium.**
- **ActivEX Limited appointed Ms Dongmei Ye as Director of the Company** (effective as 15 October 2014).
- **During October the Company sold 16,666,667 shares in Metaliko Resources Limited (ASX: MKO) for \$500,000 (0.03c/share).**
- **At the end of the September quarter the Company held \$0.343M in cash and receivables however after the sale of shares as at 30<sup>th</sup> October the Company held \$0.747 in cash and receivables**

## OVERVIEW

Exploration on the Coalstoun prospect has commenced, including the initiation of extensive portable X-Ray Fluorescence (pXRF) soil geochemical surveys over the central Coalstoun porphyry, which is the area of the historical supergene copper target. The results show a strong and coherent copper anomaly coincident with the mapped intrusive and highlighting exploration targets to extend known copper mineralisation. Additional Niton analysis is planned in the next quarter to infill portions of the target area and to cover other priority targets e.g. Staib's Hill.

Collation and validation of data from previous explorers has also been carried out at Coalstoun. Validation of historical drill hole information has included geological logging, portable XRF analysis, magnetic susceptibility measurements and re-assaying including QA/QC sampling of selected drill core from seven historic drill holes stored in the Queensland Government's Exploration Data Centre.

The significant, high grade copper mineralisation reported by Esso in 1974 in drill hole Esso22 (9.1m @ 2.3% Cu from 18.3m – no Au assayed) was confirmed, with re-assaying returning 122.53m @ 0.44% Cu and 0.07g/t Au from 15.54m including 10.52m @ 2.07% Cu and 0.14g/t Au from 17.68m. Representative core will also be selected for density measurements during next quarter.

ActivEX will determine if a maiden JORC resource estimate (supergene copper-gold mineralisation) is possible with the existing collated drill hole and associated data. The work will also guide future drilling campaigns at Coalstoun.

Follow-up leach testing at Lake Chandler Potash Project was completed, investigating HCl and H<sub>2</sub>SO<sub>4</sub> leaching and any resulting crystallisation that might take place during cooling of the leachates. Four HCl acid leach tests were performed and one H<sub>2</sub>SO<sub>4</sub> acid leach test. Potassium extraction achieved up to 86% extraction for HCl leachates and 49% for the H<sub>2</sub>SO<sub>4</sub> leachate.

Crystallisation tests were also carried out on four of the leach liquors. No crystallisation of potassium was found in the HCl liquors, although the H<sub>2</sub>SO<sub>4</sub> leachate crystallised 93% of contained potassium when cooled to 2°C.

The preliminary follow-up testing of the alternative acid leaching process returned encouraging results, demonstrating that a simplified leaching and crystallisation technique can be achieved with up to 93% of potassium crystallisation. The extraction utilised sulphuric acid (H<sub>2</sub>SO<sub>4</sub>) to leach alunite-rich Lake Chandler material to produce KHSO<sub>4</sub> as the mineral Mercallite and Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>·17H<sub>2</sub>O as Alunogen. Further testing is expected to commence to optimise leaching and to investigate further processing options of the KHSO<sub>4</sub> and Al<sub>2</sub>(SO<sub>4</sub>)<sub>3</sub>·17H<sub>2</sub>O to produce refined potassium and aluminium products.

EPM 25466, Charlie Creek, was granted on 14 October 2014 for a period of five years. The tenement forms part of the Ravenswood Gold Project.

No Occupational, Health and Safety or lost time injuries occurred during operations for the quarter.

## CORPORATE

### September Quarter

During the quarter the Company announced that the \$2.5M Loan secured from Unique Investment Holdings Pty Ltd was converted on 15<sup>th</sup> September 2014 (ASX 16<sup>th</sup> September 2014). The details of the Convertible Loan were previously provided to the ASX, on 3<sup>rd</sup> July 2014. The allotment of securities was as follows:

- ActivEX Limited

Number of Shares Issued:	75,000,000
Consideration:	0.016c / share
Total Value:	\$1,200,000
Total Transfer Holding:	17.29%
- Transfer of Securities in Associate – Metaliko Resources Limited (ASX: MKO)

Number of Shares transferred:	45,416,667
Consideration:	0.03c / share
Total Value:	\$1,362,500
Total Transfer Holding:	14.78%
Number of Securities retained by AIV in MKO:	38,333,333
Resultant Equity Holding of AIV in MKO:	12.48%

### October Update

#### Director Appointment:

On 15<sup>th</sup> October 2014 the Board of ActivEX Limited ActivEX Limited appointed Ms Dongmei Ye as Director of the Company.

Ms Ye is the sole Director of Unique Investment Holdings Pty Limited and Unique is a Substantial Shareholder of ActivEX.

For the past 6 years Ms Ye has worked for several Australian accounting firms and has built up extensive experience in the financial and taxation industry in Australian and internationally, in particular Hong Kong. Ms Ye holds a Master of Accounting degree from Macquarie University. Ms Ye is a Member of CPA Australia.

#### Sale of Securities in Associate:

During October the Company announced that it sold 16,666,667 shares in Metaliko Resources Limited (ASX: MKO) to Jia Song Global Limited for \$500,000 (0.03c/share) (ASX 29<sup>th</sup> October 2014). The proceeds of the sale will be used for ongoing exploration activities and working capital for the Company. The Company retains a 7.05% holding in Metaliko Resources Limited.

## FINANCIAL

At the end of the September quarter the Company held \$0.343M in cash and receivables.

As at 30<sup>th</sup> October the Company held \$0.747 in cash and receivables.

The company intends to undertake a share placement in the next quarter subject to shareholder approval.



## OPERATIONS

### LAKE CHANDLER POTASH PROJECT – Western Australia (M77/22, P77/3979 application – ActivEX 100%, refer Appendix 1)

The Lake Chandler Potash Project consists of a granted Mining Lease (M77/22) and a Prospecting Licence application located 48km north of the Western Australian wheat-belt town of Merredin, 300km east of Perth (Figure 1).

Lake Chandler is a salt lake with accumulations of alunite, which the Company is investigating with a view to proving the commercial extraction of potash and other fertiliser products with possible alumina by-products. Potash was produced from the deposit in the post war period from 1943 to 1947 but the operations have been idle since.

The potash at Lake Chandler occurs as alunite — hydrated potassium aluminium sulphate ( $KAl_3(SO_4)(OH)_6$ ) mineralisation hosted in a flat lying evaporate sequence of clays (playa lake).

Earlier this year, preliminary follow-up testing was initiated to investigate progress made during acid leach testing completed in 2009. The tests carried out in 2009 investigated potassium leaching from alunite-rich Lake Chandler material using separate leachates of hydrochloric acid (HCl), sulphuric acid ( $H_2SO_4$ ) and sulphur dioxide gas ( $SO_2$ ). The tests achieved potassium extractions of up to 92.9%, 96% and 90.4% for each leachate respectively. Promisingly, crystallisation appeared to initiate during cooling of the  $H_2SO_4$  leachate. Follow-up testing completed in 2014 investigated the HCl and  $H_2SO_4$  leaching and any resulting crystallisation that might take place during cooling of the leachates.

In total, five acid leach tests were performed, with the results summarised in the table below.

Table 1. Leach results summary

Test No.		HY2391	HY2430	HY2625	HY2699	HY2700	HY2727
Particle Size		100% <3 mm					
Percent Solids	% (w/w)	30	30	15	15	15	15
Leachate		HCl					$H_2SO_4$
Initial (Acid)	g/L	222	355	200	100	50	250
Temperature	°C	100-108	100-108	100-108	100-108	100-108	95-100
Final Concentration (mg/L)	K	16600	11180	8870	7920	6240	6910
	Al	43470	34300	23490	19970	15480	18490
	Fe	4744	3873	2371	2090	1728	2012
Residue Mass Loss	(%)	51.4	43.9	68.0	63.0	50.1	40.8
Residue Grade	K (%)	-	-	2.33	2.65	4.18	5.10
Extraction (%)	K	69.2	37.5	86.2	77.8	60.5	49.0

The highest potassium extraction was achieved in test HY2625, using 200 g/L HCl and 15% solids, with 86% extraction. Leaches performed at 30% solids had lower potassium extraction rates of 37-69%. HCl concentrations of 50 g/L and 100 g/L also produced lower extraction, at 60-78%.

One test was performed using 250 g/L  $H_2SO_4$  and 15% solids, and achieved 49% potassium extraction.

Crystallisation tests were performed on four of the leach liquors. No crystallisation of potassium was found in the HCl liquors, but test HY2727, using  $H_2SO_4$  had 93% of the potassium crystallise out when cooled to 2°C.

The results are summarised in the table below.

**Table 2. Crystallisation results**

Test No.	HY2625	HY2699	HY2700	HY2727
Percentage of Element Crystallised - Ambient				
Al mg/L	-	-	-	12.7
K mg/L	-	-	-	57.2
Percentage of Element Crystallised - Refrigerated				
Al %	1.69	0.00	0.00	32.0
Fe %	0.13	0.00	0.00	0.00
K %	0.00	0.00	0.00	93.0
Na %	0.00	0.00	0.00	12.9
S %	0.00	0.00	0.00	14.7

The crystal formed in HY2727 was submitted for XRD analysis and an ICP scan. The results from the ICP scan indicate the main metals present are potassium and aluminium, with minor contaminants including iron, sodium, and strontium. ICP results are summarised as per the following table.

**Table 3. ICP analysis results**

Analyte	HY2727 Crystal
K (%)	7.60
Al (%)	6.04
Fe (ppm)	1800
Ca (ppm)	250
Mg (ppm)	300
Na (ppm)	1350
P (ppm)	<250
SiO <sub>2</sub> (ppm)	<2000
Sr (ppm)	840

XRD analysis on the crystal indicates that it is composed of a range of aluminium sulphate minerals, including Alunogen, Rostite, Meta-aluminite, and Tamarugite, as well as the potassium bisulphate mineral Mercurite.

**Table 4. XRD analysis results**

Mineral ID	HY2727 Crystal
Mercurite KHSO <sub>4</sub>	19
Alunogen Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ·17H <sub>2</sub> O	17
Alunogen Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ·16.4H <sub>2</sub> O	15
Alunogen Al <sub>2</sub> (SO <sub>4</sub> ) <sub>3</sub> ·14H <sub>2</sub> O	10
Rostite Al(SO <sub>4</sub> )(OH)·5H <sub>2</sub> O	16
Meta-aluminite Al <sub>2</sub> (SO <sub>4</sub> )(OH) <sub>4</sub> ·5H <sub>2</sub> O	7
Al <sub>8</sub> (SO <sub>4</sub> ) <sub>5</sub> (OH) <sub>14</sub> ·34H <sub>2</sub> O	7
Tamarugite NaAl(SO <sub>4</sub> ) <sub>2</sub> ·6H <sub>2</sub> O	9



The preliminary follow-up testing of the alternative acid leaching process has returned encouraging results, demonstrating that a simplified leaching and crystallisation technique can be achieved with up to 93% of potassium crystallisation. The extraction utilised sulphuric acid ( $\text{H}_2\text{SO}_4$ ) to leach alunite-rich Lake Chandler material to produce  $\text{KHSO}_4$  as the mineral Mercallite and  $\text{Al}_2(\text{SO}_4)_3 \cdot 17\text{H}_2\text{O}$  as Alunogen.

ActivEX will consider further testing to optimise leaching and will investigate further processing options of the  $\text{KHSO}_4$  and  $\text{Al}_2(\text{SO}_4)_3 \cdot 17\text{H}_2\text{O}$  to produce refined potassium and aluminium products.

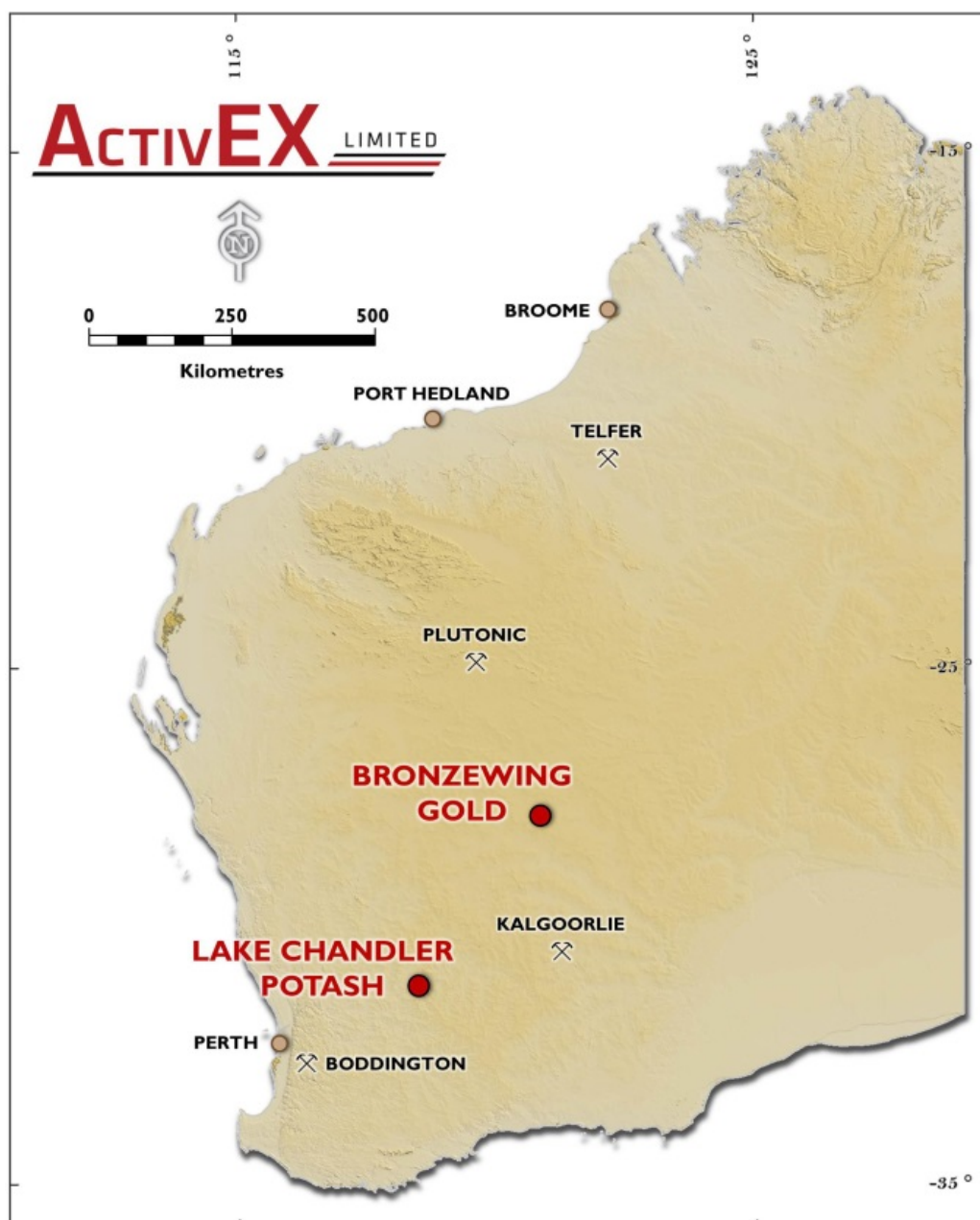


Figure 1. Bronzewing Gold Project and ActivEX Lake Chandler Potash Project locations

## ESK COPPER AND GOLD PROJECT – Southeast Queensland

(EPM 14079, 14476, 14979, part 16265, 16327, 18717 – ActivEX 100%, refer Appendix 1)

### COALSTOUN TENEMENT EPM 14079

EPM 14079 is an area of 176.5km<sup>2</sup> located near Biggenden in southeast Queensland (Figures 2 and 4). Coalstoun is a porphyry copper project with significant near surface supergene copper enrichment (open pit heap leach target) and has significant synergies with ActivEX' nearby White Horse supergene copper prospect (EPM 14476).

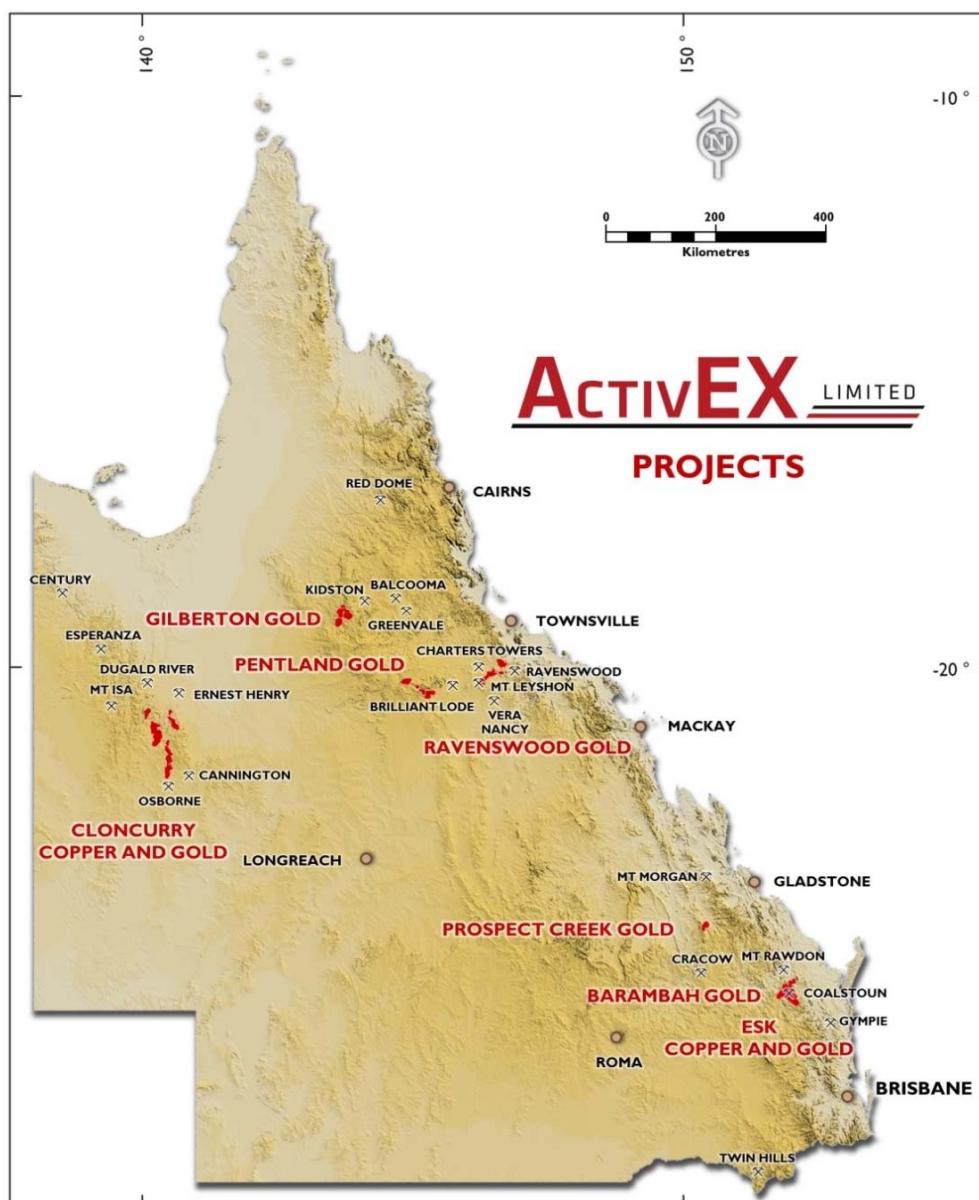


Figure 2. ActivEX Limited Queensland Projects



Previous drill intersections at the Coalstoun prospect include:

- 390.7m @ 0.30% Cu from 0m to EOH, including a supergene zone of 21.4m @ 1.36% Cu from 15.2m, Esso22
- 420.6m @ 0.30% Cu from 6.1m, including a supergene zone of 18.3m @ 0.92% Cu from 18.3m, Esso19
- 517.2m @ 0.21% Cu from 12.2m to EOH, including a supergene zone of 36.6m @ 0.51% Cu from 18.3m, Esso36
- 407.8m @ 0.28% Cu from 36.6m to EOH, including a supergene zone of 42.6m @ 0.46% Cu from 36.6m, Esso32

During the quarter ActivEX has collated and validated data from previous explorers including geophysical, drilling and surface data in the Coalstoun tenement. Validation of historical drill hole information has included geological logging, portable XRF analysis, magnetic susceptibility measurements and re-assaying including QA/QC sampling of selected drill core from seven historic drill holes stored in the Queensland Government's Exploration Data Centre. Representative core will also be selected for density measurements during next quarter.

The significant, high grade copper mineralisation reported by Esso in 1974 from drill hole Esso22 was confirmed by re-assaying of drill core. Results indicate a good correlation between historical assays and re-assayed drill core.

Historical assay interval from Esso22:

- 122.00m @ 0.48% Cu from 15.2m including 9.1m @ 2.3% Cu from 18.3m – no Au assayed.

ActivEX re-assay of Esso22 returned:

- 122.53m @ 0.44% Cu and 0.07g/t Au from 15.54m including 10.52m @ 2.07% Cu and 0.14g/t Au from 17.68m.

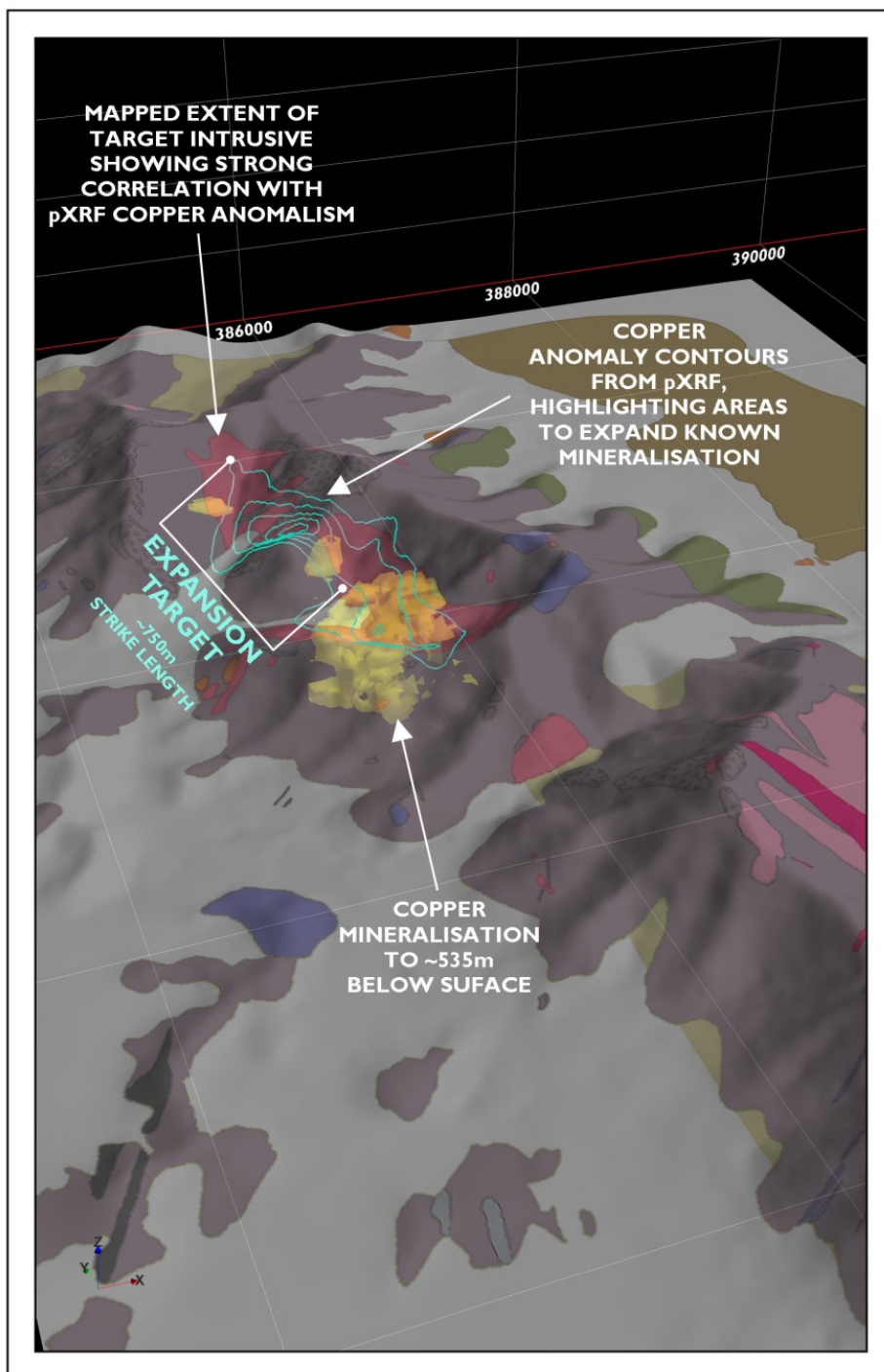
During the next quarter additional core will be selected from the Queensland Government's Exploration Data Centre for re-assay.

ActivEX will determine if a maiden JORC resource estimate (supergene copper-gold mineralisation) is possible with the existing collated drill hole and associated data. The work will also guide future drilling campaigns at Coalstoun.

Work during the quarter has also including the initiation of extensive portable X-Ray Fluorescence (pXRF) soil geochemical surveys over the central Coalstoun porphyry, which includes the area of the historical supergene copper target (Figures 3, 4 and 5). A total of 1,050 sample sites were analysed, covering a total line distance of 52.5km and 2.3 square kilometres. The samples were spaced between 50m and 100m, and each analysed with 3 filters for 30 seconds per filter. The results show a strong, coherent copper anomaly coincident with the mapped intrusive, highlighting exploration targets to extend known copper mineralisation. Additional Niton analysis is planned in the next quarter to infill portions of the target area.

Several exciting gold targets have also been identified within the Coalstoun EPM, including the Southeast Breccia and Staib's Hill prospects (Figure 4). Previous drill hole intersections include 23m @ 0.81g/t Au from 423m in CDD008 at Southeast Breccia and 80m @ 0.37g/t Au from surface in SHRC2 at Staib's Hill. The orientation and extent of mineralisation of the targets will be followed-up during the next quarter with portable XRF surveying and rock chip sampling.





**Figure 3.** Portable XRF copper contours (turquoise coloured lines – contours >100ppm Cu, contoured every 50ppm), draped over topography and geology at the Coalstoun prospect. Model of the known, and heavily explored copper mineralisation at depth (in yellow), lies below the southern portion of the pXRF copper anomaly



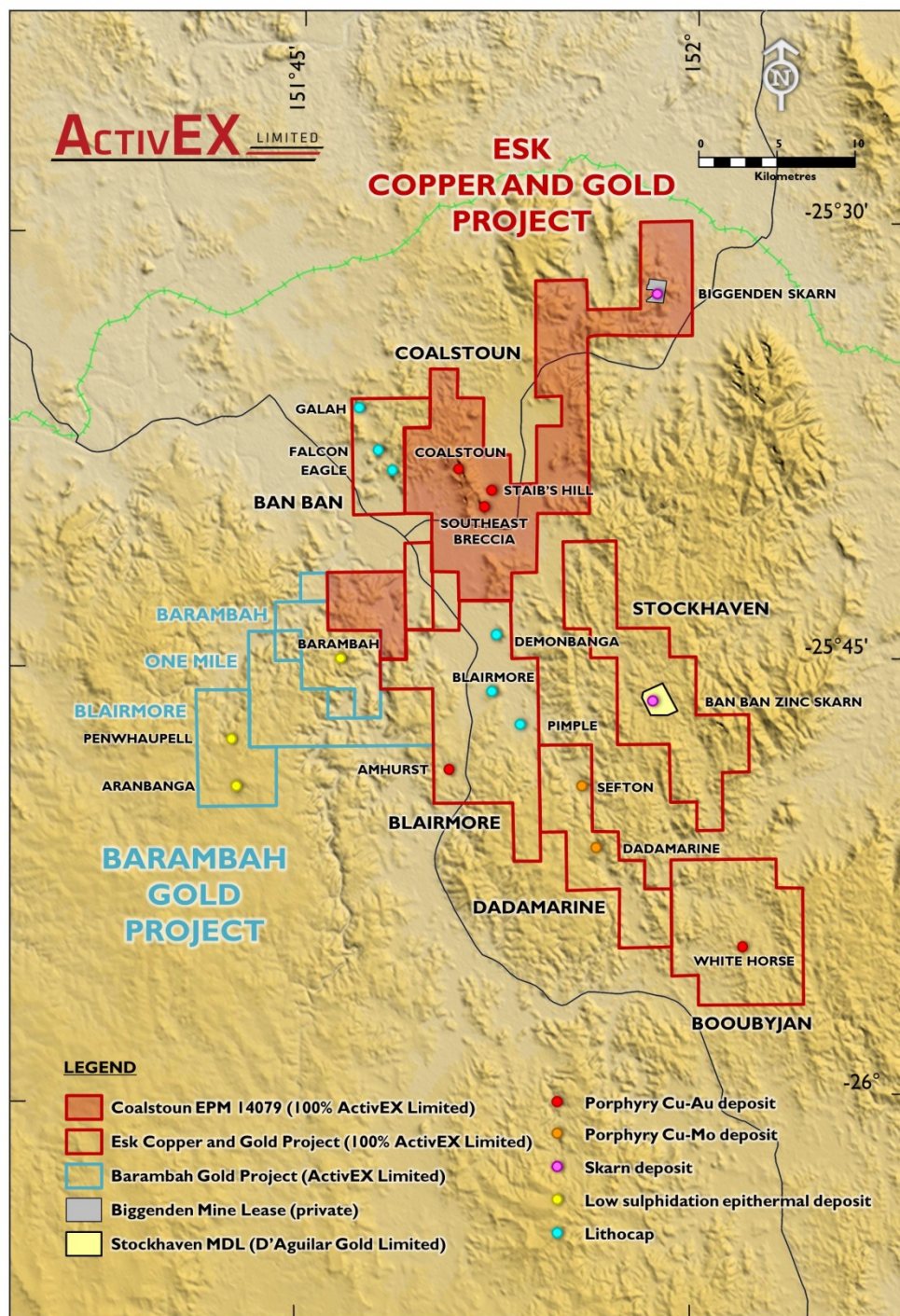


Figure 4. ActivEX Limited Esk Copper and Gold Project tenements highlighting the Coalstoun EPM 14079 acquisition (Barambah Gold Project tenements also shown)



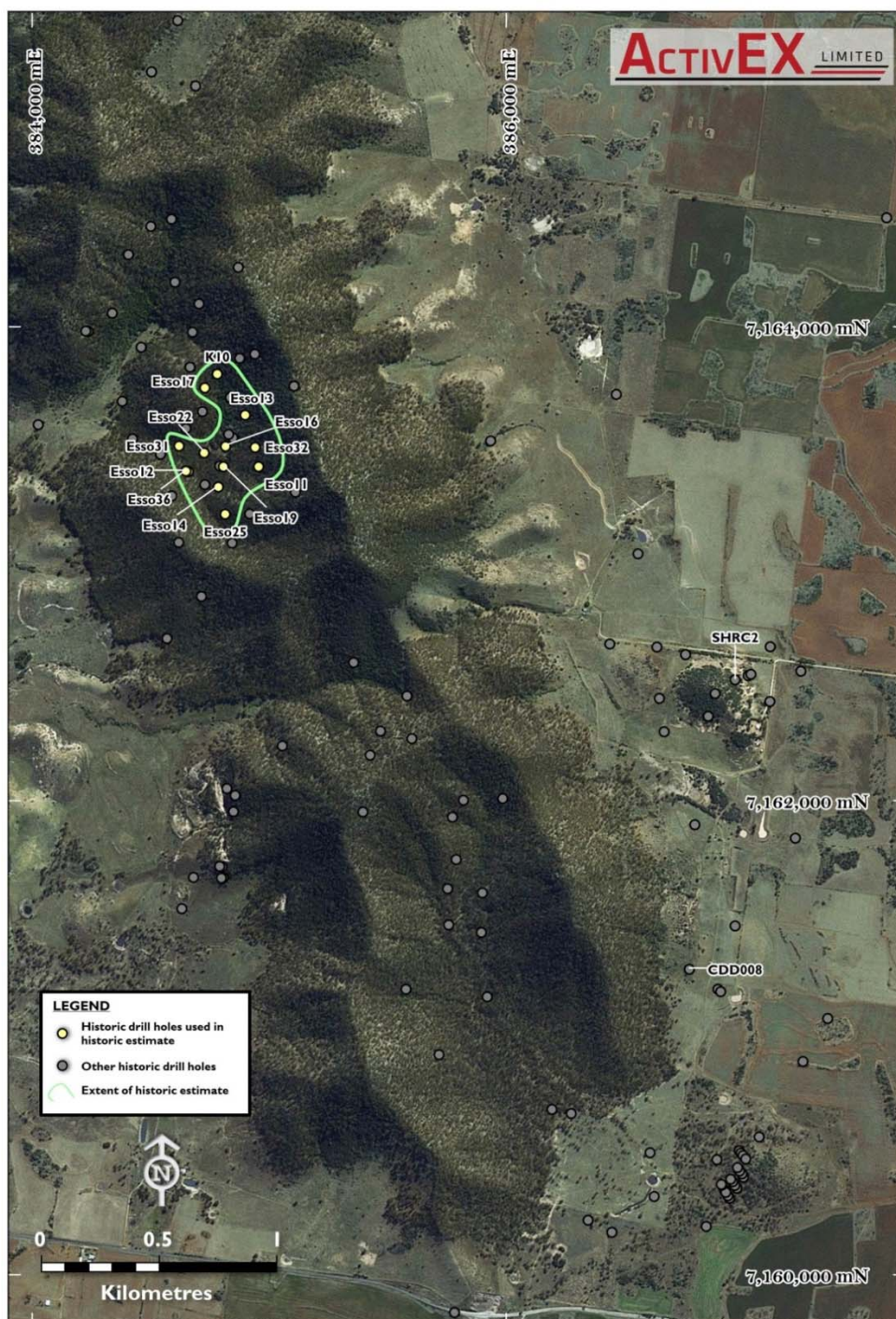


Figure 5. Drill hole collar location plan showing historic drill holes used in the historical estimate (in yellow), and other historic drill holes (in grey)



## **BARAMBAH GOLD PROJECT – Southeast Queensland**

**(EPM 18732, part EPM 16265 – ActivEX 100%, EPM 14937 – ActivEX 75%, Norton Gold Fields 25% and diluting, refer Appendix 1)**

During the quarter ActivEX was successful in securing a grant of \$85,000 from the Queensland State Government under Round 8 of the Collaborative Drilling Initiative ('CDI') (ASX 1<sup>st</sup> September 2014). The CDI is designed to stimulate exploration investment in under-explored parts of Queensland, contributing to the generation and testing of high quality innovative exploration targets.

The CDI funding will contribute up to \$85,000 of drilling costs to extend drill testing of the highly mineralised Barambah gold-silver vein system in the Barambah Gold Project (Figures 2 and 4). Four diamond core holes for a total of 1,600m are planned; targeting a large geophysical Controlled Source Audio Magnetotellurics (CSAMT) conductivity anomaly (Figure 6) believed to represent a horizon of pyroclastic breccia which may be favourable for structural dilation and mineralisation (Figure 7).

Previous drilling highlights at Barambah (Table 5) demonstrate the capacity for high grade gold and silver mineralisation within the low sulphidation epithermal system. If successful, the program will significantly expand the vein system's potential to host large volumes of mineralisation. The targeted mineralisation style is analogous to the Pajingo and Cracow deposits which host multiple high grade mineralised zones, extending laterally along strike and at depth.

**Table 5. ActivEX drilling highlights at Barambah**

Hole	Interval	True width	@	g/t Au	g/t Ag	from
ABA003	2m	1.41m	@	15.96	1556	50m
incl.	1m	0.71m	@	31.3	3040	51m
and	2m	1.35m	@	1.93	309	86.5m
ABA008	17.15m	9.32m	@	4.98	118	24.85m
incl.	10.9m	5.91m	@	7.74	122	31.1m
ABA013	25m	12.27m	@	0.61	208	46m
incl.	9m	4.36m	@	1.38	529	59m
incl.	4m	1.94m	@	2.92	1053	60m



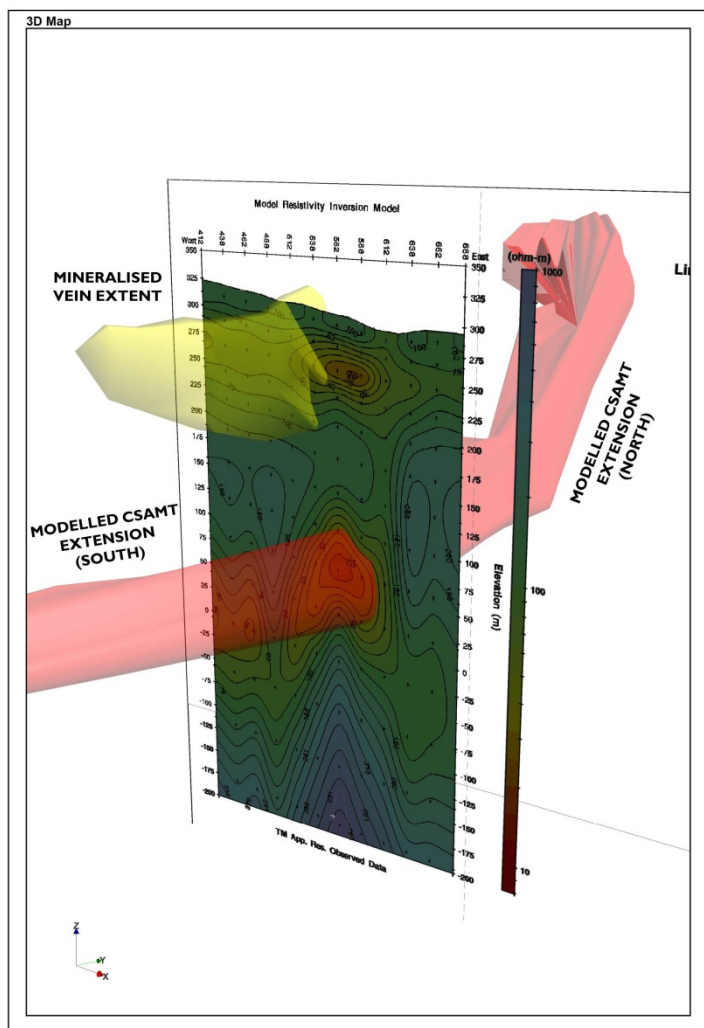


Figure 6. Three dimensional interpretation of CSAMT response (looking northwest)

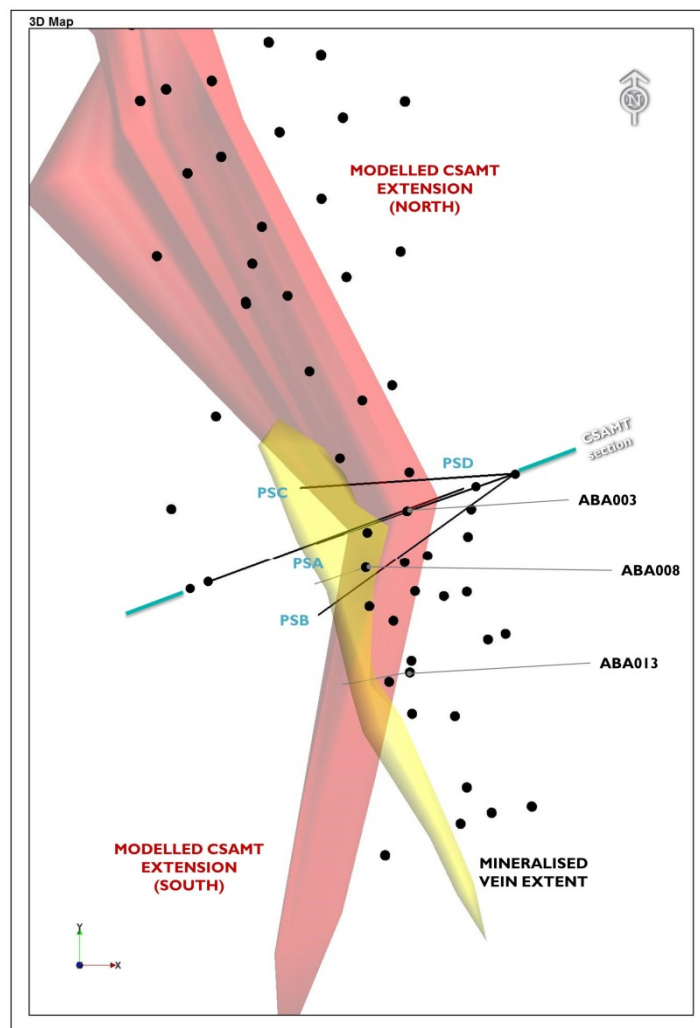


Figure 7. Geological interpretation developed from drill hole lithologies and CSAMT response

## CLONCURRY COPPER AND GOLD PROJECT – Northwest Queensland

(EPM 15285, 17313, 17805, 18511, 18073, 17454, 18852, 18053, EPM applications 25192, 25194, 25454, 25455 – ActivEX 100%, Mt Agate Joint Venture EPM 14955 – Carpentaria Exploration Limited 100%, ActivEX acquiring 100% refer Appendix 1)

### Florence Bore North and Florence Bore South prospects

H & S Consultants Pty Ltd (Brisbane) were contracted to complete resource estimates for the Cloncurry Copper and Gold Florence Bore North and Florence Bore South prospects (refer to Activities Report Quarter Ended 30 June 2014, Figure 8). The resource estimates are nearing completion and the Company anticipates that the resource estimates will be completed during the next quarter.

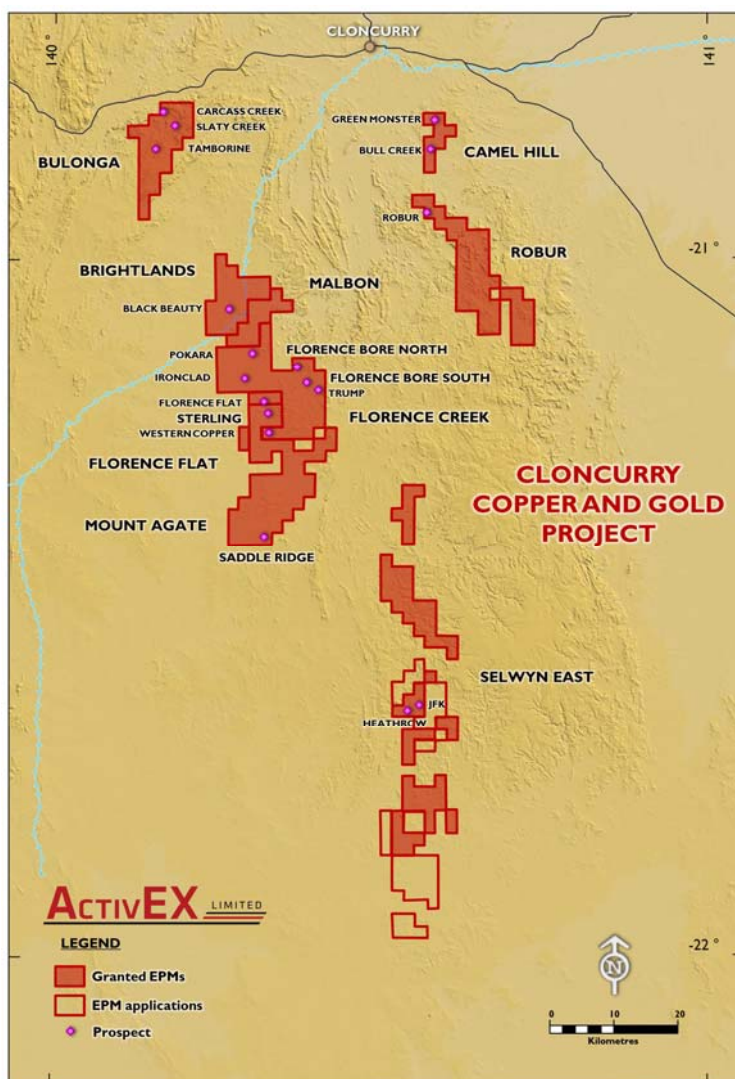


Figure 8. ActivEX Limited Cloncurry Copper and Gold Project tenements and selected prospects

For further information contact:

Mr Grant Thomas, Managing Director  
or Mr Craig James, Company Secretary



The information in this report that relates to exploration results is based on information compiled by Mr G. Thomas, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and a Member of the Australian Institute of Geoscientists (MAIG) and Ms J. Hugenholtz, who is a Member of the Australian Institute of Geoscientists (MAIG). Both Mr Thomas (Managing Director) and Ms Hugenholtz (Exploration Manager) are full-time employees of ActivEX Limited and have sufficient experience relevant to the styles of mineralisation and types of deposit under consideration and the activities being undertaken to qualify as a Competent Person as defined by the 2012 Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).

Mr Thomas and Ms Hugenholtz consent to the inclusion of their names in this report and to the issue of this report in the form and context in which it appears.

## Appendix 1

### Declarations under JORC 2012 and JORC Tables

The information in this report that relates to exploration results is based on information compiled by Mr G. Thomas, who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM) and a Member of the Australian Institute of Geoscientists (MAIG) and Ms J. Hugenholtz, who is a Member of the Australian Institute of Geoscientists (MAIG). Both Mr Thomas (Managing Director) and Ms Hugenholtz (Exploration Manager) are full-time employees of ActivEX Limited and have sufficient experience relevant to the styles of mineralisation and types of deposit under consideration and the activities being undertaken to qualify as a Competent Person as defined by the 2012 Australasian Code for Reporting Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012).

Mr Thomas and Ms Hugenholtz consent to the inclusion of their names in this report and to the issue of this report in the form and context in which it appears. The following Tables detail sampling techniques, data management and reporting criteria according to the JORC Code (2012).

### JORC Table 1 - Lake Chandler Potash Project – Leach Testing

#### Section 1 - Sampling Techniques and Data – Lake Chandler Potash Project

Criteria	Explanation
Sampling techniques	<ul style="list-style-type: none"> <li>Leach testing was carried out on alunite-rich bulk samples obtained from the Lake Chandler Potash Project.</li> <li>Bulk samples were collected using a backhoe and end loader during the 1980s. Stockpile of bulk sample material was removed by ActivEX in 2011.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>Two bags of bulk material were combined and stage crushed to 100% passing 3.35 mm. The resulting material was blended, homogenised and split into 1 kg charges. One charge (1 x 1 kg) was allocated for moisture content and head assay, whilst the remainder were stored in preparation for leaching testwork.</li> <li>Three atmospheric acid leaches were performed utilising hydrochloric acid (HCl), and one was performed using sulphuric acid (H<sub>2</sub>SO<sub>4</sub>). Leachate temperature ranged from 100 °C to 108 °C. The material was then placed in a 2-litre leaching vessel and the slurry density adjusted to 30% (w/w) to 15% (w/w) using the prepared leachate. The slurry was agitated via an overhead stirrer on a hotplate to maintain the leachate temperature.</li> <li>Crystallisation tests were performed as follows: <ul style="list-style-type: none"> <li>The leach liquor mass and specific gravity was recorded.</li> <li>The liquor was then placed in a refrigerator running at 2°C and left for three days.</li> <li>The mass of the total cooled mixture was recorded. The liquor was decanted and its specific gravity recorded. A sub-sample was assayed for Al, Fe, K, Mg, Na, S, Si, and Ti.</li> <li>Any crystals formed were dried in a vacuum oven at 50°C, and their mass recorded.</li> </ul> </li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Location by hand held Garmin GPS device.</li> <li>Western Australia – grid system MGA94, Zone 50.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Sample material is composited from bulk sample sites.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Bulk sample material was taken from stockpile located at the Lake Chandler Potash Project.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>The following analytical methods were employed: <ul style="list-style-type: none"> <li>Al, Ca, Fe, K, Mg, Mn, Na, Pb, Si and Ti in solids: Mixed acid digest/ICP-OES finish</li> <li>S in solids: CS-2000</li> <li>Al, Ca, Fe, K, Mg, Mn, Na, S, Si, Ti in solution: Direct ICP-OES</li> <li>Free acid in solution: Classical titration</li> </ul> </li> <li>A sample of the feed was submitted for XRD analysis to determine the mineralogy of any crystallised component.</li> </ul>



Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Assay results and tables taken directly from laboratory report, with no changes made.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>Samples are stored in a secure shed off site.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>Assaying has included standard laboratory procedures and audits.</li> </ul>

## Section 2 - Reporting of Exploration Results – Lake Chandler Potash Project

Criteria	Explanation
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>The Lake Chandler Potash Project is 100% owned by ActivEX Limited.</li> <li>Mining Lease 77/22 was granted prior to 1992 and therefore extinguishes Native Title. There are no current native title claims existing over the Lake Chandler area. Cultural heritage issues still need to be addressed and previous work in the area included an ethnographic survey of aboriginal sites (2001) in consultation with representative of the Ballardong and Central West claimant groups. The survey found no Aboriginal sites of significance in the lease areas.</li> </ul>
Geology	<ul style="list-style-type: none"> <li>Lake Chandler occurs within the Western Gneiss Terrain of the Yilgarn Shield. The Terrain consists of granitoid batholiths intruding granitic gneiss. These rocks are of Archean age; they are bounded by the Darling Fault along the western margin, Archaean greenstone belts of the Southern Cross and Murchison Provinces to the east and north respectively and the Proterozoic Albany-Fraser Orogen to the south.</li> <li>Lake Chandler is one of numerous playa lakes that occur along old drainage channels over the Western Australian Yilgarn Shield. The river system is some +500km long and contains major lake systems at Lake Seabrook, Lake Deborah, Lake Champion, Lake Brown before merging with current drainage systems near Northam.</li> <li>The lakes are evaporitic deposits formed by damming and perching of the river system and are subject to intense weathering and degradation of the bedrock into alluvial sediments finally ending up as clays. The Lake Chandler lake bed is covered by a dark grey clay which dries out in summer and the surface is cut by polygonal shrinkage cracks.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>Refer to body of report for further work plans.</li> </ul>

## JORC Table 1 - Coalstoun EPM 14079 – Portable XRF Soil Sampling

### Section 1 - Sampling Techniques and Data – EPM 14079

Criteria	Explanation
Sampling techniques	<ul style="list-style-type: none"> <li>A Niton XL3T-950 handheld XRF analyser was used to obtain soil analyses.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>Samples were prepared by scuffing a 10cm<sup>2</sup> area to remove any light vegetation and immediate top soil. The instrument was then used to analyse the area directly. The analyser window is checked for any foreign contaminant between samples.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Location by hand held Garmin GPS device.</li> <li>Southeast Queensland – grid system MGA94, Zone 56.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>Samples taken at 50 metre spacings, on lines 50 to 100 metres apart, no compositing of samples.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>The portable XRF sampling grid is designed to cover the extent of the mapped target intrusive.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>Portable XRF sampling has been carried out using a Niton XL3T-950 handheld XRF analyser on 'Soil' mode, using three filters, each with 30 second duration to give a total analysing time of 90 seconds.</li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Geochemical data generated by the portable XRF instrument are checked and verified by the Project Geologist.</li> </ul>

Sample security	<ul style="list-style-type: none"> <li>The Niton XL3T-950 handheld XRF analyser generates unique identifier fields to accompany analysis data which cannot be tampered with in any way and is backed up by ActivEX staff to ensure data traceability.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>The Niton XRF analyser is checked against five or more standards of varying compositions, prior to, and after operation each working day.</li> <li>The instrument is calibrated annually.</li> </ul>

## Section 2 - Reporting of Exploration Results – EPM 14079

Criteria	Explanation
Mineral tenement and land tenure status	<ul style="list-style-type: none"> <li>EPM 14079, Coalstoun, has recently been purchased by ActivEX Limited from Newcrest Operations Limited.</li> <li>The majority of EPM 14079 is located on Freehold Land covered by many pastoral enterprises.</li> <li>A Native Title Claim Application (QUD93/2012) was lodged by the Wakka Wakka People #5 on 10 Feb 2012 and covers the Coalstoun porphyry area, as well as the Staib's Hill and Southeast Breccia prospects.</li> </ul>
Exploration done by other parties	<ul style="list-style-type: none"> <li>Previous exploration has been dominantly carried out by Kennecott, Esso, Burmine, CRAE and MIM. Work included geophysics, mapping, rock chip, soil and stream sediment sampling, trenching and drilling.</li> <li>For additional information, please refer to the ActivEX website (<a href="http://www.activex.com.au/esk-copper-gold.php">http://www.activex.com.au/esk-copper-gold.php</a>).</li> </ul>
Geology	<ul style="list-style-type: none"> <li>The Coalstoun prospect is a Middle Triassic Cu-Au-Mo porphyry system which lies within the north-northeast trending Perry Fault zone. The prospect is hosted by the Carboniferous to Early Permian Goodnight Block and emplaced during regional shortening across the Northern New England Orogen in southeast Queensland. Hydrothermal alteration and mineralisation is characterised by multiple porphyritic intrusions and associated igneous-matrix breccia.</li> <li>Hydrothermal alteration is zoned from a potassic core (K-feldspar-biotite- magnetite-albite) hosting Cu, Mo and Au that is rimmed and cut by late stage phyllic veins and fault-controlled quartz-sericite-pyrite alteration. Propylitic (chlorite-epidote) alteration is regionally extensive. Multi-stage hydrothermal-cemented breccias (including anhydrite-pyrite-calcite, pyrite-specular hematite-albite-ankerite-hematite, chlorite-pyrite-albite-calcite, and quartz-pyrite-calcite-(manganese)-hematite assemblages) cross-cut the Cu mineralisation and extend regionally into the propylitically altered wall-rock. The anhydrite-bearing hydrothermal facies is known to host high Cu (up to 1 wt. %), whereas the specular-hematite-bearing facies found up to ~2.5 km from the central intrusive hosts up to 0.5 g/t Au and 1 wt. % Cu.</li> </ul>
Drill hole information	<ul style="list-style-type: none"> <li>Refer to body of report for significant drill hole results.</li> <li>Refer to ASX release 4 July 2014 for detailed historic drill hole information.</li> </ul>
Data aggregation methods	<ul style="list-style-type: none"> <li>For drill hole Esso22 intersections, a cut-off grade of 0.2% Cu, with less than 4m internal waste, has been used to calculate the entire re-assayed zone; a cut-off grade of 0.65% Cu with no internal waste has been used to calculate the high grade zone. No cutting of high grades has been applied.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul style="list-style-type: none"> <li>The geometry of the mineralisation with respect to the drill hole angle is thought to be perpendicular at this stage.</li> </ul>
Diagrams	<ul style="list-style-type: none"> <li>Refer to body of report for diagrammatic information.</li> </ul>
Balanced reporting	<ul style="list-style-type: none"> <li>Refer to body of report for relevant intersections of drill holes.</li> </ul>
Other substantive exploration data	<ul style="list-style-type: none"> <li>Refer to body of report for additional geological observations.</li> </ul>
Further work	<ul style="list-style-type: none"> <li>Refer to body of report for further work plans.</li> </ul>



## JORC Table 1 - Coalstoun EPM 14079 – Historic Drill Core Re-assay

### Section 1 - Sampling Techniques and Data – EPM 14079

Criteria	Explanation
Drilling techniques	<ul style="list-style-type: none"> <li>Esso22 was diamond drilled from 0m to 390.7m.</li> </ul>
Drill sample recovery	<ul style="list-style-type: none"> <li>Core recoveries were not recorded by Esso and precise recoveries were difficult to estimate from the historic core by ActivEX due to poor core condition. Overall however, core recovery appeared to be quite good (&gt;90%) based on approximations by ActivEX.</li> </ul>
Sampling techniques	<ul style="list-style-type: none"> <li>Historic core was resampled between core blocks to ensure accurate sampling intervals.</li> </ul>
Logging	<ul style="list-style-type: none"> <li>Esso22 was presented as lithology summaries in historic reports by Esso. ActivEX re-logged the core geologically during sampling to obtain a more accurate representation of drill hole lithologies.</li> </ul>
Sub-sampling techniques and sample preparation	<ul style="list-style-type: none"> <li>Esso22 was split using a core splitter with one half of the split sampled for assay. ActivEX commissioned staff from the Queensland Government's Exploration Data Centre to cut the core with a core saw, to produce two quarters from the split half core. One quarter of the core was then sampled for assay between core blocks, into labelled calico bags. The remaining quarter was left as reference material.</li> </ul>
Location of data points	<ul style="list-style-type: none"> <li>Esso22 was located using a topographic map reported by Esso with drill holes overlaid.</li> </ul>
Data spacing and distribution	<ul style="list-style-type: none"> <li>No gaps in sample intervals are present and sample intervals vary from 0.3m to 3.4m due to varying distances between core blocks.</li> </ul>
Orientation of data in relation to geological structure	<ul style="list-style-type: none"> <li>Esso22 was a vertically orientated drill hole. The geometry of the mineralisation with respect to the drill hole angle is thought to be perpendicular at this stage.</li> </ul>
Quality of assay data and laboratory tests	<ul style="list-style-type: none"> <li>Historic samples and samples re-assayed by ActivEX were analysed at ALS laboratories in Brisbane.</li> <li>Esso22 was assayed for Cu, Mo, Pb and Zn only (unknown method). Re-assay by ActivEX Limited returned results for 36 elements including Au, Cu and Mo, using a four-acid geo digest (HCl, HF, HClO<sub>4</sub>, HNO<sub>3</sub>) with an AAS finish (ALS code: ME-ICP61).</li> <li>Assay certificates from historic sampling and re-assaying by ActivEX have been obtained.</li> <li>All intersections reported herein are laboratory assay intervals.</li> <li>Quality control measures carried out by ActivEX for laboratory analysed samples consisted of: <ul style="list-style-type: none"> <li>Two laboratory duplicates (1 x crusher split and 1 x pulveriser split) per hole.</li> <li>One blank sample (OREAS 22d - quartz sand + 0.5% FeOx).</li> <li>One lithogeochemical blank sample (OREAS 27 – rhyodacite).</li> <li>One pebble blank (white decorative pebbles).</li> <li>One head grade copper sample (OREAS 501b – porphyry ore).</li> <li>One high grade copper sample (OREAS 504b – porphyry ore).</li> </ul> </li> </ul>
Verification of sampling and assaying	<ul style="list-style-type: none"> <li>Significant intersections verified by exploration manager Juli Hugenholtz.</li> </ul>
Sample security	<ul style="list-style-type: none"> <li>Sample security details not provided in historic company reports.</li> <li>Re-assayed samples were placed into labelled calico bags and then placed into zip-locked polyweave bags. The samples were delivered to the lab for assay by ActivEX staff.</li> </ul>
Audits or reviews	<ul style="list-style-type: none"> <li>There were no established QAQC procedures during sampling by Esso.</li> <li>Re-assaying by ActivEX included standard laboratory procedures for laboratory samples and an in-house review of QAQC data for laboratory samples.</li> </ul>

### Section 2 - Reporting of Exploration Results

(Refer to JORC Table 1 - Coalstoun EPM 14079 – Portable XRF Soil Sampling)