

# **Quarterly Activities Report**



#### CAPITAL MINING LIMITED ASX: CMY

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# **December 2017 Quarterly Activities Report**

Capital Mining Limited (ASX: CMY) ("**Capital**" or "**the Company**") is pleased to present its Quarterly Activities Report for the period ending 31 December 2017.

Capital holds gold, base metal and lithium exploration projects, with two project areas in NSW, a larger spread of lithium projects one nickel sulphide project in Western Australia and a lithium project in the Republic of Ireland.

During the quarter the Lithium projects were reviewed as part of a rationalisation of tenement holdings. This is to enable the Company to allocate resources to projects that have shown better results and geological potential for its stated aims of the discovery of lithium, caesium and tantalum type pegmatite systems. As a result, 6 Western Australian exploration licences were relinquished as others continue to be further evaluated and rated.

Withdrawals:

- Mindoolie E20/907
- Mongolia E09/2206
- Pinthagong E09/2207
- Wheelock E09/2205
- Ravensthorpe E74/609
- Yalgoo North E59/2195



#### 1. New South Wales

# 1.1 Mayfield Project NSW EL 6358 and EL8576 (Capital Mining 75%, BBI Group 23.75%, Roberts Consulting 1.25%)

At Mayfield, field work during the December quarter consisted of rehabilitation of drill holes to satisfy environmental obligations of the licence. No other field work was undertaken during the quarter and most field activity is restricted during the NSW bush fire season.

Desk top studies commenced and revealed that there is potential for further geophysical surveys that previously responded well to the known copper-gold-sulphide zone beneath and along strike of the oxide mineralization in holes with significant drill intercepts of gold and copper (holes MR-4, MARC-5, MA-18 reported in the September 2017 Quarterly). These holes with significant oxide zone results all clustered about the oxidised upper gossan portion of the Mayfield mineralised zone. No evidence of past metallurgical work on the oxide gossan at Mayfield was found and that would be required to further progress Mayfield.

EM survey work at Mayfield that confirmed conductive responses also identified some new target zones along strike and down plunge from the oxide zone noted above. Such targets were shown in Fig 3 of a release dated 15th March 2017 as new EM targets numbered 3, 4 and 5.

# 1.2 Chakola Project NSW EL 5697 (Capital Mining 100%)

No significant field work was undertaken at Chakola during the quarter.

In a recent review of both Mayfield E6358 and Chakola E5697 data files dating back to 2007, it was noted that Chakola is a more advanced project in that certain mining studies along with metallurgical results were pointing to potential mine development. These will be further investigated and some drill hole rehabilitation may be needed at Chakola to satisfy current regulations.

Historic drill holes were assessed for accessibility during the June 2017 Quarter to conduct a downhole EM survey and found that many of these drill holes are still accessible and would therefore enable a down hole geophysical survey to be completed.

Details of drill intersections at both Mayfield and Chakola were included in the September 2017 Quarterly report.



# 2. Western Australia Projects

# 2.1 Scotia East Nickel and Cobalt Project E29/879 (Capital Mining 100%)

The recent drilling program of 7 percussion holes was completed at the Company's Scotia (renamed Scotia East) Nickel and Cobalt Project. This project is located 66 km north of Kalgoorlie, 29km northwest of and along the same greenstone units hosting the high grade historic Silver Swan nickel mine and its associated low grade Black Swan disseminated zone.

Capital's recent drilling program was reported in the September Quarterly Report along with all significant assay results that supported the occurrence of disseminated nickel sulphides in hole STR005 (6m @ 0.81% Ni from 228m down hole) which was the limit of the drill rig's capacity.

That intersection was interpreted to be a nickel sulphide disseminated zone above the deeper than expected basal contact. Most massive nickel sulphides occur on or close to the basal contact in Western Australian komatiite hosted massive nickel sulphide deposits, often with a low grade disseminated nickel sulphide zone above it. Historically the Scotia nickel sulphide mine located 17km to the west produced 1.4 million tonnes at 2.2% nickel. Within the historic Scotia Mine ore zone there were higher grade intercepts and it has been recognised that there are un-drilled targets at the historic Scotia mine area. The Silver Swan nickel mine, 29km to the south east was a very high grade discovery in the 90's when an old un-drilled EM anomaly from the 70's was finally drilled. It fired up the dormant nickel sulphide industry in WA due to its 14% nickel assays over thick drill intersections and became the world's highest grade nickel mine. After closing in 2009 Silver Swan has again been re-assessed and resources of 52,000 tonnes @ 9.2% Ni declared in new studies.

Assuming the price of nickel rises significantly as anticipated with the demand for batteries, then a new program of drilling aided by electromagnetic targeting will become attractive for Capital's Scotia project area.

# **2.2 Lithium Exploration**

No field work was conducted on Capital's lithium projects during the quarter.

Planning will soon commence to mount a more intensive exploration program over the two Midwest projects and the three Gascoyne projects. New exploration of the Midwest projects being further south, should precede field work at the Gascoyne projects due to the more difficult summer weather conditions further north in WA. At this stage such exploration is being planned to conduct more comprehensive soil and rock chip sampling along with localised mapping of any outcrops that contain pegmatites or ex sulphide gossans and any significant quartz veining or general indications of mineralisation. An objective is to start generating drill targets.



Previous work by a geological contract group was a first pass exploration of 12 exploration licenses in sectors of WA from the Murchison in the north to Ravensthorpe in the south. Reconnaissance soil and rock chip samples were collected as a widely spaced first pass over most of the ELs. They were screened by XRF (Xray fluorescence) and anomalous samples submitted to Interteck labs for more accurate conventional assays.

Some of these tenements returned significantly elevated results within the LCT (lithium, caesium, tantalum) field, as disclosed in the September 2017 Quarterly report.

Following a progressive review of the 13 WA lithium projects to enable the Company to focus on its better LCT targets, the following have been rated as the most prospective of its current portfolio.

# 2.3 Mid West Region (100% Capital)

#### Dalgaranga E59/2221

This tenement application was made in late 2017 and sits within a region of numerous LCT style occurrences peripheral to granite-monzonite intrusions.

Further to the September 2017 quarterly, the Company provides the following information.





Total Magnetic Image above showing a soil-covered strongly magnetic unit at lower left side that marks the contact between a metamorphosed granite to the west and a mica (muscovite and biotite) enriched monzongranite to the east. Very limited preliminary sampling returned strongly anomalous LCT pegmatite results. Having positive results from such limited sampling causes this project to be well rated for the next phase of sampling on an expanded scale.



Dalraranga E59/2221 showing sampling points and lithium results from a portable XRF (xray fluorescence) instrument that returned anomalous Lithium, Caesium, Tantalum, Niobium and Tin.



	Li_pp	Cs_pp	Ta_pp	Rb_pp	Nb_pp	Cu_pp	Ga_pp	Sn_pp
Sample Number	m	m	m	m	m	m	m	m
pXRF								
DALGS03	418	109	319	79	260	29	37	15
DALGS04	53	188	9	186	4	117	10	53
DALGS06	2068	837	52	8002	54	66	72	303
DALGS07	1249	181	3	4947	14	72	29	135
DALGS08	23	38		76	3	2	26	
DALSS01	200	39	216	618	30	24	24	12
DALSS02	294	46	173	981	33	24	38	22
DALSS03	537	134	177	1436	118	55	64	35

Portable XRF analysis is set out in the following table.

Sample						Cu	Ga	
Number	Li PPM	Cs PPM	Ta PPM	Rb PPM	Nb PPM	PPM	PPM	Sn PPM
DALGS03	292.2	3.74	134.73	52.15	69.29	6.4	53.03	9.6
DALGS04	220.6	23.95	0.33	315.4	1.09	73.2	13.2	1.8
DALGS06	1657.2	745.73	157.21	>2000.00	44.3	4	110.9	198.8
DALGS07	2331.8	287.82	37.75	>2000.00	32.4	91.9	56.98	186.3
DALGS08	287.4	41.08	19.35	784.76	7.79	12.4	26.55	25
DGSS01	129.5	55.62	665.54	620.56	118.49	21.1	29.57	20.1
DGSS02	207.9	72.99	526.38	992.06	77.58	24.5	34.55	27.5
DGSS03	229	76.43	1113.55	1133.69	479.53	36.8	37.69	34.2

Multi acid digest wet chemical analysis above showing differing but still strongly anomalous results for Dalgaranga in the following table.



Below is a highly micaceous pegmatite found in the Dalgaranga EL and sampled as DGSS06 returning 1,657 ppm Li and 157ppm Ta.





# Big Bell South E20/906



Total Magnetic Intensity Image showing greenstone enclave within mixed magnetic response granite.





Sampling points for LCT pegmatites with previously reported anomalous lithium results.



It was previously reported that Intertek Labs conventional analysis of 7 rock chip and 20 soil samples were submitted. The rock chips returned values of up to 0.27 % Li2O associated with anomalous Be, Cs, Ga, Nb, Rb, Sn, Ta and Tl.

The surface soils closest to the anomalous rock chip returned elevated Li values up to 67 ppm Li.

Big Bell South has indications of spodumene lithium pegmatites whereas Dalgaranga may be a more tantalum rich pegmatite.

Both targets are early stage that justify a broader program of sampling in 2018 as part of an intended larger program.

# 2.4 Gasgoyne Region - Caroline, Reynolds and Yinnietharra (100% Capital)

Work conducted during the quarter was to review past sampling, research exploration records and combine the two regions with newly drawn conclusions. During the months of November to March-April the field conditions are often well above 40 degrees Celsius making remote field work unwise and the annual cyclone season often dumps flooding rains that shuts down access for weeks at a time.





# Caroline E08/2869



Geology; Proterozoic bedrock interpretation Caroline (Geological Survey of WA)

The red and yellow infill circles indicate gold anomalous stream samples of earlier tenement holders. The yellow diamonds are historic Au workings. The red squares anomalous lithium results of Capital. Red triangles are base metal occurrences.

The Ashburton projects; Caroline, Reynolds and Yinnietharra basement are part of the Paleoproterozoic Capricorn Orogen. The meta sedimentary package of rocks of the Morrisey

Metamorphic Suite have been extensively intruded by differing types of granitic plutons that have added hydrothermal fluids and pegmatites into the system over larger areas.



The Caroline project area of 94km2, covers the faulted contact zone between dolomitic carbonate sediments (orange) and dolerite intrusives (green) on its east side with metamorphosed sedimentary schist (brown) and intrusive granite (pink). A series of major faults trend northwest through the tenement.

Wide spaced sampling by Capital detected good evidence of lithium and LCT responses as shown with red squares and reported in detail 14 November 2016. With such widespread rock chip sampling responses with positive LCT signatures, further work will be planned for 2018.

In the central and southern part of the EL are historic gold workings along one of the major northwest trending faults associated with three historic Midnight Star gold occurrences. The Lyndon soil anomaly (previously explored by Helix Resources) identified a gold anomaly via stream sediment sampling, soil geochemistry with anomalous gold over 2.8km strike length at 20 to 40 ppb against background levels at less than 20 ppb Au.

It generally sits along the faulted contact between dolomites and shales to the west and lower Proterozoic metamorphic rocks to the east. Ground work by Helix and other explorers found quartz veining including pyrite bearing quartz that was interpreted as a possible anomaly cause. Further work by Helix over a broader area found additional anomalous stream sediment results and common quartz veining, some with pyrite and traces of copper minerals. Helix moved on the other projects and no records of any drilling were found.

The area has series of north east trending metamorphosed dolerite to gabbroic dykes that elsewhere in this region have some base and precious metals associated with mafic pegmatite phases. Sulphide bearing quartz veining with gold in this region is known to occur at various orientations along faults and in some areas along dyke boundaries.



#### Reynolds E09/2209



Geology; Proterozoic bedrock interpretation Reynolds (Geol Survey WA)

The Reynolds project covers approximately 187km<sup>2</sup>.

The project is bounded between major faults trending north west and has sedimentary schists and granite with minor gabbro. Occurrences of complex pegmatites are recorded in many areas around this EL.



Broad sampling within this tenement by Capital resulted in several anomalous lithium occurrences shown as red squares in the northern sector (ASX release 14 November 2016 rock chip assays results covered this in more detail).

The area has granite phases shown in pink and metamorphosed sedimentary schists in brown. A series of extensive younger Proterozoic dolerite to gabbro dykes have intruded this sequence shown in green dashed lines cross the tenement. These dykes have been reheated, metamorphosed and reported to have produced some coarse grained mafic pegmatites, particularly along their boundaries. Near this tenement's boundaries, some dolerite - gabbro dykes have incompatible melt elements that were reported to have been exsolved into the coarse grained mafic pegmatite phases in zones a few metres wide and much longer strike lengths. Historic assays reported anomalous base and precious metals that are well worthy of further exploration along with the LCT program. The widespread dyke within Reynolds system will also be targeted for cobalt that is anticipated to be associated with any base and precious metals.



# Yinnietharra E09/2208



Geology Proterozoic bedrock interpretation Yinnietharra (Geol Survey WA)

The image above shows considerable structural complexity with major faults and at least two granite phases with the northern granite having a strongly magnetic signature.

Initial reconnaissance sampling by Capital returned a number of samples with anomalous LCT signatures and two with anomalous lithium results shown in red and yellow squares on the above image (reported by Capital in more detail 14 November 2016).

The project area is within a region that has numerous recorded occurrences of complex pegmatite minerals including tantalum, niobium and beryl some 2 to 10 km to the north west of E09/2208 that are spatially associated with the magnetic granite phase. These historic occurrences were reported on and recorded before lithium became a commodity of interest. The tenement covers approximately 276km2.



# 3. Wolfhound Lithium Project Republic of Ireland

#### Ballon (PL 2930 & PL 2931) and Borris (PL 3559, PL 3211 & PL 1597) Prospects

No field work was undertaken on these projects during the quarter.

During the quarter, gathered exploration data was reviewed by the company and its consultants. From a geological perspective it was recognised that the region around the mineralisation discovered on the Borris South target zones (2.47% Li2O, 1.149% and 0.345% Li) produced clear evidence of spodumene bearing pegmatites that is a positive indicator for early stage exploration.

The Company has met expenditure obligations to retain good standing while it considers the next courses of action.

#### **CORPORATE ACTIVITIES**

#### **Placement completed**

During the quarter, Capital successfully completed a placement to raise \$500,000 via the issue of 167 million fully paid ordinary shares.

The funds raised will be used to fund targeted exploration programs across the Company's project portfolio and also for working capital. The Company would like to acknowledge the support of all investors who participated in the Placement.

#### **Future funding**

At the general meeting held 30 November 2017, shareholders approved the placement to raise up to \$1 million within three months of the date of the meeting. Of this capacity, \$600,000 remains available.



#### **ASX LISTING RULE 5.3.3**

The Company presents the tenement information in Table 3 below in accordance with ASX Listing Rule 5.3.3.

Project Name	Location	Tenement	Interest held at	Interest	Interest held at
		Licence	30 September 2017	acquired/ disposed of	31 December 2017
Mayfield	NSW	EL6358	75%	N/A	75%
Mayfield	NSW	EL8576	100%	N/A	100%
Chakola	NSW	EL5697	100%	N/A	100%
Yinnietharra	Gascoyne, WA	E09/2208	100%	N/A	100%
Ravensthorpe	Ravensthorpe, WA	E74/609	100%	100%	Nil
Yalgoo North	Yalgoo, WA	E59/2195	100%	100%	Nil
Yalgoo South	Yalgoo, WA	E59/2196	100%	N/A	100%
Mindoole	Murchison, WA	E20/907	100%	100%	Nil
Wheelock	Wail, WA	E09/2205	100%	100%	Nil
Mongolia	Wail, WA	E09/2206	100%	100%	Nil
Pinthagong	Wail, WA	E09/2207	100%	100%	Nil
Mt Vetters	North Coolgardie, WA	E29/897	100%	N/A	100%
Reynolds	Gascoyne, WA	EL09/2209	100% (Application only)	Granted	100%
Caroline Creek	Gascoyne, WA	EL08/2869	100% (Application only)	Granted	100%
Dalgaranga	Dalgaranga, WA	EL59/2221	100% (Application only)	N/A	100% (Application only)
Bigbell	Murchison, WA	EL20/906	100% (Application only)	N/A	100% (Application only)
Wail	Gascoyne, WA	EL09/2220	100% (Application only)	Granted	100%
Borris	Republic of Ireland	PL1597	100%	N/A	100%
Borris	Republic of Ireland	PL3211	100%	N/A	100%
Borris	Republic of Ireland	PL3559	100%	N/A	100%
Ballon	Republic of Ireland	PL2930	100%	N/A	100%
Ballon	Republic of Ireland	PL2931	100%	N/A	100%
Tinahely	Republic of Ireland	PL1473	100%	N/A	100%
Tinahely	Republic of Ireland	PL1715	100%	N/A	100%

-ENDS-



#### **Competent Persons Statements**

The information in this document that relates to exploration results has been reviewed by Mr Ray Muskett, a Member of the Australasian Institute of Mining and Metallurgy. Mr Muskett has sufficient experience relevant to the style of mineralisation and types of deposits under consideration, and to the activity which has been undertaken, to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code). Mr Muskett consents to the inclusion in the report of the matters based on this information in the form and context in which it appears.

#### Disclaimer

Certain statements contained in this announcement, including information as to the future financial or operating performance of Capital Mining Limited and its projects, are forward-looking statements that:

■ may include, among other things, statements regarding targets, estimates and assumptions in respect of mineral reserves and mineral resources and anticipated grades and recovery rates, production and prices, recovery costs and results, capital expenditures, and are or may be based on assumptions and estimates related to future technical, economic, market, political, social and other conditions;

■ are necessarily based upon a number of estimates and assumptions that, while considered reasonable by Capital Mining Limited, are inherently subject to significant technical, business, economic, competitive, political and social uncertainties and contingencies, and involve known and unknown risks and uncertainties that could cause actual events or results to differ materially from estimated or anticipated events or results reflected in such forward-looking statements.