



**2016 ANNUAL MINERAL EXPLORATION REPORT BORROLOOLA WEST
PROJECT**

MLN624

TENEMENT HOLDER: SANDFIRE RESOURCES NL

OPERATOR: PACIFICO MINERALS LIMITED

REPORTING PERIOD: 1 JANUARY TO 31 DECEMBER 2016

20 February 2017

1:250,000: MOUNT YOUNG (SD53-15)

1:100,000: Tawallah Range (6066)

Target Commodity: Cu

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Tenement Holder	Sandfire Resources NL
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1:250,000 map sheet	MOUNT YOUNG (SD53-15)
1:100,000 map sheet	Tawallah Range (6066)
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Location	Coppermine Creek Prospect north-west of Borroloola, NT
Geology	Middle Proterozoic sediments of the McArthur and Roper Groups of the McArthur Basin, and Cretaceous and Tertiary Cover Sediments

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SUMMARY

MLN624 makes up part of the Borrooloola West JV under an agreement between Sandfire Resources NL and Pacifico Minerals Ltd, which comprises 12 granted tenements, as of 20 February 2016.

MLN624 overlies the Coppermine Creek prospect identified for its outcropping malachite stained gossans situated along a splay off the Coppermine Creek Fault known as the Gordons Fault. Pacifico Minerals has continued an integrated exploration program for base metals along the Gordons Fault, following on from historical drilling conducted by Carrington Mines, BHP and Mount Isa Mines and more recently Sandfire Resources NL. The majority of the historical drilling has focused around the main gossan on MLN624. Sandfire Resources also drilled IP anomalies on the surrounding tenement EL26938 (Fig. 2).

Activities undertaken on MLN624 during the reporting period from 1 January to 31 December 2016 included desktop research of historical drilling data and analyses, geological field mapping and subsequently a single reverse circulation drill hole, CCR08 to a depth of 120.0m. CCR08 was designed to confirm copper mineralisation along the Gordons Fault, and intersect stratabound copper mineralisation, indicated by previous drilling studies. Most of the primary sulphide potential lies outside the ML, however there is potential for a small resource of oxide copper partially within MLN624.

Mineralisation in the intensely brecciated and dolomitised hanging wall of the Gordons Fault is associated with disseminated and veinlet chalcopyrite, almost semi-massive in parts, intersected by previous drilling by Pacifico in drill holes CCD02, CCD03 (EL26938) and CCR08. Roper Group black shales are intersected on the footwall of the Gordons Fault.

1.0 LOCATION

MLN624 covers part of the Coppermine Creek copper prospect and is located about 660km southeast of Darwin, 85 km west of Borrooloola and 100 km north of Cape Crawford in the Gulf Country of the Northern Territory (Fig. 1). Access from Darwin is by travelling about 590 km southwards along the Stuart Highway to Daly Waters and then eastwards along Carpentaria Highway to Cape Crawford (270 km). The unsealed Cape Crawford - Nathan River – Roper Bar Road runs south-north across the project area, and then continues west along the Roper Highway to meet the Stuart Highway near Mataranka, providing an alternate access route during the dry season.

Access deteriorates significantly in the north. Multiple creek crossings need to be navigated and are poorly maintained. Each wet season results in substantial damage to most creek crossings.

2.0 TITLE

Mineral Lease MLN624 was granted on 4th August 1971. Successful applications were made for renewal from 1 September 1992 and 30 March 2000, both for five years.

In accordance with a sale agreement of 18th November 2003, title was transferred from Robert Michael Biddlecombe to Sandfire Resources NL on 16th April 2004 (Dealing No. 91953). Further successful renewals were granted from 28 March 2002 for 5 years and from 9 May 2007 for a further 25 years until 31st December 2031.

The Borrooloola West Project of 14 granted tenements (since reduced to 12 granted tenements), including MLN624, and one application were farmed-out to Westrock Resources Limited (Westrock) in a joint venture (JV) agreement executed on 1 July 2013. Pacifco Minerals Ltd (Pacifco), a public company listed on the Australian Stock Exchange (ASX: PMY), acquired 100% of West Rock Resources Ltd on 19 August 2013.

3.0 CADASTRE and NATIVE TITLE

MLN624 lies within the Perpetual Pastoral Lease PPL1069 [BILLENGARAH], held by the NT Land Corporation, and the lease falls under the Billengarah Native Title Claim 00/29.

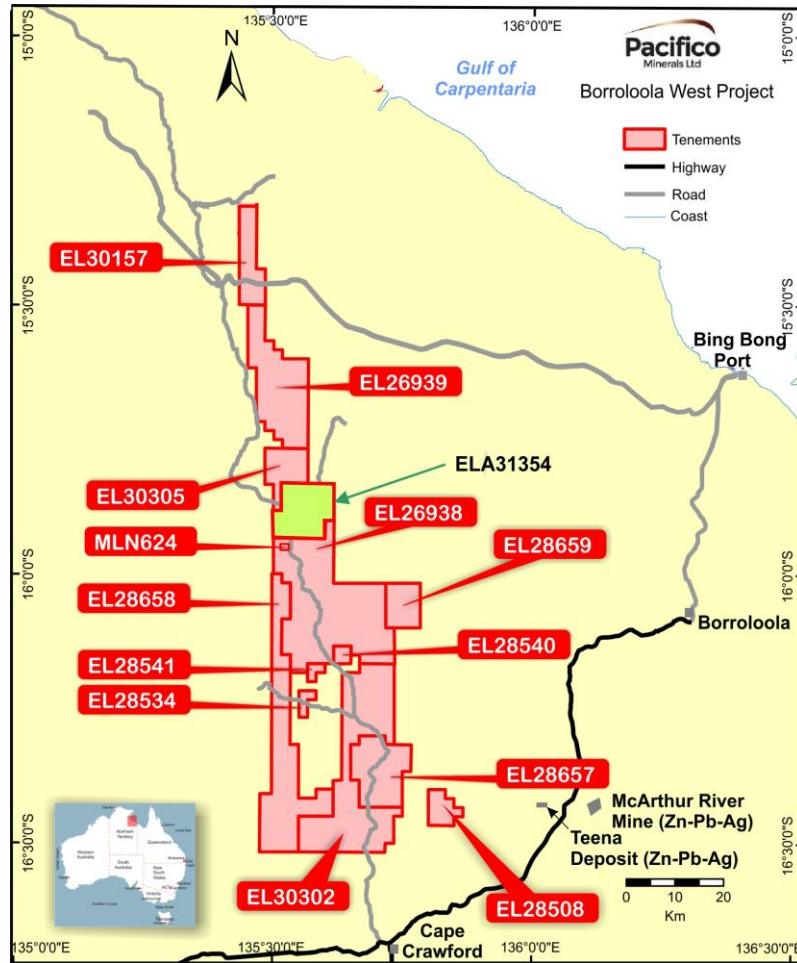


Figure 1. Location map and Borroloola West Project tenements

4.0 WORK COMPLETED

Sandfire Resources NL (“Sandfire”) is the current tenement holder; Sandfire undertook no exploration activities during this period.

From April 2016 the parties to the BWJV are 51% Pacifico Minerals Limited and 49% Sandfire Resources NL. Pacifico Minerals Ltd is the operator.

Exploration work was conducted from 1 January to 31 December 2016. The work included desktop studies compiling data and analyses from historic drilling programs on MLN624 and surrounding tenement EL26938, geological mapping and subsequent completion of a reverse circulation drill hole CCR08.

4.1 Desktop Studies

Coppermine Creek has been seen as a prospective area due to an outcropping copper rich gossan located on MLN624, with companies such as BHP, Mount Isa Mines,

Carrington Mines and Sandfire undertaking drilling on the MLN. The majority of companies that have conducted drilling programs along the Coppermine Creek Fault have focused around the main gossan, except Sandfire that targeted weak IP anomalies within MLN624 and on the surrounding tenement EL26938 (Fig. 2).

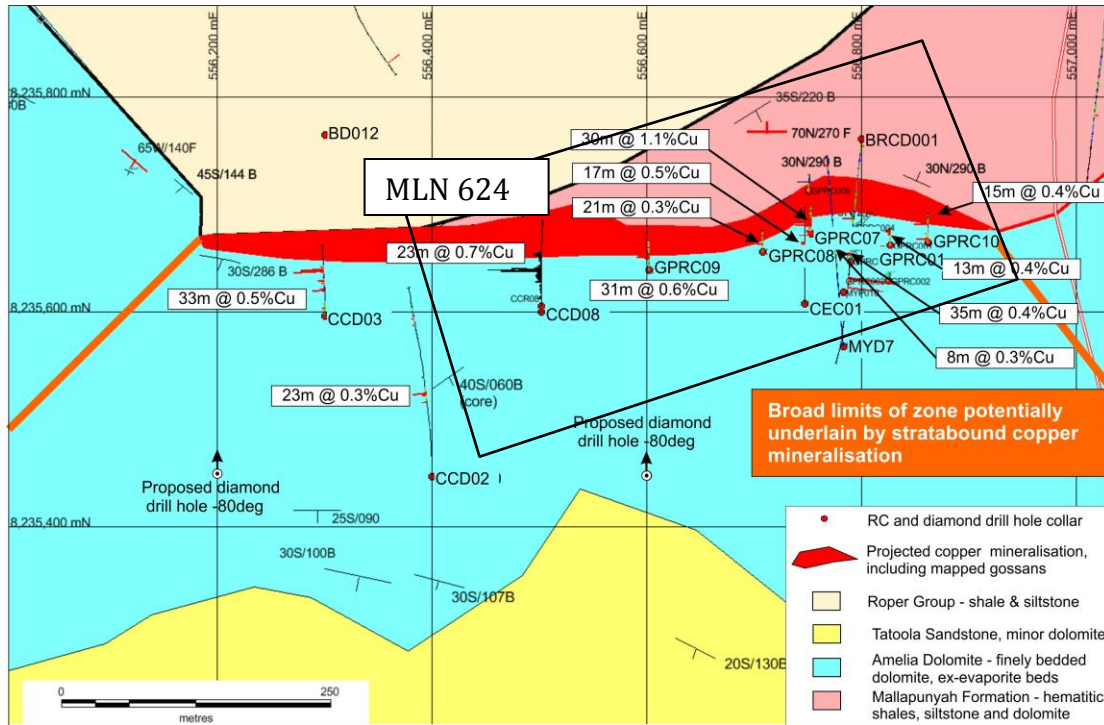


Figure 2. Geological Map of MLN624 and surrounding EL26938 showing historic drilling and recent drilling program completed by Pacifico Minerals

The drilling logs and assays indicate that the Gordon Fault consists of a steeply dipping zone several meters wide containing sheared rock fragments in a chloritic matrix, with disseminated pyrite and chalcopyrite and containing some cobalt, silver, arsenic and bismuth. Plotting of the alteration pattern in core shows evidence for stratabound bedding replacement of the dolomites away from the structure, with lenses of pyrite and chalcopyrite (Pascoe & Kay, 2015). The gossan outcrops poorly westward along the Gordon Fault and is largely covered by alluvium and colluvium. Carrington Mines' RC hole GRC09 (Fig. 2) intersected 34m of 0.53% Cu (including 7m @ 1.67% Cu), the hole stopped in copper mineralization.

One RC hole CCR08 was drilled within the MLN during 2016. It was drilled at the same location as CCR01 which was abandoned before intersecting the Gordons Fault. RC hole CCR08 was planned to retest the continuity of copper mineralization and pass through the Gordons Fault.

4.2 Geological Mapping

Geological mapping was continued over MLN624 and over the surrounding EL26938, examining the stratigraphy, structure and identifying further areas of favourable lithology, alteration and mineralisation, and assessing access for future exploration activities. Host rocks are Amelia Dolomite underlain by the Mallapunyah Formation, a red hematitic siltstone. These are overlain by the Tatoola Sandstone indicative of shallow water deposition by abundant ripple marks. The Gordons Fault is a steeply south dipping (75°) reverse fault. To the south of the fault the surrounding Amelia and Mallapunyah dip at around 35°S and flatten with increasing distance from the fault. To the north of the fault bedding dips at ~30°N, although outcrop is poor. Figure 4 shows the surface stratigraphy and general bedding dips of MLN624 and the surrounding EL26938.

4.3 Drilling

Mitchell Services were contracted to undertake the drilling program using Schramm T400 TC rig with auxiliary pump and booster.

CCR08 was drilled to a total depth of 120 m (Dip: -50, Azi: 000) Oxidized copper mineralisation was intersected in a zone of iron oxides and malachite, within Amelia Dolomite in the hanging wall of the Gordons Fault from 11m. The hole intersected 23m of 0.7% Cu and 5g/t Ag (oxidised), including 10m of 1.3% Cu, 0.01% Co and 8g/t Ag (table 1), in a zone of quartz-dolomite veining with malachite spatially associated with a stratabound ex-evaporite horizon in the hangingwall of Gordons Fault. The fault itself was unoxidised and contained chalcopyrite (8m @ 0.2% Cu).

Hole No	Cut off %Cu	From (m)	To (m)	Interval (m)	Cu %	Ag g/t	Co ppm
CCR08	0.1	31	73	42	0.50	4	56
	0.3	35	58	23	0.72	5	71
	0.5	48	58	10	1.3	8	98
	1.0	48	51	3	2.8	5	117

Table 1: Coppermine Creek Prospect – CCR08 intersection at variable cut offs

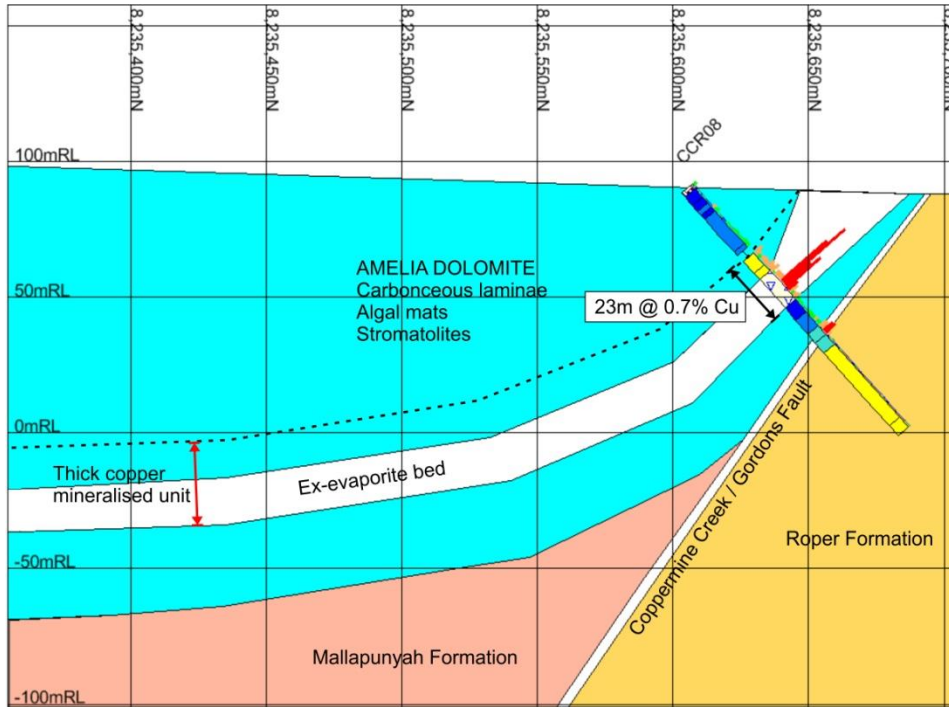


Figure 3: Coppermine Creek Prospect – East west section through CCR08 showing probable extension of copper mineralisation to the south

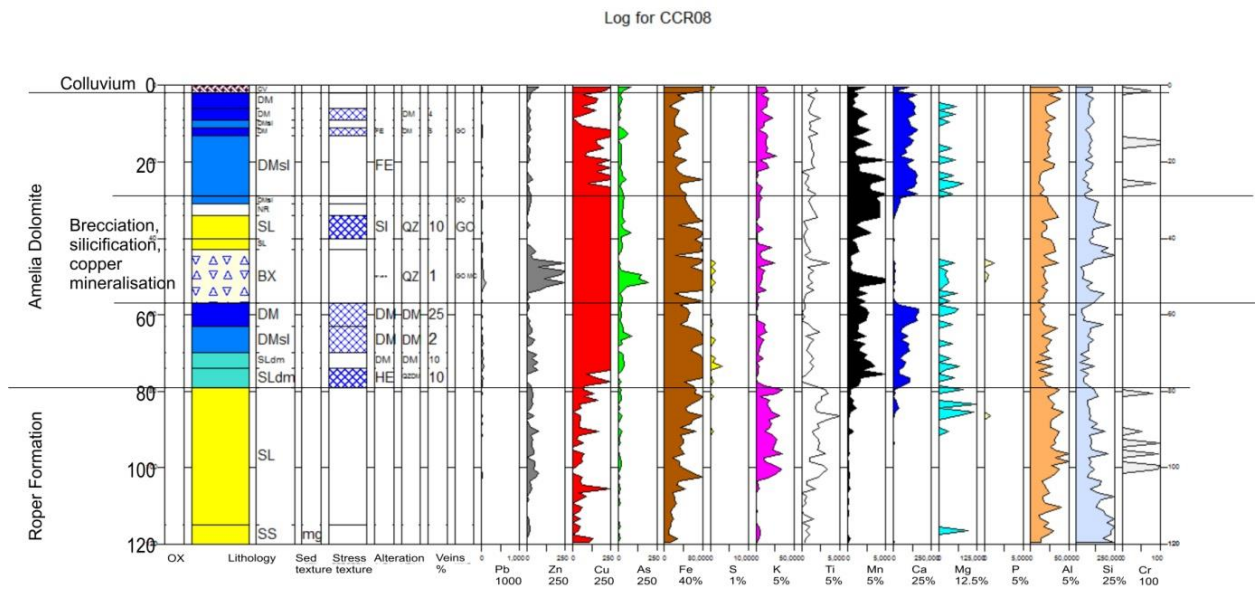


Figure 4: Coppermine Creek Prospect – Summary log and pXRF geochemistry CCR08

5.0 CONCLUSIONS and RECOMMENDATIONS

During the reporting period Pacífico Minerals significantly increased the knowledge and understanding of the mineralisation style at the Coppermine Creek prospect on MLN624. The drilling completed shows the potential importance of stratabound copper mineralisation.

Future work will focus on exploring the extensions of the stratabound copper mineralization within MLN624 and the surrounding tenement EL26938.

6.0 REFERENCES

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