outbackmetals

COMBINED

ANNUAL TECHNICAL REPORT

MT DIAMOND - MLN 63, 64, 65.

PERIOD ENDING 31/12/2016.

GR 211/11

Title holder	Outback Metals Ltd
Operator (if different from above)	Outback Metals Ltd
Titles/Tenement	MLN 63, 64, 65.
Mine/Project Name	Mt Diamond
Report Title including type of report and reporting period including date	Combined Annual Technical Report for MLN 63, 64, 65 from 1/1/2016 to 31/12/2016
Corporate Authors	Outback Metals Pty Ltd
Company Reference No:	Mt Diamond ATR 2016 - GR211/11
Target Commodity or Commodities	Copper, Silver, Gold
Date of Report	14th February, 2017
Datum/Zone	Zone 53
250 000K mapsheet	Mt Evelyn
100 000K mapsheet	Ranford Hill
Postal Address	46 The Broadway, South Brighton SA
Phone	0419 540 282
Email:	tapearce@bigpond.net.au

OUTBACK METALS LIMITED
ABN 72 126 797 573
46 Broadway, Sth Brighton
South Australia 5048
T+ 61 8 8296 0707

EXECUTIVE SUMMARY:

Re-examination of existing geophysical data was inititated to determine the potential for extensions of mineralisation. Liaisons continue in regards to the Mt Wells operation where the ore mined from Mt Diamond would be treated.

LOCATION AND TENURE SUMMARY:

The Mount Diamond tenements are located within the Pine Creek Geosyncline in the Northern Territory. The project is located 65 km east of the township of Pine Creek.

The area was historically a mining region. The prospects include the Mt Diamond, Hamilton and Waldens historical sites on the Mary River Station. The Mt Diamond copper mine operated in the first half of the century and the site was reopened in the 1970's, by United Uranium.

Normandy Woodcutters was the previous owner of the above mentioned tenements.. These tenements were transferred to Corporate Developments Pty Ltd on the 12th of January 2001 and then to the parent company Outback Metals Limited in 2012. These MLN's are current until 31st December 2013.

MLN 64 & 65 was renewed on the 12th October, 2015. MLN 63 was renewed on the 10th October, 2016.

The four main Mt. Diamond prospects are located individually within the mining leases; MLN 63, 64 & 65.

Table 1: Tenement Details

MLN	Hectares	Grant Date	Expiry Date	Easting (approx)	Northing (approx)
63	16.18	8TH Nov 1973	31/12/2023	132°15' 00"	15°46'00"
64	16.18	8TH Nov 1973	31/12/2023	132°15' 00"	15°46'00"
65	16.18	8TH Nov 1973	31/12/2023	132°15' 00"	15°46'00"

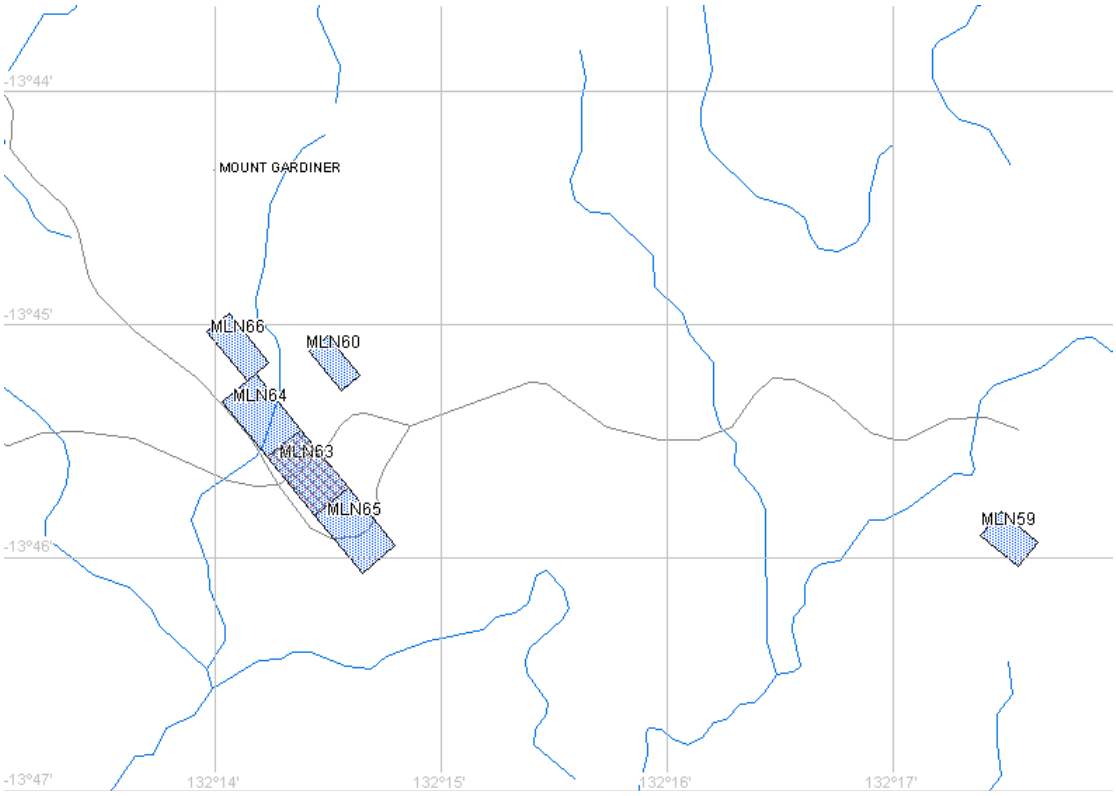

Figure 1 : Location map of Mt Diamond Tenements

PREVIOUS EXPLORATION

4.1 Mt Diamond prospects

Mineralisation was discovered at Mt Diamond in 1898 and mining first commenced in 1900, continuing until 1920. Recorded production for the above period was 681 tonnes of ore. It was the largest producer in the Ranford Hill region.

The tenements were subsequently acquired and after a diamond drilling programme mining resumed for a period of 4 years up to 1973 by United Uranium NL (UUNL). Production records for this period are given in the figure below. 10.6 kg of gold was also recovered between 1970 and 1973. Historical recovered grades are 4.74% Cu and 2.34ozs (72.8 grams) Ag per ton.

Table 2: Mt Diamond Copper Production 1970-1973

		Concentrate Produced From Ore Containing			
Year	Ore Treated (tons)	Copper (tons)	Silver (kg)	Bismuth (tons)	Arsenic (tons)
1970	3,094	88.9	177.8	1.21	8.06
1971	17,719	878.5	1344.8	12.95	60.9

1972	28,857	1389.1	2102.5	28.05	NA
1973	1,309	57.9	87.2	NA	NA
Total	**50,979**	**2414.4**	**3712.3**		

Exploration carried out by United Uranium NL (UUNL) at Mt. Diamond included extensive rock chip sampling along the length of the cropping out mineralised quartz lode, shallow wagon drilling, diamond drilling and geophysical surveying. The above rock chip-sampling program showed anomalous copper values (>1000ppm) extending some 500 metres along strike northwest of the mine workings and 150 metres also along strike to the southeast of the above workings.

After the Mt. Diamond mine closed in August 1973, two diamond core holes were drilled by the NT Mines Branch designed to intersect the mineralised lode 150 metres below the existing workings. Highlights from the results are shown below in Table 3: NT Mines Drilling results at Mt Diamond

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Table 3: NT Mines Drilling results at Mt Diamond

Hole	True Width	Cu %	Ag g/t	Bi %
DDH50	1.37m	2.18	50.5	0.09
DDH50W	0.58m	2.45	70.4	0.15
DDH51	0.55m	5.25	62	0.15

These results combined with previous data indicate that the mineralisation extends to at least 250 metres below the surface which is 150 metres below known mine workings.

4.2 Waldens Prospect

The Waldens Copper Mine was mined intermittently between 1904 and 1919. Recorded production was 1,220 tons of ore grading 8 – 10% Copper (628 tonnes of 25% copper concentrate).

During 1967, UUNL drilled 23 wagon holes at Waldens, of which only five intersected mineralisation. Two diamond core holes were drilled in 1968 followed by another four in 1970 for a best intersection of 13.6% Cu, 260 g/t Ag and 2.6% As, over a true width of 0.82 metres in drillhole DDH4. The Waldens lode was mapped, sampled and IP surveyed by UUNL during 1970 – 71. The main shaft was reportedly dewatered by UUNL in 1972.

4.3 Hamiltons Prospect

At the Hamiltons Copper Mine 20 tonnes of copper ore (12 tonnes of copper concentrate) were extracted from several shafts and pits between 1907 and 1908.
At Hamiltons, UUNL carried out the following exploration program in 1971;

- Rock chip sampling of the main lode at 7.5 metre intervals over 400 metres of strike length returning values of over 1.0% Cu from 6 out of 57 samples.
- One percussion drillhole, which failed to intersect the main lode.
- Two IP traverses delineated two IP/resistivity anomalies within the current lease.

IP anomalies beneath the main mineralised zone at the Hamiltons Prospect suggest sulphide mineralisation may occur at depth suggesting possible high-grade gold potential.

OUTBACK METALS' EXPLORATION ACTIVITY.

During 2008, the acquisition of Corporate Developments Pty Ltd by Outback Metals Ltd was completed and Outback Metals is now listed on the ASX (OUM).
The company has now reviewing all of its tenements but given the relatively small size of the Mt Diamond MLNs and the current economic environment, only a site visit & a desktop review with evaluation of the 6 holdings was completed.

Previous work by OUM included:

- 164 Niton FPXRF geochemical analyses both near mine and regionally.
- 13 Rock Chip samples collected.
- The Copper and associated Silver mineralised vein has a recognisable extensional potential identified from the preliminary soil geochemistry results, mapping and rock chip samples.
- Mt Diamond drill hole planning commenced.
- Shaft covered over/secured
- Tenement repegging

The structural continuation of the 2.6 km mineralised vein has both an associated preliminary soil geochemical Copper anomaly and visible Malachite and Chalcocite up to 1.6km in strike length. The existing workings and historic known mineralisation only extend over 600m.

Towards the end of 2012 Outback Metals applied to renew the six Mineral Leases with the aim of commencing a future mining operation.

In 2015 the Department requested boundary maintenance and replacement shaft fencing to be installed and photographed before the tenements would be renewed. This was done and included in 2015 Annual Technical Report. MLN 59, 60 & 66 were relinquished on the 1st February, 2016.

Renewals were granted after work was completed. MLN 64 & 65 was renewed October 2015 and MLN 63 was renewed October 2016 for a period of 10 years.

No further exploration work has been complete during this reporting period.
Re-examination of existing geophysical data was inititated to determine the potential for extensions of mineralisation. Liaisons continue in regards to the Mt Wells operation where the ore mined from Mt Diamond would be treated.

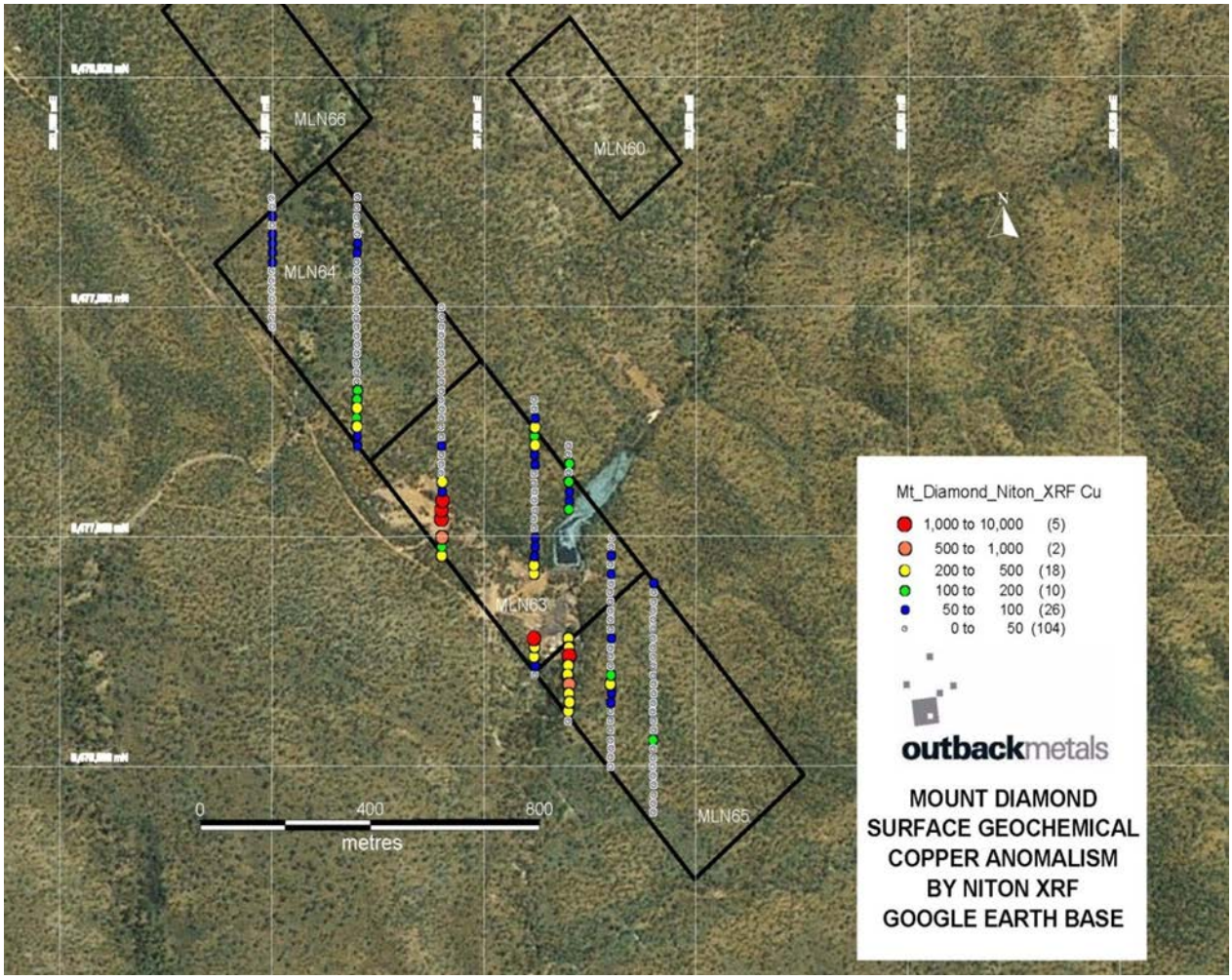

Figure 2: Mt Diamond Surface Geochemical Copper Anomalism using the Niton FPXRF.