Mt Gunson Copper Project Update

HIGHLIGHTS

- Preparatory work underway to restart oxide copper heap leach production
- Mt Gunson has historically produced >156,000t copper, 62t of silver, and 2,900t of cobalt in concentrates
- Existing oxide copper stockpiles earmarked for fast-tracking of copper cement production
- Sale of residual copper cement product stocks agreed with Adchem SA.
- Considerable unsolicited interest is being received from various potential purchasers for the copper cement
- Initial review of historic exploration and mining database complete – includes 20,000m of drilling
- Priority shallow oxide targets identified for drilling to expand production base
- Recent significant rainfall has increased fresh water resources and delaying need for planned capital purchase to improve water quality

Horseshoe Metals Limited (ASX: HOR) ("Horseshoe", or "the Company") is pleased to announce recent advances made in relation to the Operating Agreement with Copper Mining and Metallurgy Pty Ltd ("CMM") to produce copper metal from oxide material at the historic Mt Gunson Copper Mine [1, 2] in South Australia (refer Figures 1, 2, 3).

Horseshoe has the right to earn up to a 50% interest in a right to produce copper at Mt Gunson Copper Mine through contribution to expenditure, and has the immediate rights to 50% of all surplus cashflow from any copper operation conducted under the agreement.

Recommencement of oxide-copper heap leaching is now underway at the Mt Gunson copper project in South Australia, with CMM Operations Manager Mr Steven Sickerdick on-site directing activities. In conjunction with a recent site visit by representatives from Horseshoe, surface stockpiles were identified for priority leach pad construction, and are expected to provide an early boost in planned copper-cement production.

Recent significant rainfall in January has provided significant fresh water, (refer Figure 5) deferring the need for a planned capital purchase to improve water quality thereby preserving capital for other activities. While CMM still intends to purchase equipment to ensure stable quality water supply, the requirement can now be deferred to a less capital intensive period.

1. *ASX: HOR 16th October 2019 "Entry Mt Gunson Copper and Glenloth Gold Projects"*
2. *ASX: HOR 7th November 2019 "Entry Mt Gunson Copper and Glenloth Gold Projects Revised"*

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Some residual bags of copper cement product remained on site from the previous pilot-scale operation and under the term sheet agreement with Adchem, CMM is making arrangements for the sale of this product. CMM continues to receive considerable unsolicited interest from alternative purchasers for the copper cement.

The Company has now also collated and commenced review activities of a significant project database of historical drilling with a view to identifying residual oxide targets in proximity to the Main Open Cut (MOC) area. The data confirms the persistent, elongate tabular form of flat-lying shallow oxide mineralisation (refer Figures 8, 10). The extensive database totals around 20,000m of drilling, which (excluding Cattlegrid drilling on ML5599) is mostly made up of holes less than 15m in depth, as outlined in Table 1 below. Table 2 outlines significant historical intersections of copper mineralisation taken from this database, and referenced within the figures in this report.

Table 1: Mt Gunson Drill Database details.

Prospect	Number of Holes	Number of metres		Average depth	Number of samples
Main Open Cut	528	6864.5		13	5476
House	256	2673		10	3201
Core Shed	117	895		7	887
Carriage	27	420.5		16	359
Total	1102	10853		10	9923
Cattlegrid					
Exploration	394	16936		43	5724
Grade Control	923	2987		3	3755
Total	**1317**	**19922**			**9479**

Remnant oxide material extending immediately outside the current MOC pit boundary (refer Figures 4, 7, 8) is open and presents a priority drill target. In addition oxide mineralisation is present in the 'Gap' area between MOC and House prospects, where a series of four holes confirmed shallow copper mineralisation for possible mining (refer Figure 4, 7, 8, 9, 10). The Company is planning drilling of these and other available areas in the near term.

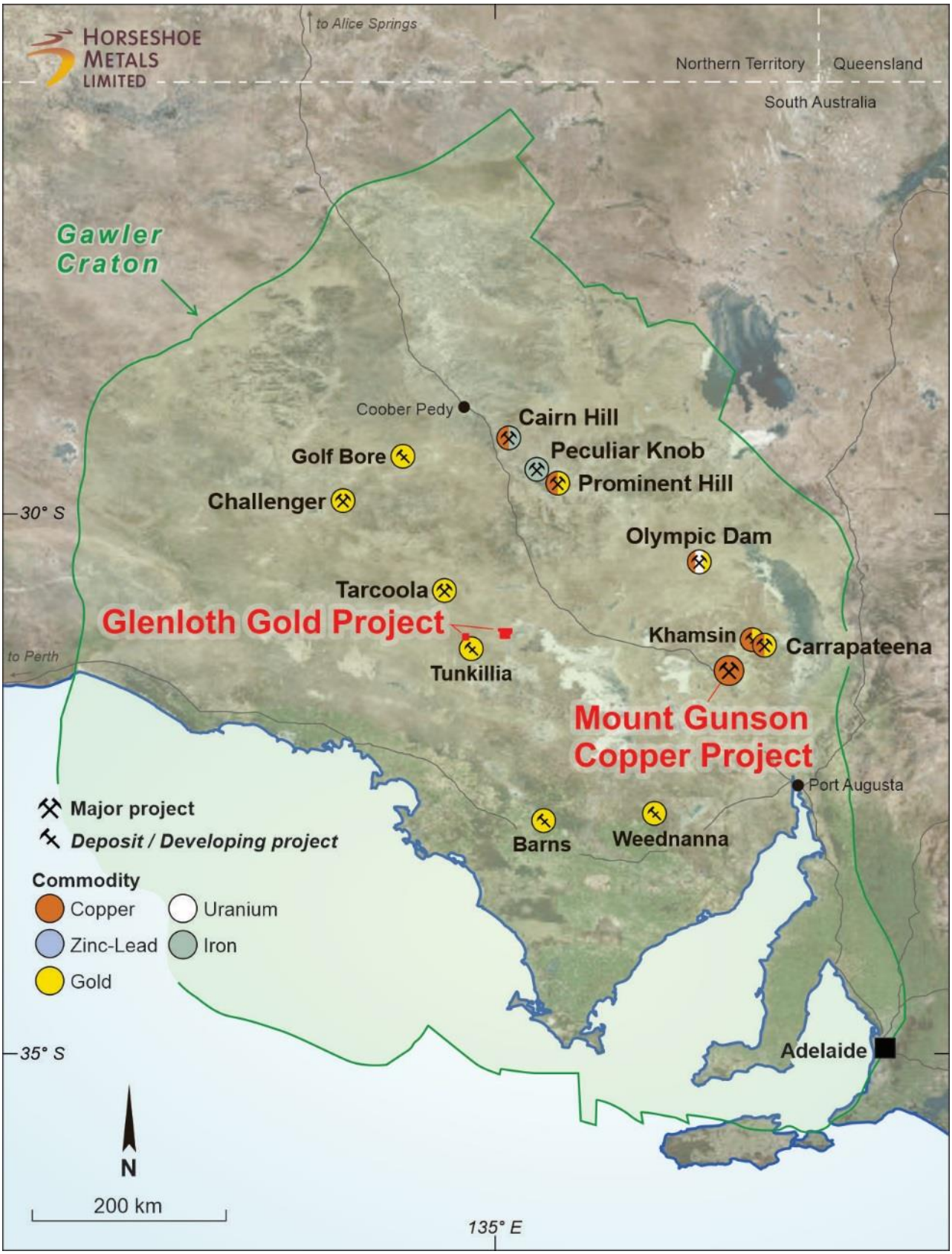

Figure 1: Location of Mt Gunson Copper Project and Glenloth Gold Project, with significant local deposits, South Australia

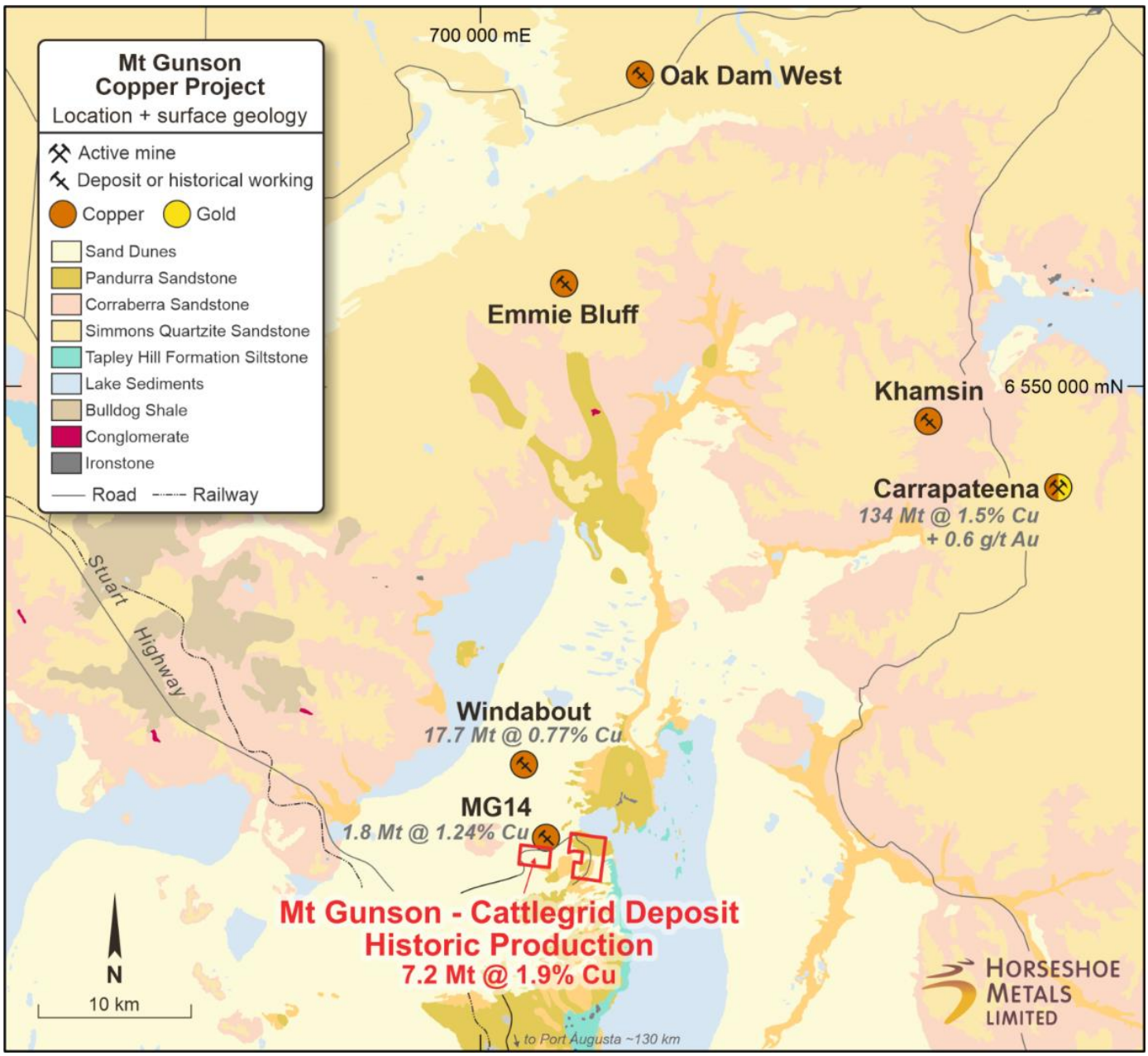

Figure 2: Location of Mt Gunson Copper Project and significant local deposits

Carrapateena Resource:
https://www.ozminerals.com/uploads/docs/170824_ASX_Release_Resource_and_Reserve_Statement_-_Carrapateena_August_2017.pdf ***p5***

Windabout Resource:
https://gindalbie.com.au/wp-content/uploads/2018/01/Mt-Gunson-Copper-Cobalt-Project-Update.pdf ***p1***

MG14 Resource:
https://gindalbie.com.au/wp-content/uploads/2018/01/Mt-Gunson-Copper-Cobalt-Project-Update.pdf ***p1***

Cattlegrid Historic Production:
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.697.4826&rep=rep1&type=pdf ***p5***

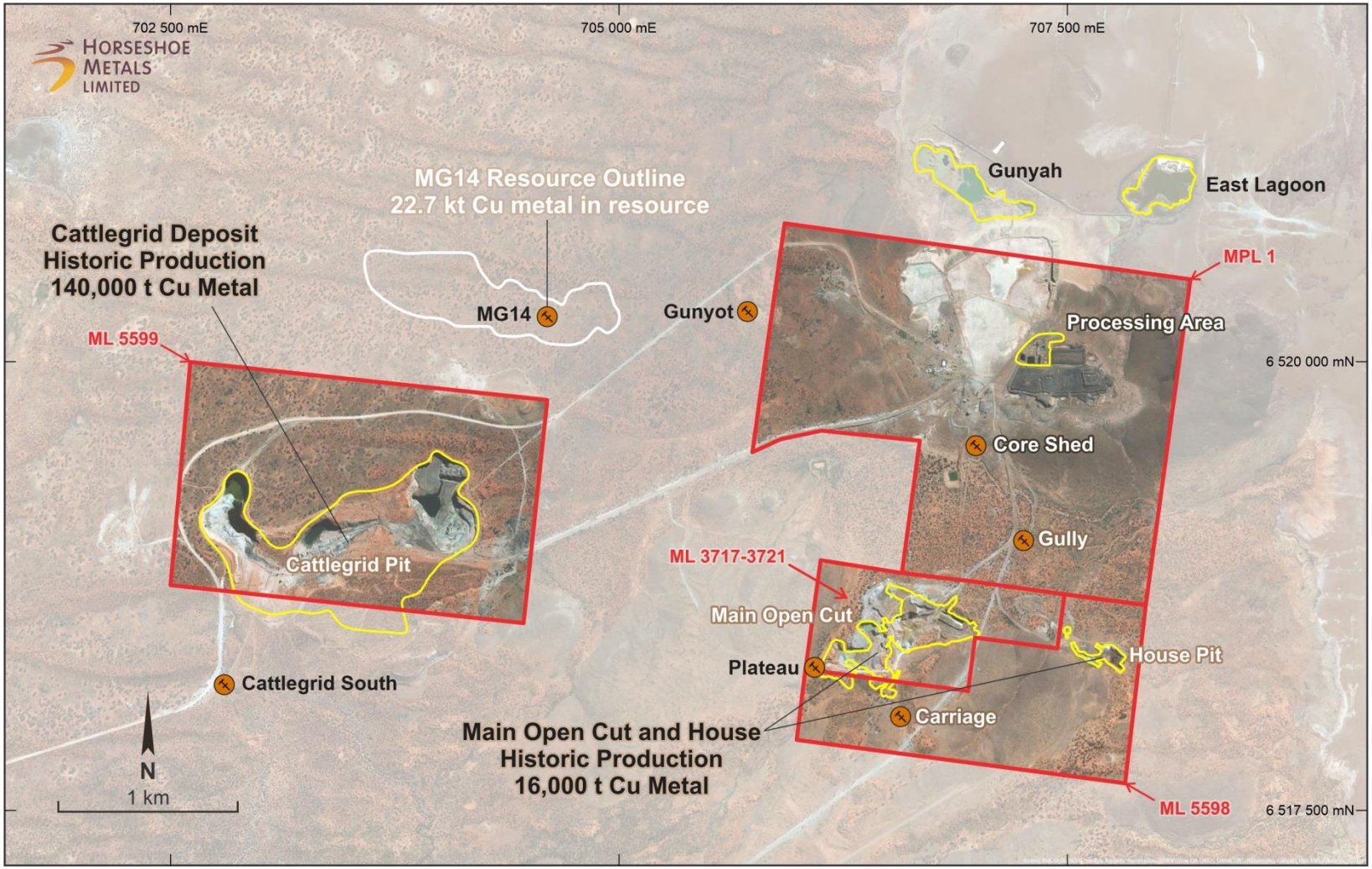

Figure 3: Location of Mt Gunson Copper Project tenure with local deposits and prospects. Historic pit outlines in yellow.

Cattlegrid Historic Production: Bampton (2003) Copper Mining and treatment in South Australia, MESA Journal 28, pp38-44
http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.697.4826&rep=rep1&type=pdf ***p2***
MG14 Resource:
https://gindalbie.com.au/wp-content/uploads/2018/01/Mt-Gunson-Copper-Cobalt-Project-Update.pdf ***p1***

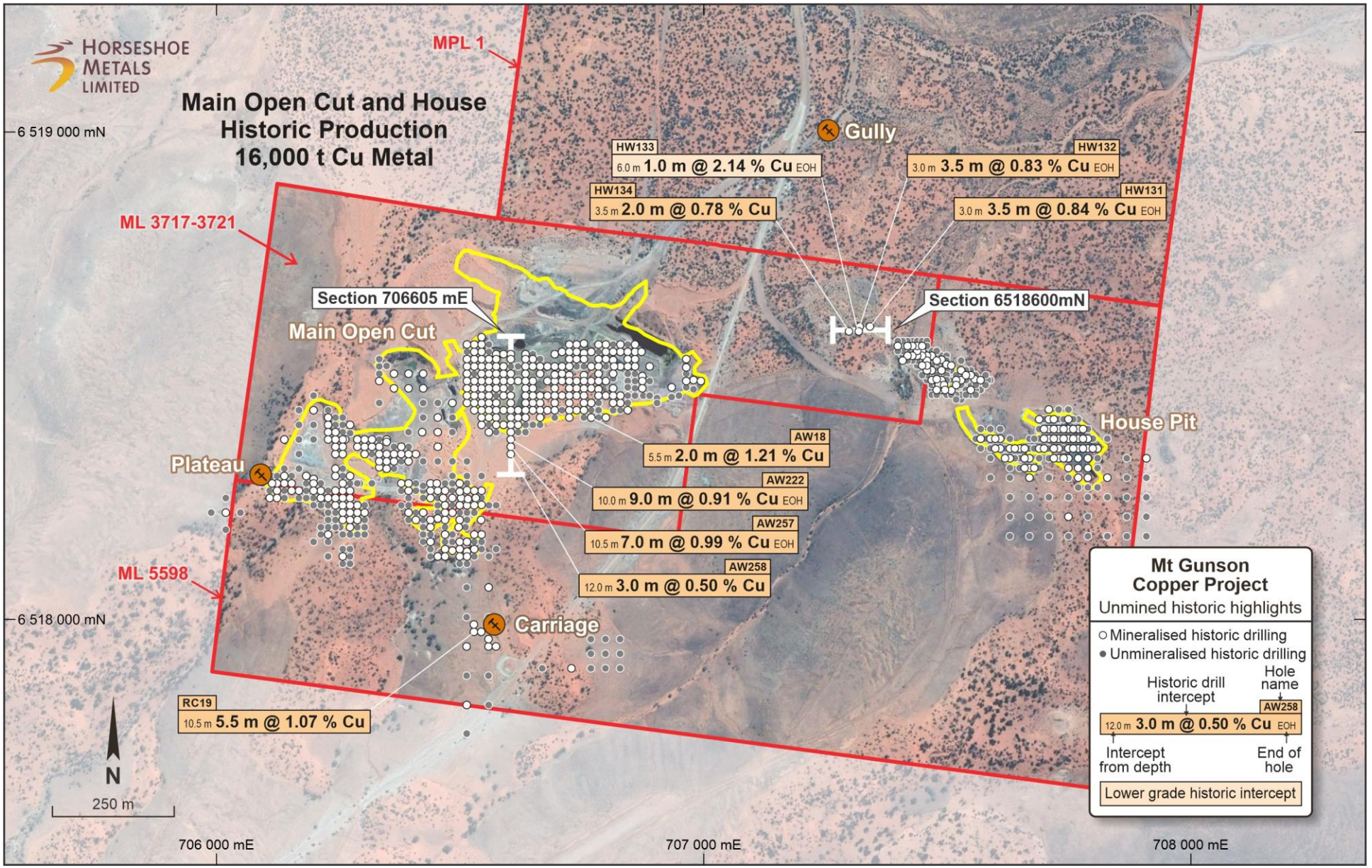

Figure 4: Location of Mt Gunson Copper Project tenure with local deposits, prospects and drill plan. Historic pit outlines in yellow.

Figure 5: Recent 2020 photo of part of Main Open Cut (MOC) at Mt Gunson, highlighting available rainwater for processing

Figure 6: View of Mt Gunson Oxide Treatment Facilities and Leach Ponds, 2019

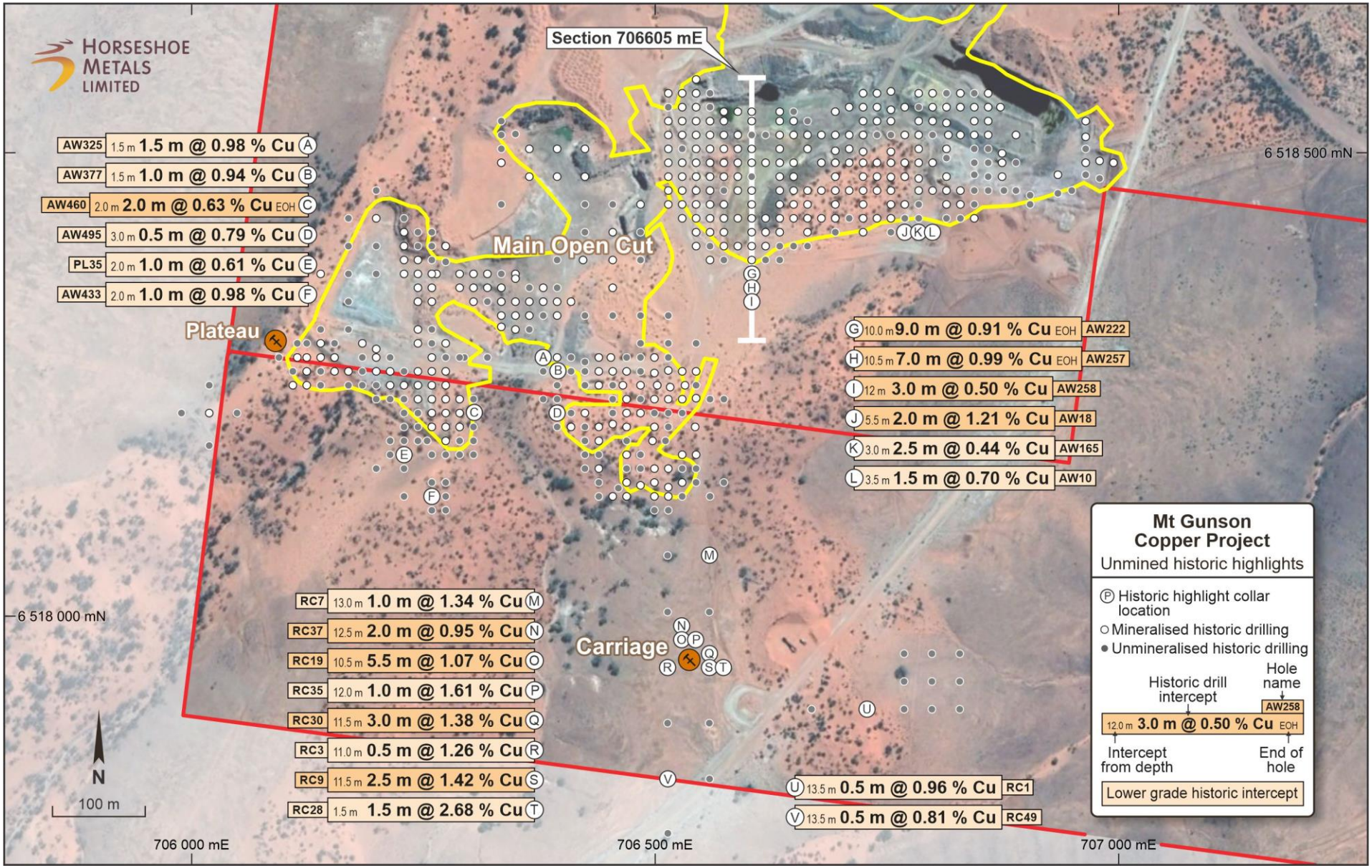

Figure 7: Drill Plan from current Database, Mt Gunson area, Main Open Cut area showing location of section lines for Figure 7, and highlighting historic results from priority drilling target areas

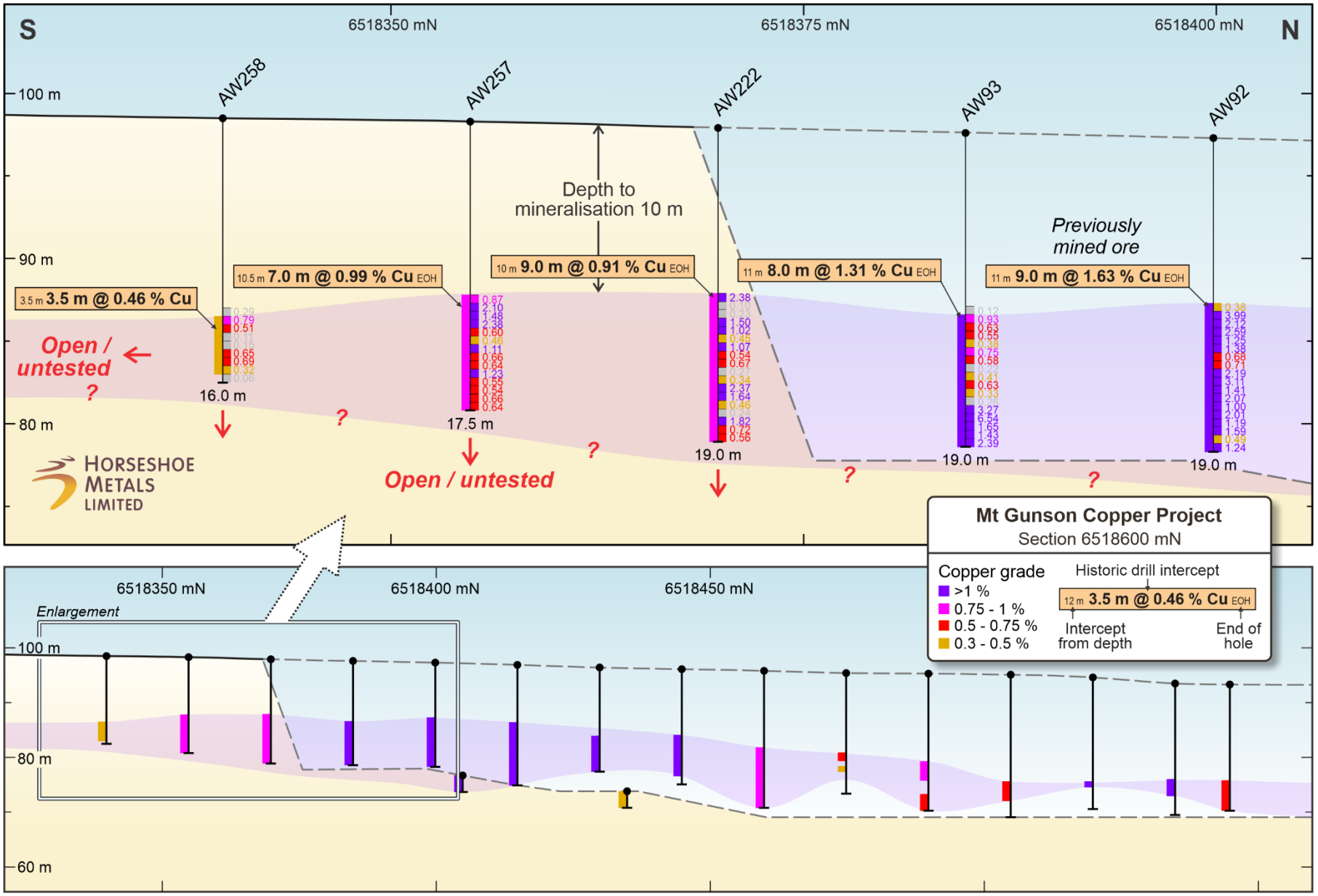

Figure 8: Section 706605mE, Mt Gunson Main Open Cut, showing shallow residual mineralisation outside current pit boundaries

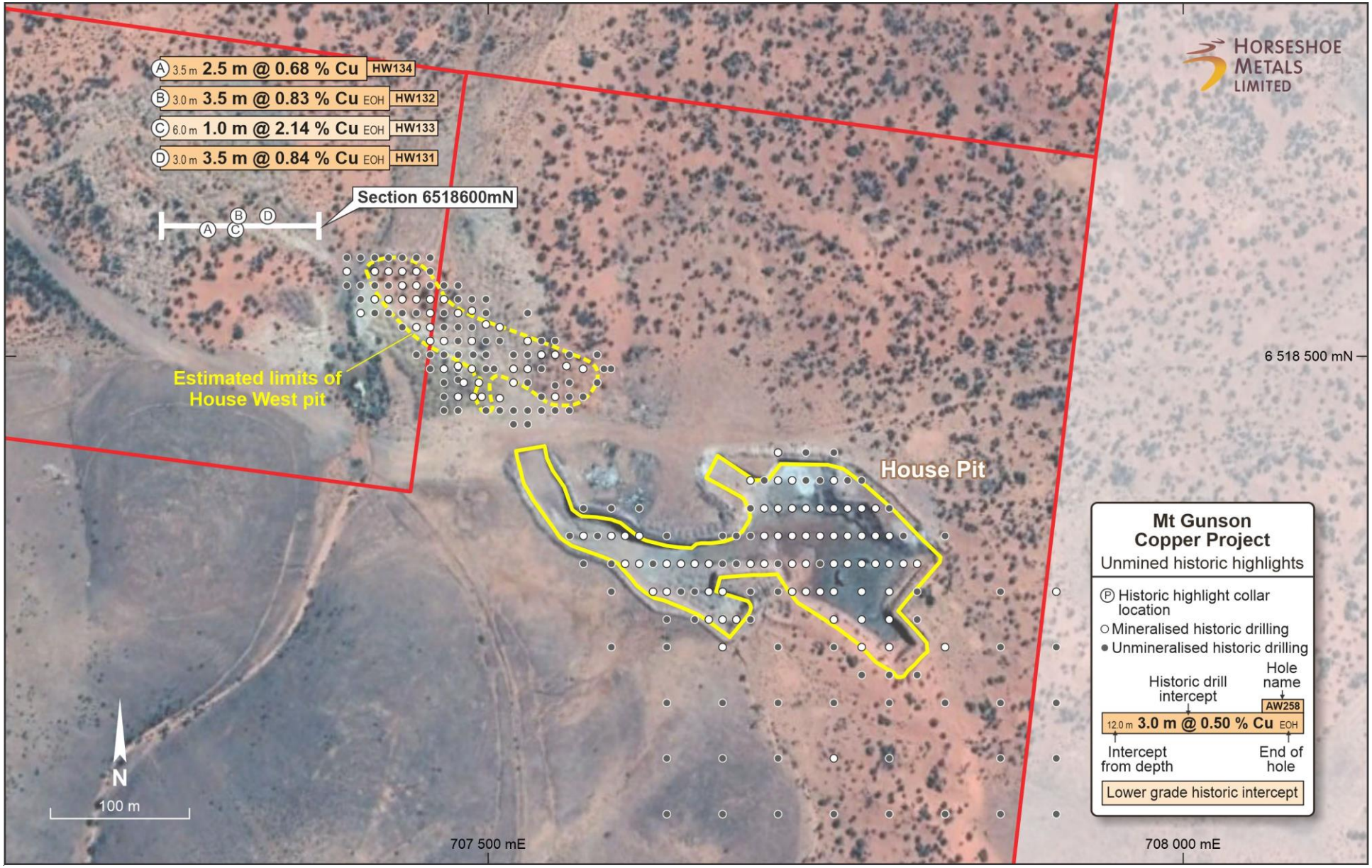

Figure 9: Drill Plan from current Database, Mt Gunson area, 'Gap' and House area showing location of section lines for Figure 9, and highlighting historic results from priority drilling target areas

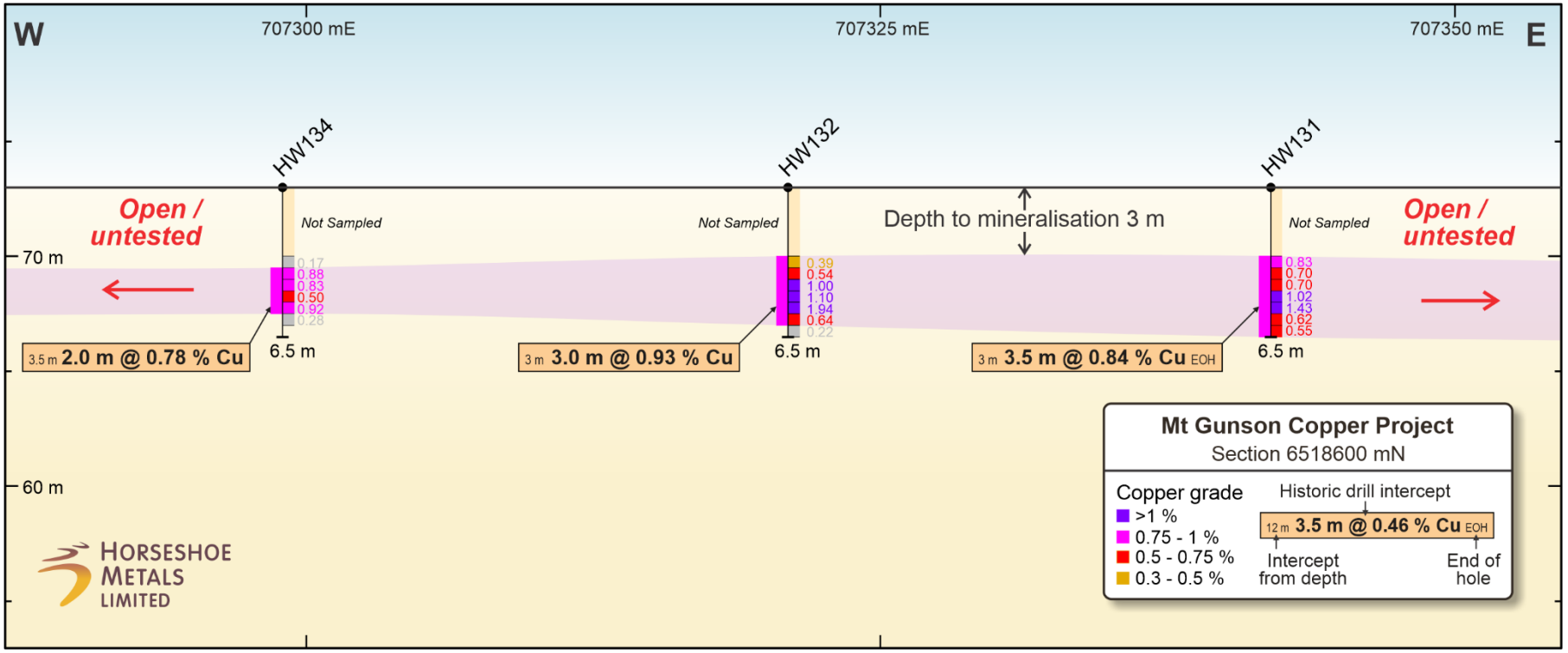

Figure 10: Section 6518600 mN, 'Gap' area between Mt Gunson Main Open Cut and House, showing shallow residual oxide mineralisation outside current pit boundaries

About Mt Gunson Copper Project (ML3717-21, ML5598, ML5599; MPL1):

Copper ore was discovered at Mount Gunson in 1875 and the first recorded production was from 1899. A smelter was subsequently erected in the MOC area in 1904. Small-scale production continued in the area until the Cattlegrid deposit was discovered and subsequently mined by CSR Limited from 1974 to 1986, with 7.2 Mt of 1.9% Cu ore mined from the Cattlegrid open pit. Together with 270,000 t of MOC ore, the tenements recorded production 156 000 t of copper, 62 t of silver and 2900 t of cobalt in concentrates (refer Figures 2, 3).

From 1987 to around 2006, Adelaide Chemical "Adchem" produced over 14,000 t of copper in cement for feed to the Burra cupric oxide plant from the Mt Gunson Project, principally from heap leaching of 1.2 Mt of 1.3% copper oxide ore from the MOC area, Gunyot, House and Core Shed deposits.

The leases forming the current project (ML3717-21, ML5598, ML5599; MPL1) were subsequently acquired and are currently held by a family-owned earthmoving contractor based in Adelaide, who previously operated their own copper-oxide leach operation until the oxide development rights were granted to CMM on the 29th June 2017 under a 'Licence to Operate'.

Under the Licence to Operate, CMM has a 100% interest in rights to explore, develop and operate oxide copper deposits, stockpiles and tailings on the above listed tenements using all available surface infrastructure including camp, mains power/water supply, treatment plant and earthmoving equipment, with the exception of ML5599, where the licence allows unrestricted use of water and the right to re-process copper-bearing material on the floor of the site. The initial term of the agreement between CMM and the Licensor, who holds the tenements, expires on 29th June 2020 and can be extended by CMM for a period of a further two years to the 29th June 2022. Further extension beyond 29th June 2022 can be negotiated during the term of this lease.

CMM has considerable expertise in developing copper mining operations in South Australia. CMM has successfully completed a pilot scale oxide copper heap leach trial at Mt Gunson and now plans to advance to commercial small-scale production. CMM currently has a term sheet in place with Adchem for an initial 3 year term commencing in 2020 for copper cement delivered to Adchem's Burra facility (some 350km south), paying a copper price based on 80% of the London Metal Exchange (LME) per tonne for a date mutually agreed once the product has been sampled and assayed on arrival.

The terms of the Mt Gunson transaction are as follows:

- HOR (or its related nominee) has the right to earn a 50% interest in CMM and the Mt Gunson Project by sole funding of up to $5M during a 4-year period with a minimum commitment of $500,000. Funding is to be provided by way of cash generated from production and capital raisings i.e. placements and rights entitlement offers. HOR has the right, over a 4-year period, to subscribe for up to 10,000 shares in CMM (representing 50% of CMM's share capital following issue of those shares) to fund CMM's development of Mt Gunson as an incorporated joint venture. Shares in CMM are to be issued to HOR (or its nominee) as funding is provided over time, with every $50k contribution earning 100 shares in CMM (representing 1% of CMM's existing issued capital).
- While HOR is sole funding it has rights to 50% of all surplus cash flow from any copper production conducted by CMM.
- HOR has a first right of refusal should other shareholders in CMM wish to sell their respective interests in CMM. If any shareholder in CMM (including HOR) is the subject of a change of control or an insolvency event, or breaches the agreement governing the incorporated joint venture, the other shareholders will have a right of first refusal to acquire the relevant CMM shares, at an independently determined fair value.
- CMM Director Mr Steven Sickerdick is retained as Operations Manager at Mt Gunson, while HOR manages administration, exploration and development.
- Horseshoe has issued 10 million fully paid ordinary shares valued at $0.02 under its existing capacity under LR7.1 to Mines Trust ("MT") a company associated with Mr Sickerdick as part-payment of fees owing by CMM to MT, with the amount being deemed to form part of HOR's funding of the Mt Gunson Project. The nominal $200,000 value comprises part of the minimum commitment of $500,000, and CMM is to issue 400 shares to HOR accordingly.
- HOR will be required to spend $300,000 within 4 years before either electing to withdraw, or continue to earn up to 50% of CMM by sole funding of an additional $4.5M within the same 4-year period.

Horseshoe Lights Copper-Gold Project

PCF Capital (PCF) have provided an updated timetable to the company to seek indicative offers for the acquisition, or such other arrangement to the satisfaction of the Company of the Horseshoe Project, with the company anticipating a completion date for a transaction agreement in April 2020.

The Board of directors of HOR has authorised this announcement to be given to the ASX.

Enquiries

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Table 2: Significant Copper Intercepts >= 2.0m and >= 0.5 % Cu from Adelaide Chemical Company ("Adchem") drilling activity circa 1985-1989; Mt Gunson Copper Mine- ML3717-3721, ML5598. (NB. Bold results >5% x m results)

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
MAIN OPEN CUT													
AW1	**BH**	**706590**	**6518505**	**95.1**	**24**	**-90**	**0**	**16**	**24**	**8**	**0.91**	**Yes**	
AW2	BH	706590	6518475	95.7	21	-90	0	16.5	18.5	2	1.89		
AW3	BH	706590	6518400	97.3	15	-90	0	11	15	4	1.21	Yes	
AW4	**BH**	**706620**	**6518400**	**97.2**	**15**	**-90**	**0**	**9**	**15**	**6**	**1.22**	**Yes**	
AW5	**BH**	**706620**	**6518415**	**96.6**	**18**	**-90**	**0**	**11**	**18**	**7**	**1.14**	**Yes**	
AW6	BH	706650	6518535	93.6	24	-90	0	19	24	5	0.93	Yes	
AW7	**BH**	**706650**	**6518475**	**94.9**	**18**	**-90**	**0**	**13**	**18**	**5**	**1.83**	**Yes**	
AW8	**BH**	**706650**	**6518445**	**95.5**	**18**	**-90**	**0**	**12**	**15**	**3**	**2.54**		
AW12	**BH**	**706710**	**6518505**	**92**	**21**	**-90**	**0**	**15**	**21**	**6**	**1.86**	**Yes**	
AW13	BH	706740	6518535	87	18	-90	0	11.5	15	3.5	1.16		
AW14	**BH**	**706740**	**6518565**	**87.2**	**18**	**-90**	**0**	**12**	**17**	**5**	**1.37**		
AW15	**BH**	**706740**	**6518475**	**88.6**	**12**	**-90**	**0**	**7**	**12**	**5**	**1.48**	**Yes**	
AW16	**BH**	**706770**	**6518475**	**85.5**	**9**	**-90**	**0**	**2.5**	**9**	**6.5**	**2.2**	**Yes**	
AW17	**BH**	**706770**	**6518445**	**86.2**	**6**	**-90**	**0**	**0.5**	**6**	**5.5**	**1.27**	**Yes**	
AW18	BH	706770	6518415	87.6	9	-90	0	5.5	8	2.5	1.21		Yes
AW20	BH	706830	6518445	82	3	-90	0	0	2.5	2.5	1.36		
AW24	BH	706860	6518535	79.4	6	-90	0	1	4.5	3.5	1.34		
AW25	BH	706800	6518565	79.4	9	-90	0	3.5	7	3.5	1.04		
AW30	BH	706890	6518520	79.5	6	-90	0	1	4.5	3.5	0.85		
AW32	BH	706860	6518520	79.6	5.5	-90	0	1.5	4	2.5	1.7		
AW33	BH	706860	6518550	79.2	7	-90	0	3.5	6	2.5	0.8		
AW34	**BH**	**706860**	**6518565**	**79**	**9**	**-90**	**0**	**2.5**	**9**	**6.5**	**2.2**	**Yes**	
AW35	**BH**	**706800**	**6518550**	**80**	**8**	**-90**	**0**	**2**	**7**	**5**	**1.94**		
AW36	**BH**	**706800**	**6518535**	**80.8**	**7**	**-90**	**0**	**2.5**	**7**	**4.5**	**1.15**	**Yes**	
AW38	**BH**	**706800**	**6518490**	**82.8**	**14.5**	**-90**	**0**	**1**	**12**	**11**	**1.49**		
AW39	**BH**	**706800**	**6518460**	**81.7**	**8**	**-90**	**0**	**0.5**	**7**	**6.5**	**1.88**		
AW42	BH	706830	6518520	81.3	7.5	-90	0	2	4.5	2.5	1.71		
AW43	**BH**	**706830**	**6518550**	**79.4**	**7.5**	**-90**	**0**	**3.5**	**6.5**	**3**	**2.05**		
AW44	**BH**	**706830**	**6518565**	**79.2**	**9.5**	**-90**	**0**	**5**	**9**	**4**	**1.44**		
AW45	**BH**	**706770**	**6518550**	**82.5**	**10.5**	**-90**	**0**	**6.5**	**10.5**	**4**	**1.82**	**Yes**	
AW46	**BH**	**706770**	**6518520**	**82**	**10.5**	**-90**	**0**	**4**	**10**	**6**	**1.2**		
AW47	**BH**	**706770**	**6518490**	**85.3**	**11.5**	**-90**	**0**	**2**	**9**	**7**	**2.19**		
AW50	BH	706740	6518430	89.5	11.5	-90	0	7	11	4	0.82		
AW51	**BH**	**706740**	**6518460**	**88.8**	**12**	**-90**	**0**	**1.5**	**11.5**	**10**	**1.18**		
AW52	**BH**	**706740**	**6518490**	**88.2**	**13.5**	**-90**	**0**	**8**	**13.5**	**5.5**	**1**	**Yes**	
AW54	**BH**	**706740**	**6518550**	**86.6**	**16**	**-90**	**0**	**11**	**16**	**5**	**1.7**	**Yes**	
AW55	**BH**	**706710**	**6518490**	**91.2**	**20**	**-90**	**0**	**12**	**20**	**8**	**2.1**	**Yes**	
AW56	**BH**	**706710**	**6518460**	**92.5**	**13**	**-90**	**0**	**8.5**	**13**	**4.5**	**1.14**	**Yes**	
AW58	**BH**	**706650**	**6518430**	**95.9**	**15**	**-90**	**0**	**11.5**	**14.5**	**3**	**2.74**		
AW59	**BH**	**706650**	**6518460**	**95.2**	**16.5**	**-90**	**0**	**12**	**16.5**	**4.5**	**1.41**	**Yes**	
AW60	BH	706650	6518490	94.6	17.5	-90	0	14.5	17.5	3	1.5	Yes	
AW61	**BH**	**706680**	**6518490**	**93.8**	**17**	**-90**	**0**	**12.5**	**17**	**4.5**	**1.34**	**Yes**	
AW62	**BH**	**706680**	**6518460**	**94.5**	**15.5**	**-90**	**0**	**10.5**	**15.5**	**5**	**2.27**	**Yes**	
AW63	BH	706680	6518430	95.2	14.5	-90	0	10.5	14	3.5	1.3		
AW64	**BH**	**706620**	**6518430**	**96.3**	**20**	**-90**	**0**	**10.5**	**20**	**9.5**	**2.06**	**Yes**	
AW65	**BH**	**706590**	**6518430**	**96.6**	**18**	**-90**	**0**	**12.5**	**16.5**	**4**	**3.22**		
AW66	**BH**	**706590**	**6518460**	**95.9**	**20**	**-90**	**0**	**14.5**	**19.5**	**5**	**1.99**		
AW67	BH	706590	6518490	95.3	21	-90	0	16	21	5	0.7	Yes	
AW68	**BH**	**706620**	**6518490**	**95.2**	**20**	**-90**	**0**	**16**	**19.5**	**3.5**	**3.2**		
AW69	**DTH**	**706575**	**6518545**	**94.4**	**30**	**-90**	**0**	**19**	**28**	**9**	**0.75**		
AW70	**DTH**	**706575**	**6518535**	**94.6**	**27**	**-90**	**0**	**19**	**25.5**	**6.5**	**0.9**		
AW71	DTH	706575	6518520	95	27	-90	0	18.5	24.5	6	0.54		
AW72	**DTH**	**706575**	**6518505**	**95.4**	**25**	**-90**	**0**	**16**	**19.5**	**3.5**	**1.94**		
AW73	**DTH**	**706575**	**6518490**	**96.7**	**24**	**-90**	**0**	**16.5**	**21**	**4.5**	**1.54**		
AW74	**DTH**	**706575**	**6518475**	**95.9**	**23**	**-90**	**0**	**17**	**20**	**3**	**1.83**		
AW76	**DTH**	**706575**	**6518445**	**96.4**	**19**	**-90**	**0**	**12**	**17.5**	**5.5**	**0.99**		
AW77	DTH	706575	6518430	96.7	25	-90	0	11.5	15.5	4	0.6		
AW78	**DTH**	**706575**	**6518415**	**97**	**24**	**-90**	**0**	**10.5**	**15.5**	**5**	**1.82**		
AW79	**DTH**	**706575**	**6518400**	**97.3**	**17**	**-90**	**0**	**10**	**14.5**	**4.5**	**1.82**		
AW81	**DTH**	**706590**	**6518520**	**94.6**	**27**	**-90**	**0**	**19**	**25**	**6**	**0.87**		
AW82	DTH	706605	6518545	93.3	23	-90	0	17.5	23	5.5	0.64	Yes	
AW83	DTH	706605	6518535	93.5	24	-90	0	17.5	21	3.5	0.98		

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
AW85	DTH	706605	6518505	95.1	26	-90	0	19.5	23	3.5	0.6		
AW86	DTH	706605	6518490	95.3	25	-90	0	16	25	9	0.55	Yes	
AW88	**DTH**	**706605**	**6518460**	**95.8**	**25**	**-90**	**0**	**14**	**25**	**11**	**0.87**	**Yes**	
AW89	**DTH**	**706605**	**6518445**	**96.1**	**21**	**-90**	**0**	**12**	**19.5**	**7.5**	**1.12**		
AW90	**DTH**	**706605**	**6518430**	**96.4**	**19**	**-90**	**0**	**12**	**19**	**7**	**1.68**	**Yes**	
AW91	**DTH**	**706605**	**6518415**	**96.9**	**22**	**-90**	**0**	**10.5**	**22**	**11.5**	**1.28**	**Yes**	
AW92	**DTH**	**706605**	**6518400**	**97.3**	**19**	**-90**	**0**	**10**	**19**	**9**	**1.63**	**Yes**	
AW93	**DTH**	**706605**	**6518385**	**97.6**	**19**	**-90**	**0**	**11**	**19**	**8**	**1.31**	**Yes**	
AW96	**DTH**	**706635**	**6518545**	**92.9**	**31**	**-90**	**0**	**19.5**	**31**	**11.5**	**1.34**	**Yes**	
AW97	**DTH**	**706635**	**6518535**	**93.3**	**29**	**-90**	**0**	**18.5**	**29**	**10.5**	**1.49**	**Yes**	
AW98	**DTH**	**706635**	**6518520**	**94.2**	**28**	**-90**	**0**	**16.5**	**27.5**	**11**	**1.17**		
AW99	**DTH**	**706635**	**6518505**	**94.7**	**20.5**	**-90**	**0**	**16.5**	**20.5**	**4**	**2.29**	**Yes**	
AW100	DTH	706635	6518490	95	23	-90	0	14.5	22	7.5	0.58		
AW101	**DTH**	**706635**	**6518475**	**95.2**	**24**	**-90**	**0**	**13.5**	**21**	**7.5**	**2.01**		
AW102	DTH	706635	6518460	95.5	23	-90	0	13.5	19	5.5	0.66		
AW103	DTH	706635	6518445	95.7	17	-90	0	11.5	16	4.5	0.98		
AW104	**DTH**	**706635**	**6518430**	**96.1**	**17**	**-90**	**0**	**10.5**	**16**	**5.5**	**1.92**		
AW105	**DTH**	**706635**	**6518415**	**96.5**	**15**	**-90**	**0**	**8**	**12.5**	**4.5**	**1.64**		
AW109	**DTH**	**706650**	**6518520**	**94.1**	**23**	**-90**	**0**	**16.5**	**23**	**6.5**	**1.2**	**Yes**	
AW111	DTH	706665	6518520	93.5	23	-90	0	19	23	4	0.75	Yes	
AW112	**DTH**	**706665**	**6518505**	**94**	**23**	**-90**	**0**	**14.5**	**22**	**7.5**	**0.79**		
AW115	DTH	706665	6518460	94.9	17.5	-90	0	12.5	16	3.5	1.41		
AW116	**DTH**	**706665**	**6518445**	**95.3**	**17**	**-90**	**0**	**10**	**15.5**	**5.5**	**1.03**		
AW117	**DTH**	**706665**	**6518430**	**95.7**	**15.5**	**-90**	**0**	**10.5**	**13**	**2.5**	**2.3**		
AW118	DTH	706665	6518415	96.1	18.5	-90	0	9.5	14.5	5	0.57		
AW120	DTH	706680	6518520	92.6	23.5	-90	0	18	21.5	3.5	0.73		
AW121	DTH	706695	6518545	91.7	20.5	-90	0	16.5	19	2.5	0.69		
AW123	DTH	706695	6518520	92.6	21	-90	0	17	20	3	1.03		
AW125	**DTH**	**706695**	**6518490**	**93**	**21**	**-90**	**0**	**12.5**	**20.5**	**8**	**1.36**		
AW126	DTH	706695	6518503	93.4	19	-90	0	14	19	5	0.79	Yes	
AW127	**DTH**	**706695**	**6518475**	**93.7**	**17**	**-90**	**0**	**12.5**	**16.5**	**4**	**1.75**		
AW128	**DTH**	**706695**	**6518460**	**93.7**	**15**	**-90**	**0**	**9.5**	**15**	**5.5**	**1.06**	**Yes**	
AW129	**DTH**	**706695**	**6518445**	**94.2**	**13**	**-90**	**0**	**7.5**	**11.5**	**4**	**3.02**		
AW130	**DTH**	**706695**	**6518430**	**94.3**	**13**	**-90**	**0**	**8**	**11.5**	**3.5**	**1.82**		
AW132	**DTH**	**706710**	**6518550**	**90.8**	**22**	**-90**	**0**	**15**	**21.5**	**6.5**	**2.03**		
AW133	DTH	706710	6518520	91.7	21	-90	0	12.5	19	6.5	0.74		
AW134	DTH	706725	6518565	89	21	-90	0	14	20.5	6.5	0.71		
AW135	DTH	706725	6518550	89.3	17	-90	0	11.5	16.5	5	0.63		
AW136	DTH	706725	6518535	89.5	17	-90	0	11.5	15.5	4	0.9		
AW137	DTH	706725	6518520	89.8	18	-90	0	10.5	15.5	5	0.81		
AW138	**DTH**	**706725**	**6518502**	**91**	**19**	**-90**	**0**	**11.5**	**19**	**7.5**	**1.25**	**Yes**	
AW139	**DTH**	**706725**	**6518490**	**91**	**16.5**	**-90**	**0**	**8.5**	**15.5**	**7**	**0.74**		
AW140	DTH	706725	6518475	90.5	13	-90	0	8	11.5	3.5	1.36		
AW141	**DTH**	**706725**	**6518460**	**90.5**	**13**	**-90**	**0**	**4**	**12**	**8**	**1.52**		
AW142	**DTH**	**706725**	**6518445**	**90.7**	**10**	**-90**	**0**	**4**	**9**	**5**	**1.98**		
AW143	DTH	706725	6518430	91.1	13	-90	0	8	13	5	0.81	Yes	
AW144	DTH	706725	6518415	91.5	12	-90	0	8.5	12	3.5	0.51	Yes	Yes
AW145	DTH	706755	6518547	84.5	12	-90	0	8.5	11.5	3	0.97		
AW146	DTH	706755	6518535	84.9	12	-90	0	8.5	11.5	3	0.93		
AW148	**DTH**	**706755**	**6518502**	**86.5**	**13**	**-90**	**0**	**6.5**	**11.5**	**5**	**1.26**		
AW149	**DTH**	**706755**	**6518490**	**86.5**	**10.5**	**-90**	**0**	**5**	**9**	**4**	**1.58**		
AW150	**DTH**	**706755**	**6518474**	**86.7**	**9.5**	**-90**	**0**	**3.5**	**9.5**	**6**	**1.69**	**Yes**	
AW151	**DTH**	**706755**	**6518460**	**87.2**	**9.5**	**-90**	**0**	**1**	**9**	**8**	**1.01**		
AW152	**DTH**	**706755**	**6518445**	**87.5**	**7.5**	**-90**	**0**	**0.5**	**7.5**	**7**	**1.04**	**Yes**	
AW153	DTH	706755	6518430	87.9	8	-90	0	5.5	8	2.5	0.58	Yes	
AW155	DTH	706785	6518565	80.2	8	-90	0	3.5	8	4.5	0.92	Yes	
AW157	**DTH**	**706785**	**6518535**	**81.7**	**11**	**-90**	**0**	**4**	**8**	**4**	**2.07**		
AW158	**DTH**	**706785**	**6518520**	**82.6**	**9**	**-90**	**0**	**4**	**7**	**3**	**2.03**		
AW159	DTH	706785	6518505	84.1	11	-90	0	4	9.5	5.5	0.61		
AW160	**DTH**	**706785**	**6518490**	**83.7**	**10**	**-90**	**0**	**0**	**9**	**9**	**1.51**		
AW161	DTH	706785	6518473	83	6	-90	0	0	5.5	5.5	0.58		
AW162	DTH	706785	6518460	81.7	4	-90	0	0	4	4	0.84	Yes	
AW167	DTH	706815	6518550	79.4	8	-90	0	2	5.5	3.5	0.94		
AW168	DTH	706815	6518533	80.7	7	-90	0	1.5	4	2.5	1.3		
AW169	DTH	706817	6518520	80.9	6.5	-90	0	0	2.5	2.5	1.53		
AW170	**DTH**	**706815**	**6518505**	**81.2**	**11**	**-90**	**0**	**0**	**6**	**6**	**1.37**		
AW172	DTH	706815	6518475	81.2	5	-90	0	0	3	3	0.69		
AW173	**DTH**	**706815**	**6518460**	**83**	**6.5**	**-90**	**0**	**0**	**4.5**	**4.5**	**2.18**		
AW174	DTH	706815	6518445	83	11	-90	0	1	5.5	4.5	1.04		

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
AW176	DTH	706830	6518460	81.7	6	-90	0	0	3	3	1.05		
AW177	**DTH**	**706845**	**6518550**	**79.2**	**9**	**-90**	**0**	**3.5**	**9**	**5.5**	**1.64**	**Yes**	
AW178	DTH	706845	6518535	79.4	5.5	-90	0	1	4	3	1.34		
AW179	DTH	706845	6518520	80	8	-90	0	2	5	3	0.63		
AW186	DTH	706873	6518550	79.1	13	-90	0	5	7.5	2.5	0.59		
AW187	DTH	706875	6518500	79.8	6	-90	0	0	2.5	2.5	1.89		
AW188	DTH	706875	6518490	80.1	5	-90	0	0	2	2	0.53		
AW189	DTH	706875	6518475	80.9	5	-90	0	0	3	3	1.42		
AW195	DTH	706980	6518492	79.3	7	-90	0	3	7	4	0.57	Yes	
AW196	DTH	706965	6518490	79	4	-90	0	0.5	2.5	2	1.3		
AW199	DTH	706560	6518535	94.9	22	-90	0	18	20.5	2.5	1.16		
AW200	**DTH**	**706560**	**6518520**	**95.2**	**23**	**-90**	**0**	**16.5**	**21**	**4.5**	**2.14**		
AW201	DTH	706560	6518505	95.5	19	-90	0	15.5	18.5	3	1.46		
AW202	DTH	706560	6518490	95.8	20	-90	0	14	18.5	4.5	0.7		
AW203	DTH	706560	6518475	96	19	-90	0	13.5	16	2.5	1.9		
AW204	**DTH**	**706560**	**6518460**	**96.2**	**17**	**-90**	**0**	**12.5**	**15.5**	**3**	**1.97**		
AW205	DTH	706560	6518445	96.4	17	-90	0	12	15.5	3.5	0.93		
AW206	DTH	706560	6518430	96.7	16	-90	0	12	14.5	2.5	1.25		
AW207	**DTH**	**706560**	**6518415**	**97**	**16**	**-90**	**0**	**10.5**	**15**	**4.5**	**1.56**		
AW209	DTH	706560	6518385	97.3	19	-90	0	16	18	2	0.8		Yes
AW211	DTH	706545	6518400	97.2	17	-90	0	13.5	15.5	2	0.5		Yes
AW213	**DTH**	**706545**	**6518430**	**96.9**	**16**	**-90**	**0**	**11.5**	**14.5**	**3**	**2.46**		
AW214	DTH	706545	6518445	96.5	17	-90	0	12.5	14.5	2	0.67		
AW215	DTH	706545	6518460	96.2	20	-90	0	12.5	19.5	7	0.67		
AW216	**DTH**	**706545**	**6518475**	**95.9**	**21**	**-90**	**0**	**12**	**19.5**	**7.5**	**1.05**		
AW217	DTH	706545	6518490	95.8	18	-90	0	14	17	3	1.01		
AW218	DTH	706545	6518505	95.6	19	-90	0	15.5	17.5	2	1.32		
AW219	**DTH**	**706545**	**6518520**	**95.2**	**21**	**-90**	**0**	**16**	**20**	**4**	**1.88**		
AW220	DTH	706545	6518535	94.9	21	-90	0	18	20	2	1.45		
AW221	**DTH**	**706545**	**6518550**	**94.6**	**21**	**-90**	**0**	**18**	**20.5**	**2.5**	**3.34**		
AW222	**DTH**	**706605**	**6518370**	**97.9**	**19**	**-90**	**0**	**10**	**19**	**9**	**0.91**	**Yes**	**Yes**
AW225	DTH	706530	6518445	96.3	18	-90	0	12.5	17	4.5	0.8		Yes
AW226	**DTH**	**706530**	**6518460**	**96**	**16**	**-90**	**0**	**11.5**	**15**	**3.5**	**2.2**		
AW227	**DTH**	**706530**	**6518475**	**95.7**	**17**	**-90**	**0**	**13**	**16.5**	**3.5**	**2.64**		
AW228	**DTH**	**706530**	**6518490**	**95.5**	**19**	**-90**	**0**	**14.5**	**19**	**4.5**	**1.65**	**Yes**	
AW230	DTH	706530	6518520	95	19	-90	0	16	19	3	0.82	Yes	
AW231	**DTH**	**706530**	**6518535**	**94.8**	**21**	**-90**	**0**	**17**	**20.5**	**3.5**	**2.48**		
AW232	**DTH**	**706530**	**6518550**	**94.6**	**23**	**-90**	**0**	**20**	**22**	**2**	**2.54**		
AW233	DTH	706530	6518565	94.3	23	-90	0	19.5	23	3.5	0.58	Yes	
AW234	DTH	706515	6518565	94	21	-90	0	18.5	21	2.5	0.9	Yes	
AW236	**DTH**	**706515**	**6518535**	**94.7**	**23**	**-90**	**0**	**18**	**20.5**	**2.5**	**2.12**		
AW237	**DTH**	**706545**	**6518565**	**94.3**	**23**	**-90**	**0**	**17**	**19**	**2**	**2.5**		
AW239	DTH	706590	6518545	93.6	21	-90	0	17.5	21	3.5	1.41	Yes	
AW240	DTH	706755	6518567	85	15	-90	0	9.5	13	3.5	0.96		
AW241	DTH	706515	6518520	94.9	21	-90	0	17.5	19.5	2	2.44		
AW242	DTH	706515	6518505	95	19	-90	0	15.5	18	2.5	0.82		
AW243	DTH	706515	6518490	95.2	18	-90	0	14	17	3	0.84		
AW244	**DTH**	**706515**	**6518475**	**95.4**	**17**	**-90**	**0**	**12.5**	**16**	**3.5**	**2.41**		
AW246	DTH	706545	6518580	93.9	22	-90	0	19	21	2	0.87		
AW250	DTH	706935	6518477	76.9	5	-90	0	0	2.5	2.5	1.3		
AW251	**DTH**	**706965**	**6518518**	**78**	**8.5**	**-90**	**0**	**0**	**3.5**	**3.5**	**2.24**		
AW253	DTH	706965	6518535	79	13	-90	0	1.5	4.5	3	1.27		
						and		9	13	4	0.54	Yes	
AW254	DTH	706995	6518490	80.3	9	-90	0	1	3.5	2.5	1.97		
AW257	**DTH**	**706605**	**6518355**	**98.3**	**17.5**	**-90**	**0**	**10.5**	**17.5**	**7**	**0.99**	**Yes**	**Yes**
AW258	DTH	706605	6518340	98.5	16	-90	0	12	15	3	0.5		Yes
AW297	DTH	706515	6518235	99	18.5	-90	0	9	12	3	1.2		
AW299	DTH	706515	6518266	102	19	-90	0	10	15.5	5.5	0.83		
AW309	DTH	706455	6518265	92.6	8.5	-90	0	3.5	8	4.5	0.74		
AW310	DTH	706545	6518236	101	16	-90	0	10.5	13.5	3	1.17		
AW315	DTH	706515	6518140	97.9	17	-90	0	9.5	11.5	2	0.97		
AW316	DTH	706485	6518142	96.2	13	-90	0	7	9.5	2.5	0.6		
AW318	DTH	706530	6518145	99.2	13.5	-90	0	10	12.5	2.5	1.39		
AW319	**DTH**	**706515**	**6518130**	**97.4**	**12.5**	**-90**	**0**	**7.5**	**11.5**	**4**	**1.8**		
AW320	DTH	706500	6518145	96.4	12	-90	0	6	9.5	3.5	0.69		
AW322	DTH	706440	6518265	90.4	6	-90	0	2	4	2	1.01		
AW330	DTH	706440	6518280	90.7	7	-90	0	3	6.5	3.5	0.68		
AW332	DTH	706440	6518250	91.9	11	-90	0	1	5	4	0.73		
AW333	DTH	706453	6518280	92.6	9	-90	0	3.5	6	2.5	0.79		

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
AW336	DTH	706500	6518280	99.8	14.5	-90	0	11.5	14	2.5	0.9		
AW342	DTH	706533	6518250	101	13	-90	0	10	12	2	0.64		Yes
AW345	DTH	706503	6518250	98.7	14	-90	0	10	12.5	2.5	0.69		
AW346	**DTH**	**706485**	**6518250**	**96.8**	**11**	**-90**	**0**	**7**	**10.5**	**3.5**	**1.44**		
AW347	DTH	706470	6518265	95.1	10	-90	0	6.5	8.5	2	0.51		
AW348	DTH	706466	6518250	93.6	8	-90	0	4.5	6.5	2	1.01		
AW349	DTH	706500	6518235	97.8	12	-90	0	7	9.5	2.5	0.96		
AW350	DTH	706500	6518263	99.8	15	-90	0	10.5	13.5	3	0.81		
AW352	DTH	706517	6518248	99.8	13	-90	0	10	12	2	0.7		
AW359	BH	706500	6518205	101	10.5	-90	0	8.5	10.5	2	1.7	Yes	
AW366	BH	706498	6518190	102	15	-90	0	11	15	4	0.76	Yes	
AW367	BH	706500	6518160	99.4	12.5	-90	0	9	12	3	1.24		
AW368	BH	706515	6518160	101	14	-90	0	11.5	13.5	2	1.56		
AW378	BH	706395	6518280	89.2	6	-90	0	2	4	2	0.75		
AW381	DTH	706500	6518130	96.3	10	-90	0	7	9.5	2.5	0.71		Yes
AW385	BH	706485	6518220	98.8	11	-90	0	7	10	3	0.58		
AW394	BH	706470	6518145	96.7	9	-90	0	6	8	2	2.05		
AW396	BH	706470	6518175	99.9	12	-90	0	7.5	10.5	3	0.79		
AW397	BH	706470	6518205	101	13	-90	0	9	12	3	1.13		
AW399	BH	706470	6518220	97.9	10	-90	0	6	9	3	0.72		
AW406	BH	706455	6518208	98.2	11.5	-90	0	8	10	2	0.94		
AW408	BH	706470	6518235	95.8	13	-90	0	8.5	11.5	3	0.54		
AW409	BH	706440	6518160	94.5	10	-90	0	6.5	9	2.5	1.61		Yes
AW410	**BH**	**706440**	**6518190**	**97.5**	**10**	**-90**	**0**	**6**	**10**	**4**	**1.93**	**Yes**	
AW436	**DTH**	**706260**	**6518250**	**90.2**	**7**	**-90**	**0**	**2**	**6**	**4**	**1.93**		
AW437	DTH	706260	6518220	91.8	5	-90	0	2	4.5	2.5	0.86		
AW440	**DTH**	**706290**	**6518220**	**91.4**	**5**	**-90**	**0**	**1.5**	**4.5**	**3**	**2.12**		
AW460	DTH	706305	6518220	91.5	4	-90	0	2	4	2	0.63	Yes	Yes
AW465	DTH	706290	6518205	91.1	4	-90	0	1	3.5	2.5	1.11		
AW466	**DTH**	**706290**	**6518235**	**91.3**	**8.5**	**-90**	**0**	**2**	**7.5**	**5.5**	**1.15**		
AW467	DTH	706275	6518265	90.5	6.5	-90	0	1.5	5.5	4	0.84		
AW468	**DTH**	**706275**	**6518250**	**89.9**	**8**	**-90**	**0**	**1.5**	**7**	**5.5**	**1.31**		
AW469	DTH	706275	6518235	91.1	11	-90	0	2.5	8	5.5	0.78		
AW470	DTH	706275	6518220	90.8	7	-90	0	2	4.5	2.5	1.64		
AW471	DTH	706275	6518205	91.4	6.5	-90	0	2	5.5	3.5	1.31		
AW472	DTH	706275	6518190	92.4	5	-90	0	2	4	2	0.74		
AW475	DTH	706260	6518205	91.8	7	-90	0	2	5	3	0.72		
AW476	DTH	706260	6518235	91.2	11	-90	0	2.5	8.5	6	0.77		
AW477	**DTH**	**706260**	**6518265**	**91.5**	**11**	**-90**	**0**	**7**	**11**	**4**	**1.35**	**Yes**	
AW479	**DTH**	**706245**	**6518235**	**91.1**	**9**	**-90**	**0**	**2.5**	**9**	**6.5**	**1.8**	**Yes**	
AW490	BH	706440	6518205	96.8	10	-90	0	6.5	10	3.5	1.36	Yes	
AW492	BH	706410	6518205	93.4	8.5	-90	0	6.5	8.5	2	1.46	Yes	
AW493	BH	706425	6518220	93.5	8.5	-90	0	6	8	2	0.98		
AW498	**DTH**	**706260**	**6518280**	**93.9**	**15.5**	**-90**	**0**	**8.5**	**15**	**6.5**	**0.85**		
AW500	DTH	706275	6518295	93	10	-90	0	5	8.5	3.5	0.64		
AW504	DTH	706245	6518295	94.9	15	-90	0	11.5	13.5	2	1.19		
AW506	DTH	706245	6518310	97.4	16	-90	0	11	14.5	3.5	0.77		
ME03	RC	706455	6518355	97.2	13.5	-90	0	10	13.5	3.5	0.75	Yes	
ME04	RC	706455	6518385	96.3	13	-90	0	10	12	2	0.77		
ME05	RC	706455	6518415	96.1	13.5	-90	0	11.5	13.5	2	0.79	Yes	
ME08	RC	706485	6518445	94.5	13	-90	0	11	13	2	2.08	Yes	
ME12	RC	706423	6518385	98.4	16.5	-90	0	13.5	16.5	3	1.28	Yes	
ME15	RC	706425	6518475	95.5	17	-90	0	14.5	17	2.5	0.62	Yes	
ME16	RC	706425	6518505	93.5	18	-90	0	16	18	2	1.67	Yes	
ME18	**RC**	**706395**	**6518505**	**94.7**	**20**	**-90**	**0**	**15.5**	**20**	**4.5**	**1.31**	**Yes**	
ME19	RC	706395	6518475	95.7	18.5	-90	0	16	18.5	2.5	1.01	Yes	
ME24	RC	706395	6518325	98.6	14.5	-90	0	12.5	14.5	2	0.64	Yes	
ME25	RC	706365	6518325	98.7	15.5	-90	0	13	15.5	2.5	0.85	Yes	
ME28	RC	706335	6518355	98.9	16.5	-90	0	14	16	2	2.14		
ME29	RC	706305	6518355	99.3	17.5	-90	0	15	17.5	2.5	1.51	Yes	
ME32	RC	706365	6518505	95.9	19	-90	0	16.5	19	2.5	1.53	Yes	
ME39	BH	706265	6518370	94.4	16.5	-90	0	14	16.5	2.5	0.73	Yes	
ME44	BH	706260	6518370	94.9	14.5	-90	0	11	13.5	2.5	0.5		
ME45	BH	706260	6518355	95.6	14.5	-90	0	9.5	12.5	3	0.9		
ME46	BH	706260	6518340	97	14.5	-90	0	11	14	3	1.11		
ME47	BH	706245	6518340	97.6	16.5	-90	0	12.5	16	3.5	1		
ME48	BH	706245	6518355	96.2	14.5	-90	0	11.5	14.5	3	0.6	Yes	
ME49	BH	706245	6518370	95.3	16	-90	0	11.5	13.5	2	0.63		
ME51	BH	706245	6518385	94.3	17.5	-90	0	11	16.5	5.5	0.66		

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
ME54	BH	706275	6518400	93.5	17.5	-90	0	12	15.5	3.5	0.84		
ME57	BH	706230	6518415	93.1	17.5	-90	0	11.5	17	5.5	0.55		
ME58	BH	706230	6518400	94.5	16	-90	0	10	13	3	0.61		
ME59	BH	706230	6518385	95.5	16.5	-90	0	10	14	4	1.05		
ME60	BH	706230	6518370	95.2	17.5	-90	0	9.5	16.5	7	0.6		
ME62	**DTH**	**706380**	**6518340**	**87.8**	**9**	**-90**	**0**	**2**	**8**	**6**	**1.03**		
ME63	**DTH**	**706380**	**6518355**	**88.9**	**9**	**-90**	**0**	**2.5**	**8**	**5.5**	**1.08**		
ME64	DTH	706395	6518340	88.1	7	-90	0	2.5	4.5	2	0.99		
ME65	DTH	706410	6518340	88.4	7	-90	0	1.5	5.5	4	0.58		
ME67	**DTH**	**706365**	**6518340**	**88.9**	**11**	**-90**	**0**	**2**	**11**	**9**	**1.43**	**Yes**	
ME69	DTH	706350	6518370	87.9	9	-90	0	2.5	7.5	5	0.67		
ME70	DTH	706350	6518365	87.8	9	-90	0	2.5	4.5	2	0.61		
ME71	**DTH**	**706350**	**6518340**	**88.5**	**12**	**-90**	**0**	**2**	**10**	**8**	**0.75**		
ME72	**DTH**	**706350**	**6518325**	**88.9**	**11**	**-90**	**0**	**3.5**	**9**	**5.5**	**1.11**		
ME73	DTH	706350	6518310	89.2	10	-90	0	3.5	8	4.5	0.64		
ME74	DTH	706335	6518313	89	9	-90	0	2.5	6.5	4	0.6		
ME75	DTH	706335	6518325	88.9	8	-90	0	2.5	6.5	4	1.17		
ME76	DTH	706335	6518340	88.5	9	-90	0	2.5	4.5	2	1.57		
ME79	**DTH**	**706320**	**6518355**	**88.8**	**10**	**-90**	**0**	**2.5**	**7.5**	**5**	**1.06**		
ME80	DTH	706320	6518370	88.4	7.5	-90	0	3.5	7	3.5	0.96		
ME81	DTH	706305	6518370	89.1	9	-90	0	3.5	8	4.5	0.5		
ME82	**DTH**	**706290**	**6518370**	**89.9**	**10**	**-90**	**0**	**4**	**9**	**5**	**1.13**		
ME83	DTH	706290	6518355	89.2	9	-90	0	6.5	8.5	2	0.78		
ME84	DTH	706305	6518340	89.2	9	-90	0	2.5	7.5	5	0.7		
ME98	**BH**	**706245**	**6518265**	**85**	**7**	**-90**	**0**	**2.5**	**6.5**	**4**	**1.52**		
ME99	**BH**	**706200**	**6518289**	**84**	**5.5**	**-90**	**0**	**0**	**4.5**	**4.5**	**2.87**		
PL05	DTH	706230	6518250	91.2	9	-90	0	3.5	7.5	4	0.56		
PL06	BH	706200	6518280	94.8	14	-90	0	9	13.5	4.5	0.83		
PL08	BH	706140	6518280	96.5	12.5	-90	0	9	11.5	2.5	0.78		
PL17	DTH	706140	6518370	91.8	11	-90	0	8	10.5	2.5	0.55		Yes
PL22	DTH	706200	6518430	91.6	13	-90	0	10	12	2	0.58		
PL26	DTH	706020	6518220	104	29	-90	0	19.5	25.5	6	0.58		Yes
PL30	**BH**	**706155**	**6518280**	**97.6**	**14.5**	**-90**	**0**	**9.5**	**14.5**	**5**	**1.75**	**Yes**	
PL31	BH	706125	6518280	96.2	13.5	-90	0	9	13.5	4.5	0.75	Yes	
PL32	**BH**	**706140**	**6518295**	**95.6**	**16**	**-90**	**0**	**7.5**	**13.5**	**6**	**1.21**		
PL33	BH	706245	6518250	90.6	8	-90	0	6	8	2	1.01	Yes	
PL37	BH	706215	6518250	92.2	8	-90	0	5	7	2	1.14		
PL46	**DTH**	**706215**	**6518265**	**92.9**	**8**	**-90**	**0**	**5.5**	**7.5**	**2**	**2.58**		
PL47	**DTH**	**706200**	**6518265**	**93.5**	**9**	**-90**	**0**	**6**	**9**	**3**	**3.43**	**Yes**	
PL51	DTH	706170	6518265	96.5	13	-90	0	11	13	2	1.23	Yes	
PL52	DTH	706155	6518265	97.9	14.5	-90	0	12.5	14.5	2	1.27	Yes	
PL53	**DTH**	**706125**	**6518265**	**97.3**	**14.5**	**-90**	**0**	**11**	**14.5**	**3.5**	**1.44**	**Yes**	
PL55	DTH	706115	6518280	95.4	14	-90	0	8.5	12.5	4	0.65		
PL63	DTH	706125	6518250	98.5	17	-90	0	13	15.5	2.5	0.65		
PL70	DTH	706185	6518295	98.1	15	-90	0	10.5	12.5	2	0.92		

HOUSE													
HE1	**DTH**	**707629**	**6518331**	**74.6**	**25**	**-90**	**0**	**10**	**25**	**15**	**1.07**	**Yes**	
HE15	BH	707789	6518291	75.6	17.5	-90	0	11.5	17.5	6	0.83	Yes	
HE25	DTH	707669	6518291	74.5	17	-90	0	9.5	12	2.5	0.64		Yes
HE27	DTH	707669	6518331	73.7	15	-90	0	10	15	5	0.54	Yes	Yes
HE32	**DTH**	**707589**	**6518371**	**76.2**	**16.5**	**-90**	**0**	**8.5**	**16.5**	**8**	**0.81**	**Yes**	
HE33	BH	707749	6518331	74	14.5	-90	0	10	14.5	4.5	0.89	Yes	
HE34	**BH**	**707789**	**6518331**	**72.5**	**14.5**	**-90**	**0**	**5**	**11.5**	**6.5**	**1.06**		
HE45	BH	707749	6518211	77.4	14.5	-90	0	12	14.5	2.5	0.5	Yes	Yes
HE46	**RAB**	**707709**	**6518371**	**73**	**12**	**-90**	**0**	**5**	**12**	**7**	**0.8**	**Yes**	
HE47	**RAB**	**707749**	**6518371**	**71.9**	**9**	**-90**	**0**	**4.5**	**9**	**4.5**	**8.38**	**Yes**	
HE48	RAB	707789	6518371	72.3	10.5	-90	0	6	9	3	0.72		
HE50	**RAB**	**707729**	**6518391**	**72**	**10**	**-90**	**0**	**4.5**	**9.5**	**5**	**1.93**		
HE51	RAB	707749	6518391	72.1	12	-90	0	4.5	8	3.5	0.95		
HE52	**RAB**	**707769**	**6518391**	**72.2**	**10**	**-90**	**0**	**3**	**7.5**	**4.5**	**1.39**		
HE54	RAB	707709	6518391	72	8	-90	0	6	8	2	0.69	Yes	
HE55	RAB	707729	6518351	73.2	15	-90	0	8.5	12.5	4	0.56		
HE56	**RAB**	**707749**	**6518351**	**72.1**	**15**	**-90**	**0**	**5.5**	**13.5**	**8**	**1.96**		
HE57	RAB	707729	6518331	73.8	13	-90	0	10	13	3	1.35	Yes	
HE58	RAB	707729	6518371	72.9	8.5	-90	0	5	8.5	3.5	1.29	Yes	
HE59	**RAB**	**707769**	**6518371**	**72.6**	**11.5**	**-90**	**0**	**5**	**11.5**	**6.5**	**1.39**	**Yes**	
HE60	**RAB**	**707769**	**6518351**	**72**	**15**	**-90**	**0**	**4.5**	**14**	**9.5**	**1.24**		
HE61	**RAB**	**707809**	**6518351**	**72.7**	**9**	**-90**	**0**	**4.5**	**9**	**4.5**	**2.61**	**Yes**	

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
HE63	RAB	707689	6518411	73.7	11	-90	0	7.5	10	2.5	0.69		
HE64	RAB	707709	6518411	73.1	11	-90	0	5.5	9	3.5	1.02		
HE65	RAB	707749	6518411	72.2	11	-90	0	3	7	4	0.61		
HE71	**RAB**	**707789**	**6518351**	**72.2**	**9**	**-90**	**0**	**4.5**	**8.5**	**4**	**1.65**		
HE72	RAB	707649	6518351	74.1	22.5	-90	0	9.5	15	5.5	0.79		
HE73	**RAB**	**707629**	**6518351**	**74.6**	**18**	**-90**	**0**	**10**	**14.5**	**4.5**	**1.31**		
HE75	**RAB**	**707609**	**6518351**	**75.2**	**18**	**-90**	**0**	**8**	**18**	**10**	**0.74**	**Yes**	
HE79	RAB	707689	6518351	73.1	16	-90	0	9.5	13.5	4	0.6		
HE83	RAB	707569	6518371	76.2	15	-90	0	8.5	14.5	6	0.72		
HE88	**RAB**	**707669**	**6518311**	**73.7**	**15**	**-90**	**0**	**9**	**15**	**6**	**1.32**	**Yes**	
HE93	BH	707769	6518331	73.4	15	-90	0	10.5	13	2.5	1.01		
HE96	BH	707789	6518311	73.3	15	-90	0	9	11.5	2.5	0.5		
HE97	BH	707769	6518311	75	15	-90	0	12	15	3	1.09	Yes	
HE98	BH	707749	6518311	75.2	15	-90	0	12	15	3	0.59	Yes	
HE99	BH	707769	6518291	76.1	15	-90	0	11	13	2	0.54		
HE105	DTH	707659	6518351	74.3	20	-90	0	8.5	10.5	2	1.39		
HE106	DTH	707639	6518351	74.8	20	-90	0	10	15	5	0.88		
HE108	DTH	707699	6518351	73	15	-90	0	8.5	12	3.5	1.05		
HE109	DTH	707719	6518351	73.3	15	-90	0	9.5	13.5	4	0.54		
HE111	**DTH**	**707759**	**6518351**	**73.1**	**16**	**-90**	**0**	**5.5**	**15.5**	**10**	**1.83**		
HE112	**DTH**	**707779**	**6518351**	**73**	**15**	**-90**	**0**	**5**	**15**	**10**	**1.41**	**Yes**	
HE113	**DTH**	**707799**	**6518351**	**72.7**	**11**	**-90**	**0**	**4**	**11**	**7**	**3.23**	**Yes**	
HE115	DTH	707779	6518371	72.5	11	-90	0	6	10.5	4.5	0.51		
HE116	**DTH**	**707759**	**6518371**	**72.7**	**11.5**	**-90**	**0**	**4.5**	**11.5**	**7**	**1.66**	**Yes**	
HE117	**DTH**	**707739**	**6518371**	**72.2**	**13**	**-90**	**0**	**4.5**	**13**	**8.5**	**1.92**	**Yes**	
HE118	**DTH**	**707719**	**6518371**	**73.1**	**13**	**-90**	**0**	**5.5**	**12.5**	**7**	**1.87**		
HE119	**DTH**	**707699**	**6518371**	**73.6**	**13**	**-90**	**0**	**6.5**	**13**	**6.5**	**1.02**	**Yes**	
HE121	DTH	707599	6518371	76.2	18	-90	0	12.5	18	5.5	0.89	Yes	
HE124	DTH	707699	6518391	73.8	10	-90	0	5	10	5	0.6	Yes	
HE125	**DTH**	**707719**	**6518391**	**73.1**	**10**	**-90**	**0**	**4.5**	**10**	**5.5**	**1.21**	**Yes**	
HE126	DTH	707739	6518391	72.9	12	-90	0	4	9.5	5.5	0.9		
HE127	DTH	707759	6518391	71.9	10	-90	0	3	7	4	0.92		
HE128	DTH	707779	6518391	72.9	10	-90	0	4.5	8.5	4	0.58		
HE130	DTH	707719	6518411	73.1	10	-90	0	5	9.5	4.5	1.06		
HE133	DTH	707659	6518331	73.8	16	-90	0	11	14	3	0.54		
HE135	DTH	707719	6518331	73.6	15	-90	0	10.5	13.5	3	0.82		
HE136	DTH	707739	6518331	74	15	-90	0	9.5	15	5.5	0.89	Yes	
HE137	**DTH**	**707599**	**6518351**	**75.8**	**20**	**-90**	**0**	**7.5**	**20**	**12.5**	**0.63**	**Yes**	
HE138	DTH	707679	6518311	74.2	15	-90	0	10	15	5	0.73	Yes	
HE139	**DTH**	**707659**	**6518311**	**74.1**	**17**	**-90**	**0**	**10**	**17**	**7**	**1.14**	**Yes**	
HE140	**DTH**	**707619**	**6518331**	**75.1**	**30**	**-90**	**0**	**12**	**23.5**	**11.5**	**0.73**		
HW3	DTH	707529	6518492	74.8	9.5	-90	0	1.5	6	4.5	0.78		Yes
HW14	DTH	707490	6518472	72.2	4	-90	0	1	4	3	1.08	Yes	Yes
HW15	DTH	707489	6518492	71.6	3	-90	0	0.5	2.5	2	0.73		
HW16	DTH	707489	6518512	71.4	6	-90	0	1.5	6	4.5	0.76	Yes	
HW17	DTH	707489	6518534	72.9	7.5	-90	0	5.5	7.5	2	0.91	Yes	Yes
HW21	DTH	707469	6518512	73.7	7	-90	0	5	7	2	1.08	Yes	Yes
HW22	DTH	707469	6518492	73.9	7.5	-90	0	1	7.5	6.5	0.76	Yes	Yes
HW24	DTH	707549	6518472	75	9	-90	0	7	9	2	1.22	Yes	
HW25	**DTH**	**707557**	**6518494**	**74.8**	**9.5**	**-90**	**0**	**4.5**	**9.5**	**5**	**4.94**	**Yes**	
HW28	**DTH**	**707569**	**6518492**	**74.7**	**11**	**-90**	**0**	**6**	**11**	**5**	**1.23**	**Yes**	
HW43	RAB	707483	6518482	74.5	4.5	-90	0	0.5	4.5	4	0.82	Yes	Yes
HW131	DTH	707342	6518602	73	6.5	-90	0	3	6.5	3.5	0.84	Yes	Yes
HW132	DTH	707321	6518602	73	6.5	-90	0	3	6.5	3.5	0.83	Yes	Yes
HW134	DTH	707299	6518592	73	6.5	-90	0	3.5	6	2.5	0.68		Yes
HW137	DTH	707459	6518512	71.3	6	-90	0	3	6	3	0.84	Yes	Yes
HW138	DTH	707469	6518542	74.3	6	-90	0	2.5	4.5	2	0.59		Yes
HW140	DTH	707479	6518532	73.1	7	-90	0	3.5	6	2.5	1.62		
HW153	DTH	707494	6518482	71.6	5	-90	0	0	5	5	0.77	Yes	
HW154	**DTH**	**707496**	**6518472**	**74**	**5**	**-90**	**0**	**1**	**5**	**4**	**1.95**	**Yes**	
HW155	DTH	707499	6518524	72.3	6	-90	0	0	2	2	1.28		Yes
HW156	DTH	707479	6518494	73.6	7.5	-90	0	0	2.5	2.5	1.14		Yes
HW157	**DTH**	**707479**	**6518472**	**71.1**	**8.5**	**-90**	**0**	**0**	**8.5**	**8.5**	**0.75**	**Yes**	**Yes**
HW172	**DTH**	**707459**	**6518532**	**73.4**	**8**	**-90**	**0**	**3.5**	**8**	**4.5**	**1.12**	**Yes**	
HW173	DTH	707459	6518522	73.5	8	-90	0	5	7.5	2.5	0.54		Yes
HW186	DTH	707539	6518502	75	6	-90	0	4	6	2	1.84	Yes	
HW189	DTH	707449	6518552	73.1	8	-90	0	5	7	2	0.73		Yes
HW196	**DTH**	**707439**	**6518542**	**73.1**	**7**	**-90**	**0**	**2.5**	**7**	**4.5**	**1.33**	**Yes**	
HW199	DTH	707449	6518562	72.7	8	-90	0	5.5	7.5	2	1		

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation	Unmined
HW200	DTH	707429	6518542	73.4	5.5	-90	0	3.5	5.5	2	0.8	Yes	Yes
HW202	DTH	707429	6518562	72.8	8	-90	0	5.5	8	2.5	1.15	Yes	
HW212	DTH	707419	6518562	72.3	8	-90	0	3	6.5	3.5	1.01		
HW220	DTH	707399	6518562	72.1	6	-90	0	3.5	5.5	2	0.6		Yes
CARRIAGE													
RC9	DTH	706559	6517945	103	15	-90	0	11.5	14	2.5	1.42		Yes
RC19	**DTH**	**706529**	**6517975**	**102**	**19**	**-90**	**0**	**10.5**	**16**	**5.5**	**1.07**		**Yes**
RC30	DTH	706559	6517960	102	16.5	-90	0	11.5	14.5	3	1.38		Yes
RC37	DTH	706529	6517990	101	16	-90	0	12.5	14.5	2	0.95		Yes
CORE SHED													
CS1	**DTH**	**706959**	**6519512**	**75.3**	**6**	**-90**	**0**	**0**	**4.5**	**4.5**	**1.12**		
CS4	DTH	706959	6519482	72.8	3.5	-90	0	0	3.5	3.5	1.07	Yes	
CS5	DTH	707109	6519512	79.8	10	-90	0	6.5	10	3.5	0.86	Yes	
CS15	**DTH**	**706959**	**6519542**	**77.5**	**10.5**	**-90**	**0**	**3**	**6.5**	**3.5**	**2.17**		
CS26	DTH	706944	6519482	72.3	4.5	-90	0	1	3.5	2.5	0.94		
CS27	DTH	706959	6519482	72.8	4	-90	0	1	4	3	0.67	Yes	
CS28	DTH	706974	6519482	72.7	4	-90	0	1.5	3.5	2	0.62		
CS37	DTH	706959	6519512	75.2	5	-90	0	2	4	2	1.7		
CS56	**DTH**	**706929**	**6519542**	**76.9**	**5**	**-90**	**0**	**2**	**5**	**3**	**2.11**	**Yes**	
CS58	DTH	706959	6519527	76.5	5	-90	0	1.5	4.5	3	1.61		
CS61	DTH	707109	6519527	81.6	10.5	-90	0	8.5	10.5	2	0.81	Yes	
CS67	DTH	707104	6519482	76.6	6	-90	0	3	5.5	2.5	1.28		
CS69	DTH	706959	6519497	74.3	4	-90	0	1.5	4	2.5	1.01	Yes	
CS71	DTH	706929	6519482	72	4	-90	0	1	4	3	0.75	Yes	
CS85	DTH	706974	6519572	81.2	8.5	-90	0	6.5	8.5	2	0.71	Yes	
CS86	DTH	707094	6519527	81.2	12	-90	0	9.5	11.5	2	0.9		
CS88	DTH	707109	6519467	76.2	6	-90	0	3	5.5	2.5	0.52		
CS91	DTH	706989	6519467	72.2	6	-90	0	2	5	3	0.63		
CS95	DTH	706929	6519466	71.6	5	-90	0	2.5	5	2.5	0.78	Yes	
CS105	DTH	707079	6519452	74.6	6	-90	0	4	6	2	0.61	Yes	
CS106	DTH	707094	6519452	74.8	6	-90	0	4	6	2	0.89	Yes	
CS107	DTH	707109	6519452	75	7	-90	0	4	6	2	2.34		
CS109	DTH	707124	6519467	76.3	6	-90	0	3	6	3	1.02	Yes	
CS124	DTH	707139	6519452	75.7	8	-90	0	5	7.5	2.5	1.13		

Additional Unmined Cu Intercepts <2m width but >= 0.5 m and >= 0.5 % Cu (i.e. lower tenor 'open' mineralisation, forming exploration targets)

Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation
MAIN OPEN CUT												
AW19	**BH**	**706800**	**6518415**	**85**	**6**	**-90**	**0**	**3**	**4.5**	**1.5**	**0.7**	
AW212	DTH	706545	6518415	97.1	17	-90	0	12	13	1	0.79	
AW223	DTH	706530	6518430	96.6	17	-90	0	13	14	1	0.6	
AW224	DTH	706515	6518445	95.6	17	-90	0	13	14	1	0.8	
AW245	DTH	706515	6518460	95.5	16	-90	0	13	14.5	1.5	0.62	
AW256	DTH	706845	6518430	84.1	5	-90	0	0	0.5	0.5	0.56	
AW258	**DTH**	**706605**	**6518340**	**98.5**	**16**	**-90**	**0**	**12**	**15**	**3**	**0.5**	
AW296	**DTH**	**706545**	**6518265**	**103**	**14.5**	**-90**	**0**	**11.5**	**12.5**	**1**	**1.01**	
AW325	**DTH**	**706380**	**6518280**	**88.5**	**5**	**-90**	**0**	**1.5**	**3**	**1.5**	**0.98**	
AW338	**DTH**	**706530**	**6518265**	**103**	**15**	**-90**	**0**	**11**	**12.5**	**1.5**	**0.69**	
AW353	DTH	706530	6518235	100	13	-90	0	10	11.5	1.5	0.55	
AW362	**BH**	**706544**	**6518205**	**103**	**14.5**	**-90**	**0**	**13**	**13.5**	**0.5**	**2.7**	
AW371	DTH	706545	6518175	104	15.5	-90	0	14	15	1	0.63	
AW372	DTH	706530	6518175	103	14.5	-90	0	13.5	14	0.5	0.72	
AW377	DTH	706395	6518265	89.5	4	-90	0	1.5	2.5	1	0.94	
AW400	**BH**	**706455**	**6518130**	**94.4**	**8**	**-90**	**0**	**4.5**	**6**	**1.5**	**1.49**	
AW433	DTH	706260	6518130	92.9	5	-90	0	2	3	1	0.99	
AW458	DTH	706470	6518130	94.7	7	-90	0	6	7	1	0.72	Yes
AW495	BH	706395	6518220	90.3	6	-90	0	3	3.5	0.5	0.79	
ME31	RC	706365	6518475	96.5	19	-90	0	18	18.5	0.5	1.04	
ME34	RC	706335	6518490	92.6	17	-90	0	15	15.5	0.5	0.52	
PL35	BH	706230	6518175	91.9	6	-90	0	2	3	1	0.62	

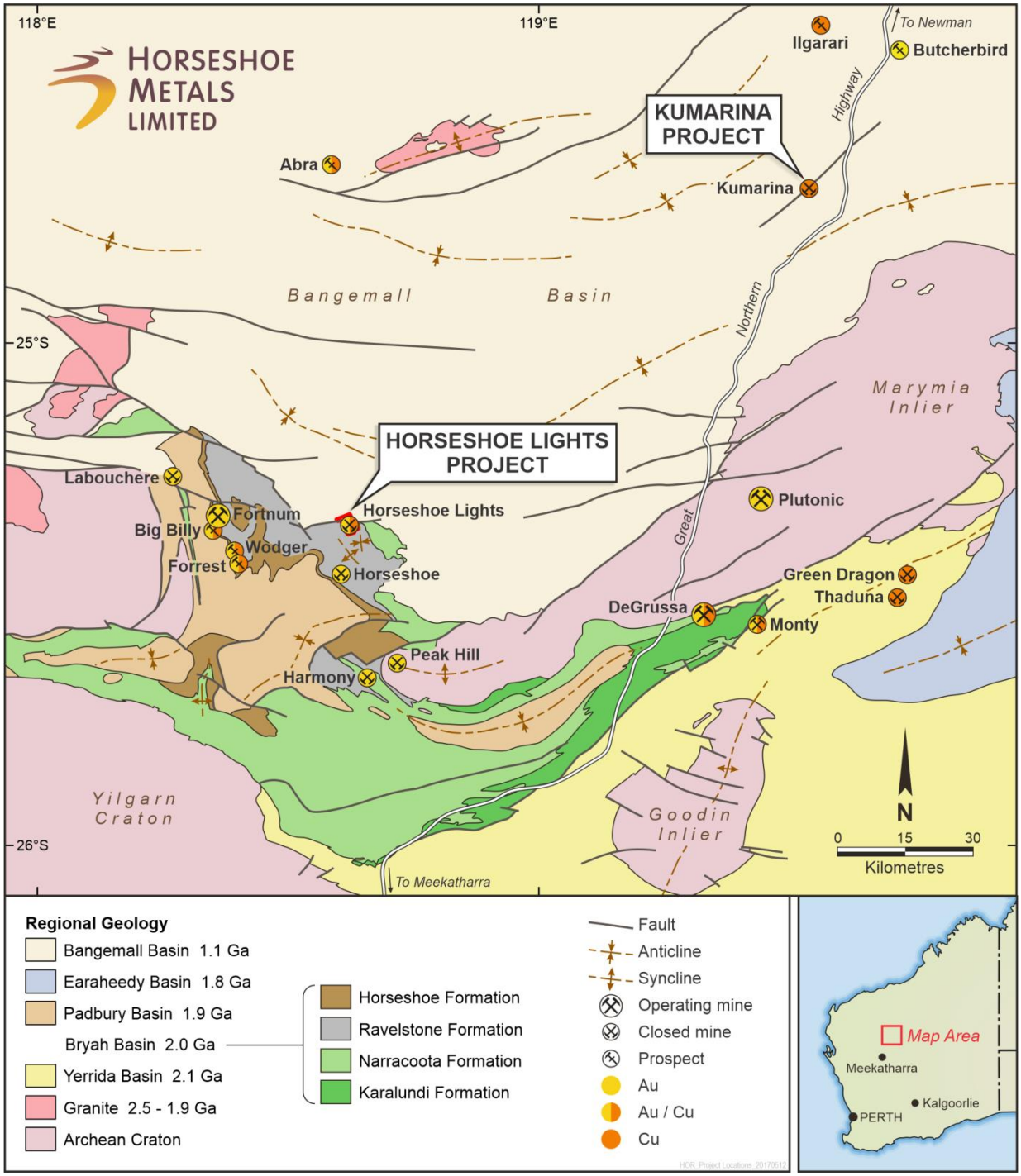
Hole ID	Type	EAST GDA94z53	NORTH GDA94z53	RL	Depth	Dip	Azi	From (m)	To (m)	Interval (m)	Cu %	Hole ends in mineralisation
PL62	DTH	706110	6518250	97.9	15	-90	0	12.5	13	0.5	1.43	
HOUSE												
HE16	BH	707829	6518291	73.4	17.5	-90	0	11	12.5	1.5	0.62	
HE29	DTH	707909	6518331	72.3	8	-90	0	2	2.5	0.5	0.77	
HE67	RAB	707709	6518431	73	11	-90	0	8	9.5	1.5	0.59	
HE77	RAB	707609	6518371	75.6	17	-90	0	13	13.5	0.5	0.64	
HW4	DTH	707529	6518512	73.9	9	-90	0	8	8.5	0.5	0.5	
HW11	**DTH**	**707509**	**6518471**	**75.7**	**11**	**-90**	**0**	**7.5**	**9**	**1.5**	**0.81**	
HW28	DTH	707569	6518492	74.7	11	-90	0	2.5	3	0.5	1.97	
HW37	RAB	707549	6518502	74.9	9	-90	0	5	6	1	0.75	
HW133	**DTH**	**707319**	**6518592**	**73**	**7**	**-90**	**0**	**6**	**7**	**1**	**2.14**	**Yes**
HW158	**DTH**	**707519**	**6518492**	**73.8**	**5**	**-90**	**0**	**1**	**2.5**	**1.5**	**1**	
HW159	DTH	707519	6518482	75.3	6	-90	0	2	2.5	0.5	0.56	
HW171	**DTH**	**707459**	**6518542**	**73.3**	**7**	**-90**	**0**	**5.5**	**7**	**1.5**	**0.69**	**Yes**
HW186	DTH	707539	6518502	75	6	-90	0	0.5	1.5	1	0.54	
HW192	DTH	707509	6518522	72.3	6	-90	0	0	0.5	0.5	0.8	
HW198	DTH	707439	6518562	72.8	6.5	-90	0	6	6.5	0.5	0.56	Yes
HW210	**DTH**	**707419**	**6518542**	**72.9**	**8**	**-90**	**0**	**4**	**5.5**	**1.5**	**0.73**	
HW214	DTH	707409	6518532	72.9	6	-90	0	4	5.5	1.5	0.54	
CARRIAGE												
RC1	DTH	706514	6517825	102	16	-90	0	13.5	14	0.5	0.96	
RC3	DTH	706514	6517945	102	15	-90	0	11	11.5	0.5	1.26	
RC7	**DTH**	**706559**	**6518066**	**99.4**	**15**	**-90**	**0**	**13**	**14**	**1**	**1.34**	
RC28	**DTH**	**706574**	**6517945**	**102**	**16**	**-90**	**0**	**12**	**13.5**	**1.5**	**2.68**	
RC35	**DTH**	**706544**	**6517975**	**102**	**16**	**-90**	**0**	**12**	**13**	**1**	**1.61**	
RC49	DTH	706729	6517900	100	20	-90	0	13.5	14	0.5	0.81	

About Horseshoe Metals Limited

Horseshoe Metals Limited (ASX:HOR) is a copper and gold focused Company with a package of tenements covering approximately 500km^2 in the highly prospective Peak Hill Mineral Field, located north of Meekatharra in Western Australia. The Company manages the Horseshoe Lights Project and the Kumarina Project.

About the Horseshoe Lights Project

The Horseshoe Lights Project includes the historic open pit of the Horseshoe Lights copper-gold mine which operated up until 1994, producing over 300,000 ounces of gold and 54,000 tonnes of contained copper including over 110,000 tonnes of Direct Shipping Ore (DSO) which graded between 20-30% copper.



The Horseshoe Lights ore body is interpreted as a deformed Volcanogenic Hosted Massive Sulphide (VMS) deposit that has undergone supergene alteration to generate the gold-enriched and copper-depleted cap that was the target of initial mining. The deposit is hosted by quartz-sericite and quartz-chlorite schists of the Lower Proterozoic Narracoota Formation.

Past mining was focused on the Main Zone, a series of lensoid ore zones, which passed with depth from a gold-rich oxide zone through zones of high-grade chalcocite mineralisation into massive pyrite-chalcopyrite. To the west and east of the Main Zone, copper mineralisation in the Northwest Stringer Zone and Motters Zone consists of veins and disseminations of chalcopyrite and pyrite and their upper oxide copper extensions.

Table 3 below summarises the total Mineral Resources for the Horseshoe Lights Project as at 30 December 2019.

TABLE 3
HORSESHOE LIGHTS PROJECT
SUMMARY OF MINERAL RESOURCES
AS AT 30 December 2019

Location	Category	Tonnes (Mt)	Cu (%)	Au (g/t)	Ag (g/t)	Cu metal (tonnes)	Au metal (oz)	Ag metal (k oz)
In-situ Deposit (0.5% Cu cut-off grade)	*Measured*	*1.73*	*1.04*	*0.0*	*0.5*	*18,000*	*1,900*	*28.8*
	Indicated	*2.43*	*0.95*	*0.0*	*0.7*	*23,200*	*3,400*	*52.2*
	Inferred	*8.69*	*1.01*	*0.1*	*2.6*	*87,400*	*30,700*	*712.4*
	Total	**12.85**	**1.00**	**0.1**	**1.9**	**128,600**	**36,000**	**793.4**
Flotation Tailings	**Inferred**	**1.421**	**0.48**	**0.34**	**6.5**	**6,800**	**15,300**	**294.8**
M15 Stockpiles	**Inferred**	**0.243**	**1.10**	**0.17**	**4.7**	**2,650**	**1,300**	**36.7**
Note: At 0% Cu cut-off grade unless otherwise stated					**TOTAL**	**138,050**	**52,600**	**1,124.9**

These Mineral Resource Estimates meet the reporting requirements of the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves".

About the Kumarina Project

The copper deposits at the Kumarina Project were discovered in 1913 and worked intermittently until 1973. The workings extend over nearly 5km as a series of pits, shafts and shallow open cuts. At the main Kumarina Copper Mine, the workings are entirely underground with drives from the main shaft extending for some 200m in the upper levels and for about 100m in the lower levels at a depth of 49m below surface.

Incomplete records post-1960s make it difficult to estimate the total copper production from the workings. However, indications are that the Kumarina Copper mine was the second largest producer in the Bangemall Basin group of copper mines. Recorded production to the late 1960s is 481t of copper ore at a high-grade of 37.0% Cu and 2,340t at a grade of 17.51% Cu.

An initial Mineral Resource Estimate for the Rinaldi deposit was completed by the Company in 2013 (see 30 June 2013 Quarterly Report announced on 31 July 2013). The total Measured, Indicated and Inferred Mineral Resource Estimate as at 30 September 2019 is shown in Table 4 below. The Rinaldi resource is currently covered by a Mining Lease Application.

TABLE 4 KUMARINA PROJECT SUMMARY OF MINERAL RESOURCES AS AT 30 December 2019				
Location	**Category**	**Tonnes (t)**	**Cu (%)**	**Cu metal (tonnes)**
Rinaldi Prospect (0.5% Cu cut-off)	*Measured*	*415,000*	*1.46*	*6,100*
	Indicated	*307,000*	*1.16*	*3,500*
	Inferred	*114,000*	*0.9*	*1,000*
	Total	**835,000**	**1.3**	**10,600**

The Mineral Resource Estimate meets the reporting requirements of the 2012 Edition of the "Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves"

Forward Looking Statements

Horseshoe Metals Limited has prepared this announcement based on information available to it. No representation or warranty, express or implied, is made as to the fairness, accuracy, completeness or correctness of the information, opinions and conclusions contained in this announcement. To the maximum extent permitted by law, none of Horseshoe Metals Limited, its directors, employees or agents, advisers, nor any other person accepts any liability, including, without limitation, any liability arising from fault or negligence on the part of any of them or any other person, for any loss arising from the use of this announcement or its contents or otherwise arising in connection with it. This announcement is not an offer, invitation, solicitation or other recommendation with respect to the subscription for, purchase or sale of any security, and neither this announcement nor anything in it shall form the basis of any contract or commitment whatsoever. This announcement may contain forward-looking statements that are subject to risk factors associated with gold exploration, mining and production businesses. It is believed that the expectations reflected in these statements are reasonable but they may be affected by a variety of variables and changes in underlying assumptions which could cause actual results or trends to differ materially, including but not limited to price fluctuations, actual demand, currency fluctuations, drilling and production results, reserve estimations, loss of market, industry competition, environmental risks, physical risks, legislative, fiscal and regulatory changes, economic and financial market conditions in various countries and regions, political risks, project delay or advancement, approvals and cost estimates.

Competent Persons Statement

The information in this report that relates to the Exploration Results and Mineral Resources at the Horseshoe Lights and Kumarina Projects is based on information reviewed by Mr Craig Hall, who is a member of the Australian Institute of Geoscientists. Mr Hall is a non-executive director Horseshoe Metals Limited and has sufficient experience which is relevant to the style of mineralisation and types of deposit under consideration and to the activity he is undertaking to qualify as Competent Persons as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2012)'. Mr Hall consents to the inclusion of the data in the form and context in which it appears.

The information in this report that relates to the Horseshoe Lights Project In-situ Mineral Resources is based on information originally compiled by Mr Dmitry Pertel, an employee of CSA Global Pty Ltd, and reviewed by Mr Hall. This information was originally issued in the Company's ASX announcement "40% increase in Copper Resource at Horseshoe Lights Copper/Gold Project", released to the ASX on 5th June 2013, and first disclosed under the JORC Code 2004. This information was subsequently disclosed under the JORC Code 2012 in the Company's ASX release "Quarterly Report Period Ended 30th June 2013", released on the 31st July 2013. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The company confirms that the form and context in which the findings are presented have not materially modified from the original market announcements.

The information in this report that relates to the Horseshoe Lights Project surface stockpile Mineral Resources is based on information compiled by a previous employee of Horseshoe Metals Limited, and reviewed by Mr Hall. The information was previously issued in announcements released to the ASX on 26 February 2015 and 9 March 2015. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market

announcements. The company confirms that the form and context in which the findings are presented have not materially modified from the original market announcements.

The information in this report that relates to the Kumarina Project (Rinaldi Prospect) Mineral Resources is based on information compiled by or under the supervision of Mr Robert Spiers, an independent consultant to Horseshoe Metals Limited and a then full-time employee and Director of H&S Consultants Pty Ltd (formerly Hellman & Schofield Pty Ltd), and reviewed by Mr Hall. The information was originally issued in the Company's ASX announcement "Horseshoe releases Maiden Mineral Resource Estimate for Kumarina", released to the ASX on 4th March 2013, and first disclosed under the JORC Code 2004. This information was subsequently disclosed under the JORC Code 2012 in the Company's ASX release "Quarterly Report Period Ended 30th June 2013", released on the 31st July 2013. The Company confirms that it is not aware of any new information or data that materially affects the information included in the original market announcements. The company confirms that the form and context in which the findings are presented have not materially modified from the original market announcements.

JORC CODE, 2012 EDITION

Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
Sampling techniques	• *Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.*	• Drilling results referenced within this document are historical in nature, and relate to the period 1985-1989. The primary data was receipted as a database maintained by geologist Ken Bampton, of Ore Reserve Evaluation Services in South Australia, formerly of Adelaide Chemical SA ("Adchem"), whom worked extensively at Mt Gunson. Drilling results and data was corroborated with South Australian Mines Department Envelope Open File Envelope 8319 (Comprising Quarterly and Annual reports for Mount Gunson Mines Pty Ltd for the period 14/2/1987 to 15/4/1994) and found to be satisfactory. Drill programmes are summarised in the below format: **HOLE SERIES/HOLE_ID**/YEAR/TYPE/HOLE DIAMETER/LABORATORY/ANALYSIS METHOD • **AW series (AW1-25)** 1985**:** Air track Blasthole, 75mm hole, AWF Central Lab, 3 acid/AAS finish • **AW series (AW30-68)** 1986: Air track Blasthole, 75mm hole, EMAC Gunston Lab, wet chem/AAS finish • **AW series (AW69-258)** 1987: Downhole hammer, 85mm hole, AMDEL Adelaide Lab, wet chem/Method A2 • **AW series (AW297-352)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **AW series (AW359-378)** 1988: GD Hydra-Trac Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **AW series (AW381)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **AW series (AW385-410)** 1988: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **AW series (AW436-479)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **AW series (AW490-493)** 1988: GD Hydra Trac-Blasthole, 75mm hole, XRF (Amdel PMA); *checked -Classic Comlabs* • **AW series (AW498-506)** 1989: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **ME series (ME03-32)** 1988: RC, 112mm, Classic Comlabs, Method AAS1/AAS1C • **ME Series (ME39-60)** 1989: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **ME Series (ME62-84)** 1989: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **ME Series (ME98-99)** 1989: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **PL Series (PL05)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **PL Series (PL06- PL08)** 1988: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **PL Series (PL17- PL26)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **PL Series (PL30-PL37)** 1988: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **PL Series (PL46-PL70)** 1988-9: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE1)** 1989: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE15)** 1989: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE25-HE32)** 1989: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE33-HE-45)** 1989: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE46-HE88)** 1989: RAB, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE93-99)** 1989: GD Hydra Trac-Blasthole, 75mm hole, Classic Comlabs, Method AAS1/AAS1C • **HE Series (HE105-HE140)** 1989: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HW Series (HW3-HW28)** 1987: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HW Series (HW43)** 1988: RAB, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **HW Series (HW131-HW220)** 1988-9: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **RC Series (RC9-RC37)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C • **CS Series (CS1-CS37)** 1988: Downhole hammer, 85mm hole, Classic Comlabs, Method AAS1/AAS1C

Criteria	JORC Code explanation	Commentary
		• **CS Series (CS56-CS124)** 1988-9: Downhole hammer, 85mm hole, Comlabs Services, Method AAS1/AAS1C
	• *Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.*	• Industry standard practice was adopted at the time for sampling of drill cuttings for copper, although Mt Gunson routinely collected 0.5m samples, as opposed to an industry standard of 1m of material from the downhole length. Although the decreased sample size could be expected to increase sample variability, the smaller sample size was required to give additional control over mining the flat-lying mineralisation.
	• *Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information.*	• For each RC/RAB/DTH hole, each 0.5 m (5-6 kg) of -10 mm drill cuttings was manually riffled (20mm slots) down to a 2-2.5 kg sample collected in a 10" calico bag for delivery to the laboratory. For BH sampling, collar cuttings were sampled and cleared every 0.5m, and collected as typically a sub-2kg sample in a calico bag. No record of charge sizes for the respective analysis methods has been recovered to date.
Drilling techniques	• *Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).*	• Various drilling types are recorded in the numerous drilling programmes- listed by type in Table 2, summarised below: **BH**- Air track Blasthole Drill Rig, 75mm hole diameter, owned/operated by Emeco-MacMahon "EMAC" **DTH**- Downhole hammer, 85mm hole diameter, owned/operated by Adelaide & Wallaroo Fertilizers Ltd ("AWF") **BH**- Garnder Denver Hydra-Trac Blasthole Rig, estimated 75mm hole, owned/operated by Roche Brothers **RC**- Reverse Circulation Drill Rig, 112mm hole, using small diameter bit with crossover sub, contractor unknown. **RAB**- Rotary Air Blast Drill Drill, 85mm hole, utilising tricone rollers or drag bits, contractor unknown.
Drill sample recovery	• *Method of recording and assessing core and chip sample recoveries and results assessed.*	• Typically not recorded.
	• *Measures taken to maximise sample recovery and ensure representative nature of the samples.*	• Typically not recorded. As holes depths discussed within are typically shallow (<15m depth), sample representativity and recovery are likely only issues at the within the first metre with these types of drilling.
	• *Whether a relationship exists between sample recovery and grade and whether sample bias may have occurred due to preferential loss/gain of fine/coarse material.*	• Possible anecdotal suggestion of sample bias through partial loss of fine fraction, but not considered material in respect of the historical production record at Mt Gunson.
Logging	• *Whether core and chip samples have been geologically and geotechnically logged to a level of detail to support appropriate Mineral Resource estimation, mining studies and metallurgical studies.*	• Typically not logged, holes were primarily drilled for mine production purposes. Samples not visually showing copper mineralisation were routinely not sampled.
	• *Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.*	• N/A.
	• *The total length and percentage of the relevant intersections logged.*	• N/A
Sub-sampling techniques and sample preparation	• *If core, whether cut or sawn and whether quarter, half or all core taken.* • *If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.*	• No diamond core resulted are cited in this release. • All holes were dry. At the drill site of RC/RAB/DTH hole, each 0.5 m (5-6 kg) of -10 mm drill cuttings was manually riffled (20mm slots) down to a 2-2.5 kg sample collected in a 10" calico bag for delivery to the laboratory. For BH sampling, collar cuttings were sampled and cleared every 0.5m, and collected as typically a sub-2kg sample in a calico bag.
	• *For all sample types, the nature, quality and appropriateness of the sample preparation technique.*	• Typically, a disc mill was used to reduce the 2-3 kg sample to -1 mm prior to riffling through a mechanically shaken, 20x 10 mm slot riffle to obtain a 100 g sub-sample for ring-mill grinding to an assay pulp, which was then collected in a geochemical paper packet.

Criteria	JORC Code explanation	Commentary
	• *Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.*	• Compressed air blast cleaning of both mills and riffle was carried out between each sample.
	• *Measures taken to ensure that the sampling is representative of the in situ material collected, including for instance results for field duplicate/second-half sampling.*	• Sub-sampling stages are considered appropriate for the representivity of samples. No historical field duplicates or additional representivity checks are recorded in the available data
	• *Whether sample sizes are appropriate to the grain size of the material being sampled.*	• The sample size is considered industry standard for base metal mineralisation, typically recording values in the % range, and appropriate to the grain size of the material being sampled.
Quality of assay data and laboratory tests	• *The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.*	• The nature, quality and appropriateness of the assay methods and procedures are considered for the analysis of acid-leachable copper-bearing oxide material, are considered representative of a total assay in this setting. Analysis typically consists of a wet chemistry digestion by acid, and determination of grade by Atomic Absorption Spectrometer ("AAS"). Over-range grades were diluted and reread. Some silver values are recorded in initial assay results, but were discontinued over time- typically the results are copper only, although the mineralisation typically shows a Cu-Ag-Co grade relationship, as evidenced by the historic production figures. A summary of the various laboratories and procedures used at Mt Gunson is listed below: **AWF Central Lab-**(1985)- Method 3 acid digest/AAS finish, Detection limit not recorded **EMAC Gunston Lab-** (1986)- Method wet chem/AAS finish, Detection limit not recorded **Amdel-** (1987-NATA Accredited) Method A2, Upper Method not specified, Lower Detection Limit 2ppm **Classic Comlabs Ltd** -(NATA Accredited-1988/9) Method AAS1, Upper Method AAS1C, Lower Detection Limit 2ppm
	• *For geophysical tools, spectrometers, handheld XRF instruments, etc, the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc.*	• Holes AW487-495 were analysed onsite for expediency and subsequent mining at the Mt Gunson onsite laboratory by XRF using an Amdel PMA. Results for Holes AW394-404 had previously been compared with results from Classic Comlabs and were found to vary no more than 2% on average, giving confidence in the Amdel PMA method. It was determined at the time to retain Comlabs results in the database for uniformity with respect to resource/reserve calculation purposes. The PMA was used onsite to record mine production grades, such as crusher feed grades, giving confidence in production records.
	• *Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established.*	• The quality of the assay data is not able to be verified as it is of a historical nature, but the tenor of results is consistent with production records, suggesting the grades are reliable. Some 80% of the database is within mined pits with a satisfactory reconciliation record, and some 95% of the database reports within a 25m buffer of a mined pit outline.
Verification of sampling and assaying	• *The verification of significant intersections by either independent or alternative Company personnel.*	• External laboratory checks are planned for significant assay results but have yet to be completed.
	• *The use of twinned holes.*	• No recorded twinning of data is noted. An older generation (1960-70's) of CSR coreholes and Air Trac holes exist within the tenure, but this data is currently lost and being considered for recovery where possible. The AW series of drilling completely replace these holes.
	• *Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.*	• Primary data was receipted as a database maintained by geologist Ken Bampton, of Ore Reserve Evaluation Services in South Australia, formerly of Adchem, whom previously worked at Mt Gunson. Drilling results and data was corroborated with South Australian Mines Department Envelope Open File Envelope 8319 (Comprising Quarterly and Annual reports for Mount Gunson Mines Pty Ltd for the period 14/2/1987 to 15/4/1994- work undertaken by Adelaide Chemical SA "Adchem"), and found to be satisfactory.
	• *Discuss any adjustment to assay data.*	• No adjustments undertaken.

Criteria	JORC Code explanation	Commentary
Location of data points	• *Accuracy and quality of surveys used to locate drill holes (collar and down-hole surveys), trenches, mine workings and other locations used in Mineral Resource estimation.*	• Collar locations were survey-controlled onsite by surveyors. Some uncertainty around final mining boundaries in certain pits (e.g. House West) owing to backfilling and availability of pit pickups. The company has assumed a mining event which takes in significant mineralisation encountered in HW series drilling. The company intends to confirm remnant in-situ resources in such areas by further drilling.
	• *Specification of the grid system used.*	• Grid system coordinates are GDA94 MGA Zone 53.
	• *Quality and adequacy of topographic control.*	• Topographic control is available from known survey stations and considered adequate
Data spacing and distribution	• *Data spacing for reporting of Exploration Results.*	• Drilling in these programmes are typically sub- 20m spacing in areas recording copper production.
	• *Whether the data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource and Ore Reserve estimation procedure(s) and classifications applied.*	• Drilling spacings are sufficient to establish a degree of geological and grade continuity appropriate for Mineral Resource and Ore Reserve estimation.
	• *Whether sample compositing has been applied.*	• No composite sampling applied
Orientation of data in relation to geological structure	• *Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.*	• All drilling reported is vertical into flat-lying mineralisation, and no additional mineralisation control is considered to date
	• *If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.*	• No sampling bias is considered to have been introduced by the drilling orientation
Sample security	• *The measures taken to ensure sample security.*	• Historical protocols over many generations of drilling programmes are unavailable
Audits or reviews	• *The results of any audits or reviews of sampling techniques and data.*	• No audits or reviews have been revealed to date, other than the discussion of PMA and Comlabs results discussed above.

Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	• *Type, reference name/number, location and ownership including agreements or material issues with third parties such as joint ventures, partnerships, overriding royalties, native title interests, historical sites, wilderness or national park and environmental settings.*	• The leases forming the current project (ML3717-21, ML5598, ML5599; MPL1) were acquired from Adelaide Chemical Company Ltd ("Adcem") and are currently held by a family-owned earthmoving contractor based in Adelaide, who previously operated their own copper-oxide leach operation until the oxide development rights were granted to CMM on the 29th June 2017 under a 'Licence to Operate'. Under the Licence to Operate, CMM has a 100% interest in rights to explore, develop and operate oxide copper deposits, stockpiles and tailings on the listed tenements using all available surface infrastructure including camp, mains power/water supply, treatment plant and earthmoving equipment, with the exception of ML5599, where the licence allows unrestricted use of water and the right to re-process copper-bearing material on the floor of the site. The initial term of the agreement between CMM and the Licensor, who holds the tenements, expires on 29th June 2020 and can be extended by CMM for a period of a further two years to the 29th June 2022. Further extension beyond 29th June 2022 can be negotiated during the term of this lease.
	• *The security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area.*	• ML3717-21, ML5598, ML5599 and MPL1 are in good standing. The Company is unaware of any additional impediment to the licence to operate in the area.
Exploration done by other parties	• *Acknowledgment and appraisal of exploration by other parties.*	• Copper ore was discovered at Mount Gunson in 1875 and the first recorded production was from 1899. A smelter was subsequently erected in the Main Open Cut ("MOC") area in 1904. Small-scale production continued in the area until the Cattlegrid deposit was discovered and subsequently mined by CSR Limited from 1974 to 1986 (in partnership with Emeco-MacMahon "EMAC" from 1984-86), with 7.2 Mt of 1.9% Cu ore mined from the Cattlegrid open pit. Together with 270,000 t of MOC ore, the tenements recorded production of 156, 000 t of copper, 62 t of silver and 2900 t of cobalt in concentrates. In late 1985, Adelaide and Wallaroo Fertilizers Ltd ("AWF") became involved with EMAC in a partnership to continue exploration and mining of the MOC area. EMAC then conducted a successful trial floating oxide ore thru their on-site plant, selling AWF an oxide concentrate for feed to Burra, but terms were not agreed, so EMAC concluded operations, dismantled the plant and rehabilitated the site.

Criteria	JORC Code explanation	Commentary
		AWF then approached CSR for a sub-lease to pursue a standalone heap leach operation at Mt Gunson, and as Adchem (an operating division of Adelaide and Wallaroo Fertilizers Ltd) continued in their own right. From 1987 to around 2006, Adelaide Chemical Company Ltd "Adchem" produced over 14,000 t of copper in cement for feed to the Burra cupric oxide plant from the Mt Gunson Project, principally from heap leaching of 1.2 Mt of 1.3% copper oxide ore from the MOC area, Gunyot, House and Core Shed deposits.
Geology	• *Deposit type, geological setting and style of mineralisation.*	• Mt Gunson is located on the Stuart Shelf, comprising an undeformed cover sequence of flat-lying, late Adelaide platform sediments on Gawler Craton crystalline basement. Both sandstone-hosted (e.g. Cattlegrid, MOC) and shale-hosted (e.g. MG14, Gully) mineralisation types occur at relatively shallow depths within the Mt Gunson region, typically within 25-50m of the surface. Only the sandstone-hosted deposits have been mined, and copper mineralisation occurs as flat undulating blankets of variable thickness, comprising networks of fracture-filling veins in a breccia representing a preserved Precambrian permafrost horizon, where repeated freezing and thawing created the brecciated host rock in which the copper was deposited. The quartzite is the locally-silicified upper part of the Pandurra Formation, a thick (typically >1000 m) pre-Adelaidean fluviatile sandstone unit. Regionally, the Mt Gunson copper deposits lie on a northerly trending structural ridge known as the Pernatty Upwarp which is a complex horst structure expressed as an uplift of the Pandurra Formation. Neoproterozoic strata of the Stuart Shelf that would normally be present in a complete stratigraphic section are absent over the culmination of the Pernatty Upwarp, allowing the Whyalla Sandstone to directly overlie the Pandurra Formation in places within the Mt Gunson region. The principal ore mineral is chalcocite, but significant bornite and chalcopyrite occur locally along with accessory carrollite, galena and sphalerite. Due to the saline surface environment, the copper chloride hydroxide atacamite is the principal oxide mineral. Shale-hosted mineralisation occurs in the Adelaidean Tapley Hill Formation where this unit is present between the Pandurra and Whyalla units. Sulphide mineralogy is similar but much finer-grained and not necessarily breccia-hosted.
Drill hole Information	• *A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:* • *If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.*	• Refer to the body of text of this report and Table 2 for information material to the understanding of the exploration results. • Exclusions within Table 2 relate to unmineralised or subgrade intervals (mostly within the mined pit outlined) have occurred, but are represented in plans of drilling in Figures 4, 7 and 9- giving a context of location, and are not considered to detract from this report.
Data aggregation methods	• *In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated.* • *Where aggregate intercepts incorporate short lengths of high grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.* • *The assumptions used for any reporting of metal equivalent values should be clearly stated.*	Typically 0.5m split samples are reported and simply averaged over the mineralised interval; typically with no top cut; the significant intersections with Table 2 and figures within the report use a minimum 2m interval > 0.5% Cu, with minimum 2m internal dilution. Additional 'unmined' (i.e. remaining in situ) intervals between 0.5 and 2m width and >0.5 % Cu (i.e. lower tenor 'open' mineralisation are reported at the end of Table 2 and identified in certain figures. • N/A • N/A

Criteria	JORC Code explanation	Commentary
Relationship between mineralisation widths and intercept lengths	• *These relationships are particularly important in the reporting of Exploration Results.* • *If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.* • *If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true width not known').*	• Reported downhole lengths are approximately true width. • Mineralisation occurs within sheet-like tabular bodies, sub-horizontal in dip, drilling is perpendicular to the target. • N/A, refer above
Diagrams	• *Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.*	• See plans and sections this report
Balanced reporting	• *Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.*	• See Table 2
Other substantive exploration data	• *Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.*	• In the Company's opinion this material has been adequately reported in previous production history over a mostly continuous period for the last 50 years, and the detail is not relevant for reporting of these exploration results. The Company continues to compile historic exploration data from a variety of sources, principally SARIG (the SA Government mines department resource) for meaningful exploration results, and will report them in separate releases as significant detail comes to hand.
Further work	• *The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling).* • *Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.*	• Planned extensional drilling is being considered. Other planned activities discussed in text. • Refer to figures in body of text.