

Superior launches 8,000m drilling campaign at Greenvale; Expanded gold, copper, nickel exploration programs

HIGHLIGHTS:

- **Drilling to commence on 17 June 2021** to accelerate growth of copper and gold Mineral Resource inventory at Greenvale, amid surging prices for both metals
- Fully funded 1st campaign of approx. 8,000m of RC and diamond drilling at three prospects: Steam Engine (including Dinner Creek); Bottletree (Tier 1-potential Copper); and Wyandotte Copper Deposit
- GOLD (Steam Engine Gold Project):
 - Maiden drilling program at Dinner Creek and targeted expansion of gold Mineral Resource at Steam Engine Lode
 - Feasibility Study (Steam Engine and Eastern Ridge lodes) progressing through Q3 (2021); mining lease application under preparation
- COPPER (Bottletree and Wyandotte):
 - Bottletree: Deep RC and Diamond drilling targeting high grade copper core within Tier 1-scale coincident MIMDAS IP chargeability and resistivity anomaly
 - Wyandote: Exploration Target (JORC, 2012) defined for Wyandotte Copper Deposit.
 Resource definition and extensional drilling program to establish maiden copper Mineral Resource Estimate.
- NICKEL (Big Mag and Dido):
 - Prospectivity analysis completed strong geological indicators confirm Big Mag and Dido are highly prospective for Voiseys Bay style Ni-Cu-PGE magmatic sulphide ore deposit systems
 - o Target generation program progressing on **Big Mag** and **Dido**, based on high quality aerial VTEM and magnetic survey datasets
- **Second 2021 drilling campaign** to potentially follow completion of first campaign, focussing on Cockie Creek (Cu-Au), with further follow-up programs.

Superior's Managing Director, Peter Hwang commented:

"Following on from a strong start to the year with the positive Steam Engine Scoping Study, we are escalating our level and scope of exploration with several potentially transformative drilling programs, each progressing significant gold and copper prospects at our Greenvale Project in north-east Queensland.

"Importantly, the first campaign is fully funded and drilling will commence this Thursday, 17 June amid record high copper prices and continued high gold prices.

"2021 promises to be an exciting year for the Company and its shareholders. With approximately 8,000m to be drilled in the first campaign and a planned follow-up campaign later in the year, we expect at least one rig to be active through to December.



"Our commitment to an aggressive year of drilling and other exploration programs is with a strategic focus on expediting growth of our gold and base metal Resources inventory. Together with positive gold and copper market outlooks extending beyond 2021, we are well on the pathway to realise value from the substantial mineral endowment at Greenvale."

He added:

"The first campaign will commence with maiden drilling of the new Dinner Creek Zone at the Steam Engine Project. Detailed geological mapping and rock chip sampling indicates that Dinner Creek is likely to be a mineralised gold lode that bears the same characteristics as the main Steam Engine Lode, but on a significantly larger scale.

"We will also be drilling an important program on the Tier-1 potential Bottletree Prospect, targeting the high-grade core of a large copper-mineralised MIMDAS IP chargeability and resistivity anomaly. The next holes in this program are significant, as they present very positive prospects for confirming the existence of a large, high grade copper deposit.

"In addition to developing Steam Engine, building an inventory of copper resources is a key objective for the year. We aim to deliver up to two JORC 2012 copper Mineral Resource Estimates by the end of the year: one at the Wyandotte Copper Deposit and the other at the larger Cockie Creek Copper Prospect.

"With the aggressive activity ahead of us, we are optimistic that the foundations of a centralised gold and copper processing strategy at Greenvale will start crystallising during the course of 2021. As the drilling commences, we will be following up by presenting our Greenvale strategy to the market along with further detail of the Company's magmatic nickel sulphide projects."

Superior Resources Limited (ASX:SPQ) (Superior, the Company) is ramping up its exploration activity in 2021 on the back of high copper and gold prices, as it seeks to enlarge its mineral resources base at its 100% owned Greenvale Project, located around 210 km west of Townsville, Qld.

Since completion of the Steam Engine Scoping Study, the Company has commenced a Feasibility Study based on the current Mineral Resource Estimate and the base case considered under the Scoping Study. Depending on results from this year's drilling at the Steam Engine, Eastern Ridge and Dinner Creek zones, the scope of the Feasibility Study may change.

Although aggressive programs of drilling will continue across the Steam Engine Project through 2021, mining and mine planning studies will continue in parallel to meet our objectives of commencing production as soon as possible.

The Company has also committed significant resources to progressing the portfolio of copper and nickel prospects at Greenvale as part of implementing the Board's broader Greenvale strategy.

In particular, the substantial copper mineralisation at the Bottletree Copper Prospect will be progressed with up to 2,000 metres of diamond core drilling to follow up the last hole drilled in 2018 (SBTRD006), which returned 292m @ 0.22% Cu, including 18.7m @ 1.12% Cu.

Planning for this program has involved 3-D geophysical remodelling of MIMDAS Induced Polarisation (**IP**) survey data acquired over the prospect by Superior in 2018. The results of the remodelling indicate that drill hole SBTRD006 intersected the northern edge of a large, coincident chargeability and resistivity anomaly (Figures 2 and 3). The upcoming drilling program will target the central core of the chargeability and resistivity anomaly and also a more substantial, but deeper part of the anomaly.



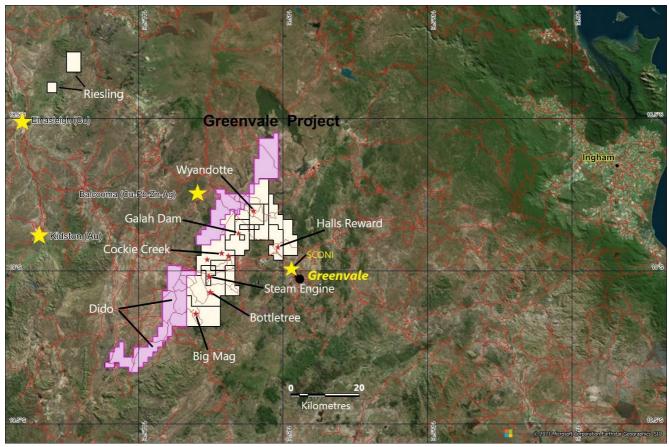


Figure 1. Location of exploration permits comprising the Greenvale Project. Exploration permit applications are shaded purple. The Greenvale township and existing mines are also indicated.

A further objective for the Company in 2021 is to establish up to two JORC, 2012-compliant copper Mineral Resource Estimates, comprising the Wyandotte Copper Prospect and the Cockie Creek Copper Prospect.

In preparation, the Company has defined an Exploration Target (JORC, 2012) of 400,000 – 1,000,000 tonnes @ 1.9% to 2.2% Cu, which was modelled from historic drill hole and assay data. This year's drilling program is designed to enable the conversion of the Exploration Target into a maiden copper Mineral Resource.

Cautionary Statement (JORC, 2012)

Exploration Target: The Wyandotte Exploration Target has been calculated using historic drill hole and assay information by a Competent Person (Competent Person declaration is provided in the latter parts of this report). The Exploration Target is reported in a form comprising a tonnage range and copper mineralisation grade range. The Exploration Target does not constitute a Mineral Resource or Ore Reserve. The potential quantity and grade expressed by the Exploration Target is conceptual in nature as there has been insufficient exploration information to estimate a Mineral Resource. Furthermore, it is uncertain whether further exploration work will result in the estimation of a Mineral Resource. Detailed information setting out the process and methodology used by the Competent Person in establishing the Exploration Target is provided in this report under the heading "Wyandotte Copper Deposit" and in Appendix 2.



Steam Engine Gold Project

The Steam Engine Gold Project is an orogenic, structurally controlled gold deposit comprising at least three main sub-parallel lode zones (Steam Engine Lode, Eastern Ridge Lode and the Southern Zone Lodes) and a potential new and large fourth zone (Dinner Creek Zone) (Figure 2). Gold mineralisation in each of the lode zones is developed within north-north-east trending, west-dipping shear zones comprising pyrite-quartz-muscovite-carbonate schist, hosted within amphibolite, metasediment and metatonalite.

The mineralisation shows strong continuity and characteristically includes high grade shoot zones within the lodes. The form of the lodes is persistent and has been identified over distances of at least 2.5 kilometres at the Eastern Ridge Lode. Mineralisation along each of the lodes has not been definitively closed off and remains open along strike and down dip.

The current Mineral Resource stands at 1.73 million tonnes at 2.2 g/t Au for 122,000 ounces Au¹.

A positive Scoping Study was completed and reported to the market on 27 April 2021. Key outcomes from the Scoping Study are set out in Appendix 1.

The Scoping Study enabled the Company to immediately commence a Feasibility Study, which is expected to be completed during the September quarter, 2021.

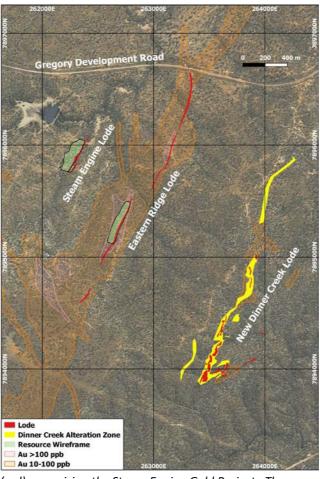


Figure 2. Main gold lode zones (red) comprising the Steam Engine Gold Project. The area of the Mineral Resource that is currently contemplated for mining studies under the Steam Engine Scoping Study is approximately delineated by light green polygons at the Steam Engine and Eastern Ridge lodes.

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¹ Refer ASX announcement, dated 22 March 2021.



2021 Drilling Programs

The upcoming drilling programs have been designed to achieve the following objectives:

- Dinner Creek: 13 reverse circulation (RC) holes for approximately 1,000m of drilling to confirm whether mineralised gold lode is developed at depth beneath the mapped gold-bearing lode at surface. If the results are positive, a follow up program will comprise an intense drill-out of the lode of up to 54 RC holes for 3,500m of drilling to define a maiden Mineral Resource (Figures 3 and 4);
- **Expansion of the total Mineral Resource** (Figures 5 and 6):
 - o **Down-dip extension** of the Steam Engine Lode **8 RC holes for 1,275m** of drilling; and
 - Extension of high grade ore shoots in Steam Engine Lode up to 15 RC holes for approximately
 2,000m of drilling.

The initial 8,000m Greenvale drilling campaign contemplates the Mineral Resource expansion holes and the initial 13 holes planned for Dinner Creek as a minimum program. Actual drilling may be expanded, depending on assay results that are received as drilling progresses.

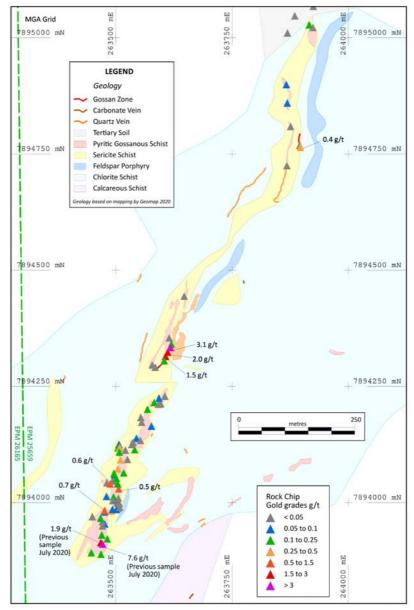


Figure 3. A portion of the Dinner Creek Lode zone showing mapped surface geology and recent rock chip Au assay results.



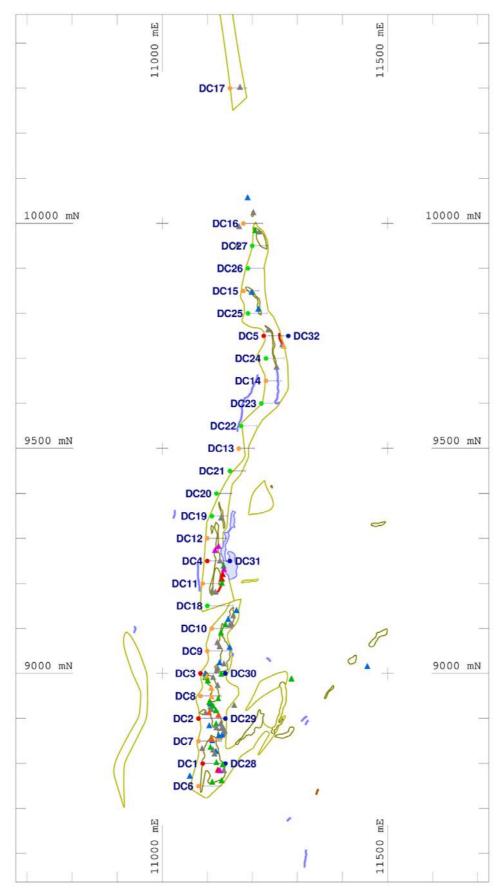


Figure 4. A portion of the Dinner Creek Lode zone showing an outline of the lode alteration zone and locations of proposed drill hole collars. Drill hole priorities are shown as: priority 1 (Red), priority 2 (Orange) and priority 3 (Green).



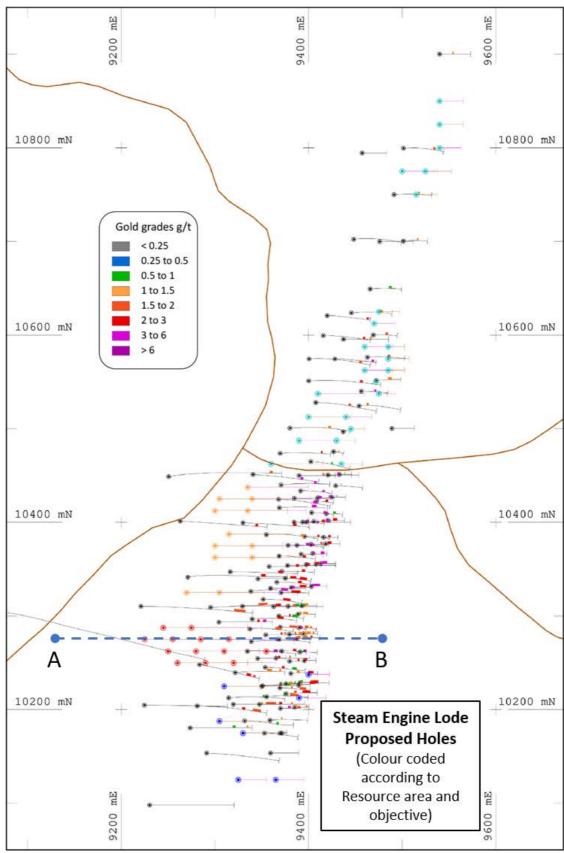


Figure 5. Plan of all proposed 2021 drill holes for the Steam Engine Lode (First and Second Campaigns). Proposed holes are colour coded to indicate Resource zones targeted and drilling objectives: Very high grade ore shoots (Red); other high grade zones (Orange); southern part of Steam Engine Lode (Blue); Northern Extension Zone (Aqua). Existing holes are coded Black. Section line A-B along 10275mN presented as a cross-section in Figure 6.



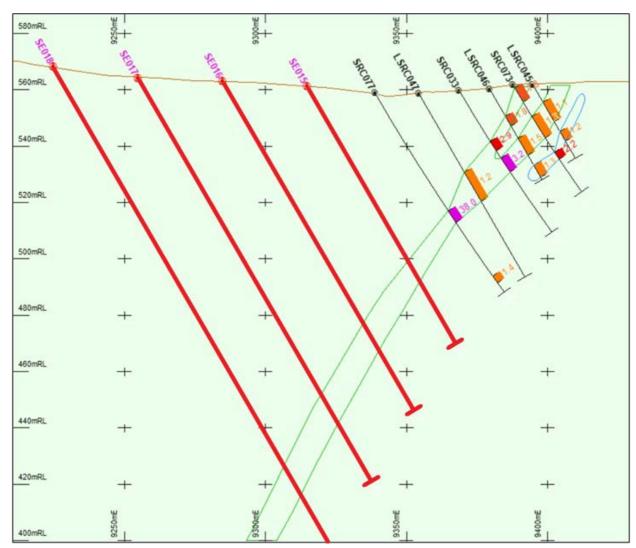


Figure 6. Cross section (A-B) of Steam Engine Lode along 10275mN showing existing drill holes (in black) and 2021 proposed holes (in red).

Bottletree Copper Prospect

Bottletree is a large, Tier-1 size potential copper-mineralised system, characterised by a large (2km x 1km) copper-in-soil anomaly (Figure 7) and coincident high order IP chargeability and resistivity (low) anomaly. RC and diamond core drilling by Superior during 2017 and 2018 confirmed extensive copper mineralisation to depths in excess of 300m below surface.

The last hole drilled in 2018 (SBTRD006) returned significant intervals of visible coarse-grained chalcopyrite, pyrite and pyrrhotite mineralisation with the following grades²:

- **292m @ 0.22% Cu** (from 148m to 440m)³;
- Including 18.7m @ 1.12% Cu (from 328m to 346.7m)⁴.

² Refer ASX announcement, dated 25 October 2018.

 $^{^3}$ Cut-off grade of 0.1% Cu, including some narrow intervals of less than 0.1% Cu.

 $^{^4}$ Cut-off grade of 0.5% Cu, including some narrow intervals of less than 0.5% Cu.



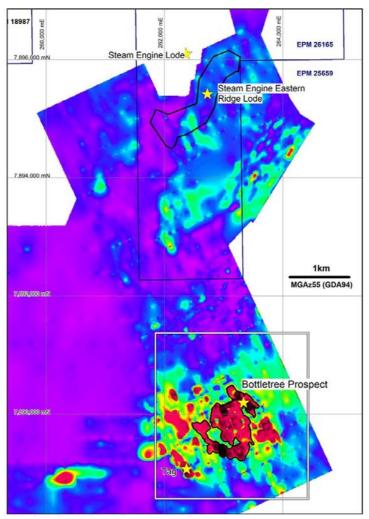


Figure 7. Copper-in-soil processed image showing the large-scale regional Bottletree anomaly. A MIMDAS geophysical IP survey was carried out over the geochemical anomaly during May 2018.

3-D geophysical remodelling of MIMDAS IP survey data acquired over the prospect by Superior in 2018, indicate that drill hole SBTRD006 intersected the northern edge of the large, coincident high-order chargeability and resistivity (low) anomaly (Figures 8 and 9). The 3-D geophysical model and assay results from SBTRD006 indicate a close correlation between the copper grades and chargeability response levels.

2021 Drilling Program

The upcoming drilling program will target the central, expected high-grade core of the chargeability and resistivity anomaly with **up to three diamond core holes at between 150m to 450m (down-hole depth)**. A deeper but larger part of the anomaly will also be targeted for more extensive mineralisation at between **400m and 750m (down-hole depth) with one diamond core drill hole** (Figures 8 and 9).

The initial 8,000m Greenvale drilling campaign contemplates the drilling of all four planned holes at Bottletree for a total of 2,100 metres. Actual drilling may change as drilling progresses, depending on observations from recovered core and assay results.



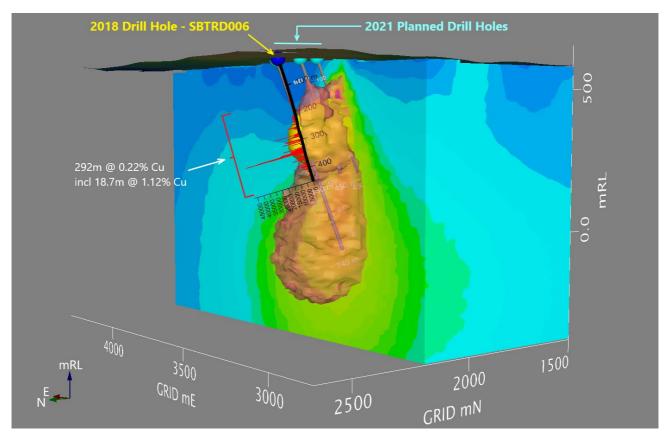


Figure 8. 3-D modelled IP high chargeability and low resistivity iso-surfaces highlighting the Bottletree IP anomaly, viewed looking southeast. 2018 hole SBTRD006 shown intersecting northern edge of the anomaly. Proposed 2021 holes also shown.

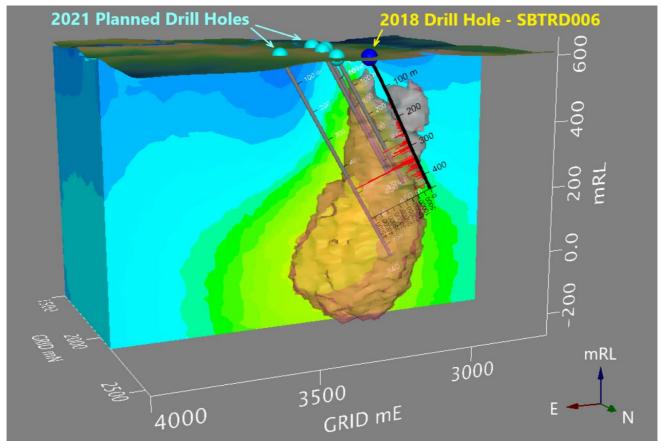


Figure 9. 3-D modelled IP high chargeability and low resistivity iso-surfaces highlighting the Bottletree IP anomaly, viewed looking southwest. 2018 hole SBTRD006 shown intersecting northern edge of the anomaly. Proposed 2021 holes also shown.



Wyandotte Copper Deposit

The Wyandotte Copper Deposit is a body of copper mineralisation located in the northern part of the Greenvale Project.

Historically, the main area of mineralisation has been held under mining leases and mineral development licences. The earliest significant work on the prospect was by Silver Valley Minerals (SVM) in 1969. SVM drilled 27 diamond core drill holes and established a supergene copper resource and also sank a shaft on the copper mineralisation. The best of the drill intersections underpinning the resource were in adjacent holes, DDH05 - 5.8m @ 7.8% copper and DDH08 - 13.4m @ 3.6% copper.

Shell Minerals Exploration (Aust.) Pty Ltd conducted a review of previous work and drilled a further five diamond core drill holes in 1975.

No exploration work has been conducted on the mineralised area since 1975.

Exploration Target

The historic work that has been conducted on the mineralised zone has been determined by Superior to be sufficient to enable the estimation of an Exploration Target that meets the requirements of clauses 17 and 38 of the JORC Code 2012, ASX Listing Rules 5.7, 5.12 and 5.16 and ASX Listing Rules Guidance Note 31.

The Company has defined an Exploration Target, expressed as a tonnage and grade range of:

Tonnes	SG	Cu %	Cu tonnes	Range
400,000	2.7	2.2%	8,800	Lower
1,000,000	3.0	1.9%	19,000	Upper

In determining the Exploration Target, sectional interpretations of the historic drilling data were used to form wireframe models of the copper mineralisation for several different scenarios.

Three of the models examined areas in close proximity to the historic drilling. A fourth model examined the possibility of a down-dip extension of the copper mineralisation near the historic drilling, together with the possibility of a southern extension of the mineralisation along strike from the known mineralisation.

Tonnage and grade estimates were made of the models to help determine the likely ranges of tonnes and grade for the targeted mineralisation down to approximately 100 metres vertical depth. Only areas proximal and down dip of the historical drilling were used to determine this exploration target, as insufficient data exists at this time to determine the extent of any further along strike mineralisation.

More detailed information regarding the process, methodology and assumptions used in deriving the Exploration Target is provided in Appendix 2.

Cautionary Statement (JORC, 2012)

Exploration Target: The Wyandotte Exploration Target has been calculated using historic drill hole and assay information by a Competent Person (Competent Person declaration is provided in the latter parts of this report). The Exploration Target is reported in a form comprising a tonnage and copper mineralisation grade range. The Exploration Target does not constitute a Mineral Resource or Ore Reserve. The potential quantity and grade expressed by the Exploration Target is conceptual in nature as there has been insufficient exploration information to estimate a Mineral Resource. Furthermore, it is uncertain whether further exploration work will result in the estimation of a Mineral Resource.



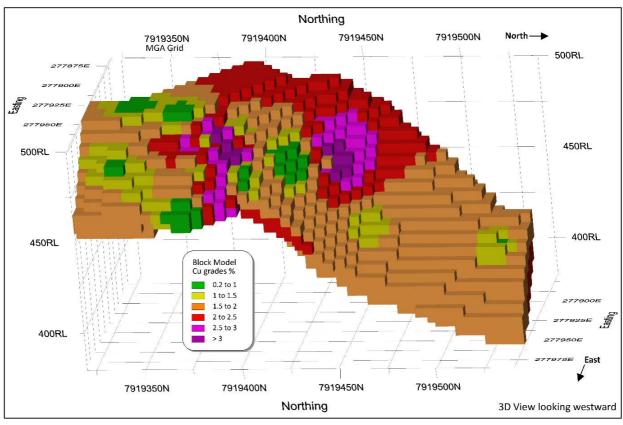


Figure 10. 3-D view of the Wyandotte copper mineralisation around the core area of the historic drilling.

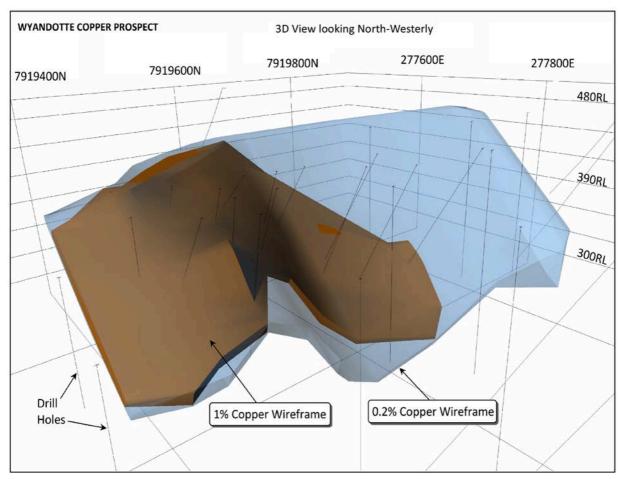


Figure 11. 3-D view of Wyandotte mineralisation wireframes of +1% copper and +0.2% copper mineralisation.



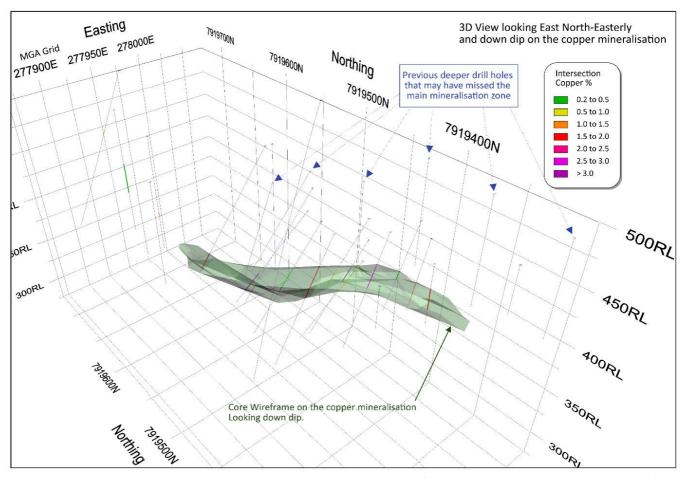


Figure 12: 3-D view looking down dip along the copper mineralisation wireframe. This view shows that a number of the deeper historic drill holes may have missed the main copper mineralisation zone at depth.

2021 Drilling Program

A total of **14 drill holes for 1,075m of drilling** (30m to 150m drill hole depths) are designed to test the Exploration Target in the area of the historical drilling and also the potential for down-dip extensions of the copper mineralisation to approximately 100m vertical depth. The proposed holes will include four diamond core drill holes for up to 200m of diamond core drilling (40m to 50m depths) with the remainder being RC drill holes (Figure 13).

The initial 8,000m Greenvale drilling campaign contemplates the drilling of all 14 planned holes at Wyandotte for a total of 1,075m. Actual drilling may change as drilling progresses, depending on observations from recovered drill samples and assay results.



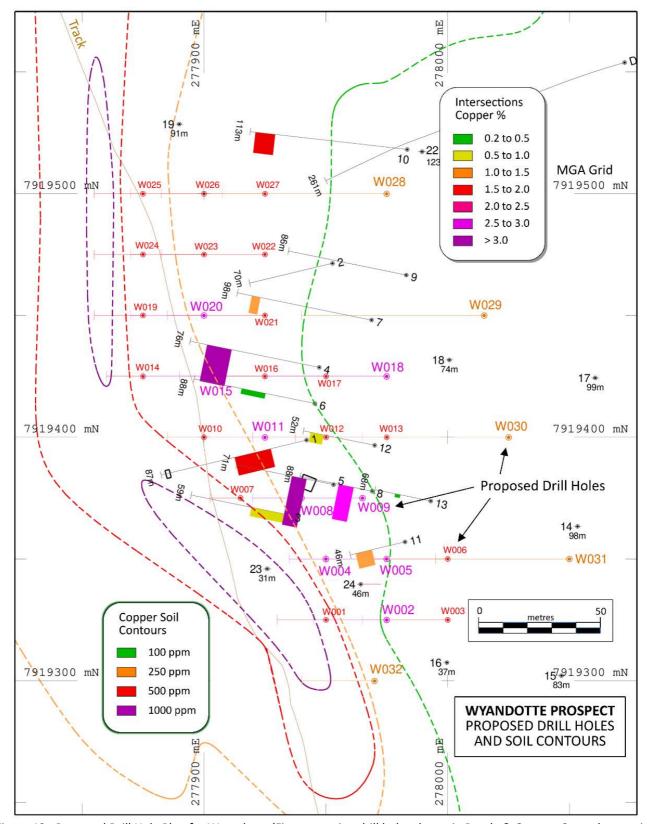


Figure 13: Proposed Drill Hole Plan for Wyandotte (First campaign drill holes shown in Purple & Orange; Second campaign drill holes shown in Red). Histograms of the historic drilling intersections (copper) are shown with historic holes (marked in black). Surface copper-in-soil contours are also shown.



Big Mag and Dido Prospects

An extensive prospectivity analysis exercise has been completed on approximately 2,000 km² of unique geological terrain located in the south-eastern part of the Greenvale Project. The exercise confirmed the existence of strong geological indicators that confirm the area to be highly prospective for the existence of Voiseys Bay style Ni-Cu-PGE magmatic sulphide ore deposit systems.

On the basis of these findings, the Company is progressing a target generation program on the Big Mag and Dido prospect areas. This exercise will be substantially based on high quality aerial VTEM and magnetic survey datasets.

To date, the exercise has identified several anomalous target areas, including potentially mineralised magma feeder dykes and mafic-ultramafic ovoid intrusions identified at Big Mag.

A comprehensive update will be provided to the market shortly.



About Superior Resources

Superior Resources Limited (ASX:SPQ) is an Australian public company exploring for large lead-zinc-silver, copper, gold and nickel-copper-cobalt deposits in northern Queensland which have the potential to return maximum value growth for shareholders. The Company has a dominant exploration position within the Carpentaria Zinc Province, one of the world's richest mineral producing regions and is focused on multiple Tier-1 equivalent exploration targets.

Reporting of Exploration Target: Information contained in this report that relates to the Wyandotte Exploration Target is based on information compiled by Mr Kevin Richter, an employee of Superior Resources Limited, who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Richter has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Mr Richter consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.

Reliance on previously reported information: In respect of references contained in this report to previously reported Exploration Results or Mineral Resources, Superior confirms that it is not aware of any new information or data that materially affects the information, results or conclusions contained in the original reported document. In respect of previously reported Mineral Resource estimates, all originally reported material assumptions and technical parameters underpinning the estimates continue to apply and have not been materially changed or qualified. The form and context in which the relevant Competent Person's findings are presented have not been materially modified from the original document.

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APPENDIX 1

Steam Engine Gold Deposit – Scoping Study Key Outcomes⁵

Scoping Study Key Financial Outcomes

The Scoping Study has demonstrated robust financial metrics for the Steam Engine Gold Project (**Project**) based on an open pit mining and third-party toll treatment processing operation as the base case proposal.

The proposed operation is based on optimised pits for the mining of **1.1 million tonnes at 2.31 g/t Au to recover 70,000 ounces of gold**, with 73% of the Life of Mine (**LOM**) Production Target in Measured and Indicated categories. This represents approximately 65% of the current Mineral Resource, which comprises Measured, Indicated and Inferred Resources totalling 1.73 million tonnes at 2.2 g/t Au for 122,000 ounces of gold⁶.

On the basis of a generally positive outlook for the price of gold over the near to intermediate term, the Scoping Study also considered an upside scenario based on a gold price of A\$2,500 (US\$1,900 @ 0.76 AUD/USD). The impact on the Project economics is significant with the post-tax overall cash flow increasing by 69% to A\$41.0M (Table 1).

Table 1. Key Outcomes – Upside Scenario compared to Base Case Scenario

Parameter	Base Case @ A\$2,200 /oz	Upside Case @ A\$2,500 /oz				
Financial Summary						
Overall Cash Flow (post-tax)	A\$24.2M	A\$41.0M				
NPV _{7%} (post-tax)	A\$21.2M	A\$35.9M				
Internal Rate of Return (IRR) (post-tax)	242%	410%				
All-in Sustaining Costs (AISC) ¹	A\$1,673 /oz	A\$1,725 /oz				
Payback Period	11 months	9 months				
Funding						
CAPEX (Pre-Production and Closure)	A\$5.1M	A\$5.1M				
Funding Required ²	A\$10.0M	A\$9.0M				
Return on Capital (post-tax)	475%	806%				
Physical Outputs						
Life of Mine (LOM) (Construction to Closure)	~2.5 years	~2.9 years				
Total Ore	1.131 Mt	1.305 Mt				
Ore Grade	2.31 g/t	2.24 g/t				
Overall Gold Recovery	84%	84%				
Gold Produced and Sold	70,000 oz	79,000 oz				

 $^{^{\,1}}$ AISC calculated in accordance with the 2018 World Gold Council Updated Guidance Note.

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² Includes pre-production CAPEX plus operating losses until profits are generated.

 $^{^{5}}$ Extracted from ASX Announcement dated 27 April 2021.

 $^{^6}$ Total Mineral Resource estimate completed during March 2021; refer ASX Announcement dated 22 March 2021.



APPENDIX 2

WYANDOTTE COPPER DEPOSIT – EXPLORATION TARGET

Summary Report of Estimation Methodology

1. Introduction

The Wyandotte copper prospect is located within EPM 25691, some 210km west-northwest of Townsville in northeast Queensland. The EPM was granted to Superior Resources Limited on 7 April 2015.

The previous drilling carried out on the Wyandotte copper prospect totals 32 diamond drill holes for 2,941 metres of drilling. The majority of the drilling (27 holes) was from a drilling program that was carried out by Silver Valley Minerals (SVM) in 1969. Later drilling in 1975 was carried out by Shell Minerals Exploration who concentrated on two along strike holes, one down dip hole, and two other holes that were targeted on other nearby zones.

This report is based on data compilations of the historical drilling work, carried out by Mr Kevin Richter (Competent Person), a full-time employee of Superior Resources Limited. Data validation for this report was carried out by the inspection of the previous reports by Silver Valley Mineral and Shell Minerals Exploration. Further data validation processes were also carried out in mining software to make the data ready for use. The data compilations rely on the accuracy of the historical drilling, and no recent drilling has yet been carried out to verify the accuracy of the historical drilling.

2. Exploration Target (Estimate of Potential)

The Exploration Target (Estimate of Potential) carried out in this report used inverse distance-weighted block modelling of the copper mineralisation, as constrained by a series of wireframes. The estimates were based on the historical drilling data. Superior has yet to carry out any drilling on the Exploration Target area.

The historic drilling data on the Wyandotte Prospect does make a very good basis on which to estimate an Exploration Target. Sectional interpretations of the drilling data were used to form wireframe models of the copper mineralisation for several different scenarios. Internal waste was included in the targeted mineralisation where it was either modelled inside the copper mineralisation or where a potential zone for mining would otherwise be too narrow.

Three different model scenarios were created in the core area around the historical drilling, and a further model has included the down-dip potential, together with the possibility of some along strike extension at the southern end of the known mineralisation (Figure 1). The Exploration Target has been based on these outcomes.

An Exploration target of approximately 400,000 to 1,000,000 tonnes of approximately 1.9 to 2.2% copper is estimated based on the exploration target modelling.

Of the above Exploration Target, the majority of the target is estimated to be within approximately 100 metres vertical of the ground surface. It is believed that the widths of the identified historical mineralisation are sufficient that open pitting to these depths would be able to be considered if sufficient continuity of the copper mineralisation can be demonstrated.

The summary results from the block modelling from the four different block model scenarios used for this Exploration Target estimate are shown on the following pages (2 carried out previously by the Company for internal management purposes in May 2020 and 2 more recently in May 2021). The previous estimates (May 2020) used an SG of 2.7, which is probably conservative for the ~2% copper mineralisation that is likely to contain



significant amounts of metal sulphides. The recent estimates (May 2021) use an SG of 3 which is considered reasonable for the likely metal sulphide content of the mineralisation.

Block Model – Scenario 1 – Targeting the core area around the historic drilling

Copper %		By Grade				Cumulative	2	
From	То	Volume	Tonnes	SG	Cu%	Volume	Tonnes	Cu%
>3		16511.25	44580.38	2.7	4.0553	16511.25	44580.38	4.0553
2.5	3	38922.5	105090.8	2.7	2.7141	55433.75	149671.1	3.1136
2	2.5	56771.25	153282.4	2.7	2.2772	112205	302953.5	2.6904
1.5	2	44411.25	119910.4	2.7	1.7642	156616.3	422863.9	2.4278
1	1.5	18643.75	50338.13	2.7	1.3592	175260	473202	2.3141
0.5	1	2560	6912	2.7	0.7865	177820	480114	2.2921
0.2	0.5	1221.25	3297.38	2.7	0.3343	179041.3	483411.4	2.2787

Block Model – Scenario 2 – Targeting the core area around the historic drilling

Copper %		By Grade				Cumulative	2	
From	То	Volume	Tonnes	SG	Cu%	Volume	Tonnes	Cu%
>3		15460	41742	2.7	4.1146	15460	41742	4.1146
2.5	3	25608.75	69143.63	2.7	2.7104	41068.75	110885.6	3.239
2	2.5	34080	92016	2.7	2.2564	75148.75	202901.6	2.7934
1.5	2	64272.5	173535.8	2.7	1.7843	139421.3	376437.4	2.3282
1	1.5	10382.5	28032.75	2.7	1.3384	149803.8	404470.1	2.2596
0.5	1	3047.5	8228.25	2.7	0.8337	152851.3	412698.4	2.2312
0.2	0.5	881.25	2379.38	2.7	0.3359	153732.5	415077.8	2.2203

Block Model – Scenario 3 – Targeting the core area around the historic drilling

Copper %		By Grade				Cumulative	e	
From	То	Volume	Tonnes	SG	Cu%	Volume	Tonnes	Cu%
>3		12086.25	36258.75	3	4.1627	12086.25	36258.75	4.1627
2.5	3	11716.25	35148.75	3	2.6995	23802.5	71407.5	3.4425
2	2.5	43816.25	131448.8	3	2.2101	67618.75	202856.3	2.6439
1.5	2	81892.5	245677.5	3	1.7651	149511.3	448533.8	2.1625
0.5	1.5	29716.25	89148.75	3	1.1888	179227.5	537682.5	2.0011
0.2	0.5	1516.25	4548.75	3	0.3811	180743.8	542231.3	1.9875

Block Model – Scenario 4 – Including the down dip area to $^{\sim}$ 400m RL

Copper %	ı	By Grade				Cumulativ	'e	
From	То	Volume	Tonnes	SG	Cu%	Volume	Tonnes	Cu%
>3		13530	40590	3	4.3654	13530	40590	4.3654
2.5	3	11180	33540	3	2.7046	24710	74130	3.614
2	2.5	89680	269040	3	2.1971	114390	343170	2.5032
1.5	2	157570	472710	3	1.7736	271960	815880	2.0805
0.5	1.5	41340	124020	3	1.2215	313300	939900	1.9671
0.2	0.5	4210	12630	3	0.2881	317510	952530	1.9449



Discussion of the Models in terms of Exploration Target tonnes and grade implications.

In terms of tonnage, the likely range indicated by the models lies somewhere between approximately 400,000 tonnes (Scenario 2) to approximately 1,000,000 tonnes (Scenario 4).

In terms of grade, the above models indicate a likely grade range in the order of 1.9% to 2.2% copper. Significant tonnage in the grade blocks above 2% Cu are encountered in the models, which lends to the conclusion that the likely grade outcome may reside somewhere around the 2% mark when using the 0.2 g/t block grade cut-off. Based on this information it is concluded that the likely grade range of the mineralisation lies somewhere between 1.9% to 2.2% copper.

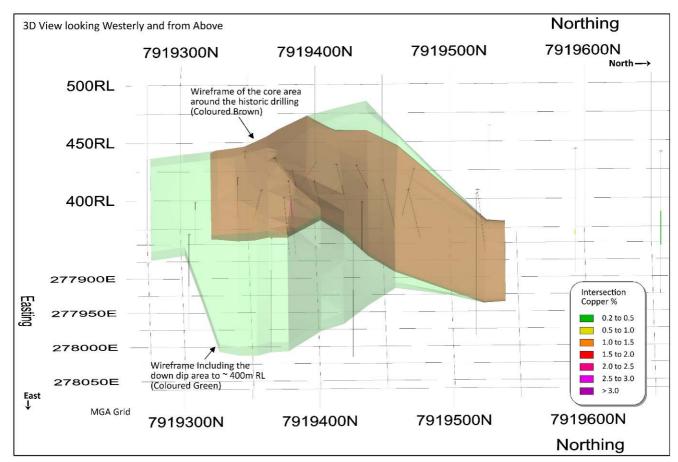


Figure 1. 3D View looking Westwards from above, of the 2021 wireframes (the Core Area around historical drilling in Brown, and the Wireframe including the down dip area to 400m RL and the strike extension to the south in Green).

3. Estimation Criteria

3.1 Geology

Outcrop is poor at the Wyandotte copper prospect, hindering field geological interpretation. The rocks are originally a sequence of sediments and basic volcanics that have been intruded by rocks of approximately tonalite composition. These rocks have then been deformed and metamorphosed.

Previous interpretations speculate that the copper mineralisation is intrusive related mineralisation that has been remobilised to its current position. Petrological analysis work carried out for MIM Exploration in 2002 suggested that the copper mineralisation may be intrusive (porphyry?) related but did not exclude that it could be of volcanogenic massive sulphide (VMS) origin. Superior has not yet carried out any petrological work on the Wyandotte copper mineralisation.



The predominant copper mineral is chalcopyrite, but bornite is also often mentioned in the historic drill hole logs. Both pyrite and magnetite are present with the copper mineralisation. There is reportedly some evidence of supergene enrichment at about 20-25 metres depth. However, from an examination of the drilling logs and together with the variability of the copper grades recorded at different RL levels, it does not appear to indicate to the Competent Person any significant amount of supergene effect. Enrichments where they occur may generally be more related to structural issues, rather than to any significant amount of supergene enrichment. A further review of this will need to be undertaken once the 2021 proposed drilling is completed.

The geological interpretation of the Wyandotte Prospect suffers from some issues yet to be resolved. Firstly, the mineralisation clearly transcends the geological rock types in many places, based on the historical logging information. In addition, the past logging does not clearly separate out alteration zones in the primary logging. It therefore remains uncertain if these alteration zones are evident. Finally, the mineralisation may be faulted out in certain areas and the nature of these structural controls is not yet fully understood from the current information.

The wireframing of the copper intersections currently gives the best insight into the nature of the copper mineralisation. The copper intersections were generally developed at copper cut-off grades from 0.2% to 0.5% Cu. The results of the wireframes have given some insight into the nature of the mineralised body. The best mineralisation (widths and grades) from the drilling lies within and adjacent to a flexure or possibly even a cross structure that strikes at approximately 3200 MGA and dips at 30 to 35 degrees eastwards. Such intersections include Hole 5 with 10.6m @ 4.05% Cu from 19.56m downhole, Hole 8 with 18.1m @ 2.88% Cu from 22.71m downhole (Figure 3), Hole 1 with 21.5m @ 1.52% Cu from 21.34m downhole (including 8.8m @ 2.89% Cu from 33.99m downhole), and Hole 4 (just north of the flexure) with 14.5m @ 3.04% Cu from 54.1m downhole.

Most of the rest of the known mineralisation that occurs at the northern end of the drilling strikes northerly (approximately 0030 MGA) and dips at approximately 45 degrees to the east. The very southern end the mineralisation also appears to turn back again toward a more northerly trend. This is evident in the soil survey results which shows a generally northerly striking anomaly that becomes north-west striking in the vicinity of the best copper mineralisation (Figure 2).

It should be noted that previous drilling appears not to have taken the flexure properly into account. This may present the possibility that the copper mineralisation may have been missed by a number of deeper holes (Figure 4), both down dip and possibly even at the southern end of the mineralisation, where the mineralisation appears to be warping back to an approximately northerly strike.

The best of the copper mineralisation at the northern end of the Wyandotte mineralisation appears to plunge away from the surface to the north west at about 30 degrees, however historical drilling density in this area is limited. The surface copper-in-soils indicate the copper mineralisation continuing to at least 7919725N, adjacent to drill hole DR2 (3.4m @ 0.75% Cu from 58.4m downhole), this lies outside of the current Exploration Target area. Some low-grade resource may be available from this area, although the widths and tonnages may be limited.



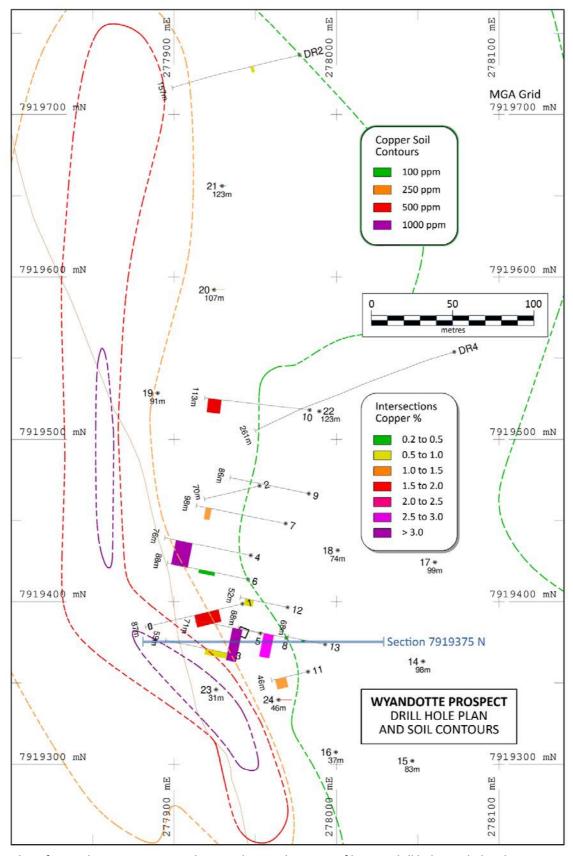


Figure 2. Plan of Wyandotte copper mineralisation showing locations of historic drill holes, including histograms of the historical drilling intersections (copper) and surface copper soil contours.



3.2 Historic Drilling

The historic drilling carried out on the Wyandotte copper prospect totals 32 diamond core drill holes for a total of 2,941 metres of drilling.

The Silver Valley Minerals drilling was carried out in 1969. They drilled 27 diamond core holes for a total of 2071.01 metres of drilling. Much of this drilling targeted the main parts of the copper mineralisation that were evident at the Wyandotte prospect (Figure 2).

Drilling in 1975 by Shell Minerals Exploration included an additional 5 diamond core drill holes. The Shell Minerals drill holes were concentrated on two along strike holes, one down dip hole, and two other holes that were targeted on other adjacent zones. Consequently, these holes are of little use in the current evaluation, except for one hole at the northern end of the copper mineralisation, that indicates the petering out of the copper mineralisation at depth in that area.

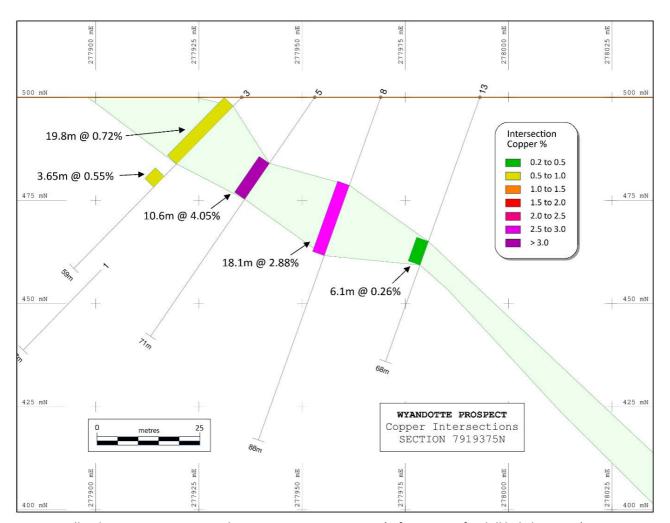


Figure 3. Drill Hole Section 7919375N – Showing copper intersections (refer Figure 2 for drill hole locations).

3.3 Drill Hole Locations

Terra Search undertook rehabilitation work on all historic drill holes in 2002. During this work they recorded GPS coordinates for most of the drill hole locations (Eastings and Northings). Unfortunately, no data was picked up in relation to RLs. These GPS locations have been used along with a variety of old drill hole plots to establish reliable locations in MGA coordinates for the purpose of this estimation exercise (Table 1).



Although no RL data is currently available for the drill hole collars, the area is very flat, and an arbitrary RL of 500 metres has been used for all holes. This is sufficient for the Exploration Target estimate, however RL data will need to be collected when the prospect is drilled by Superior.

Table 1 - Wyandotte Copper - Drill Hole Collars

Hole ID	East_MGA	North_MGA	RL	Dip	Azimuth_MGA	TDepth	Company	Report
1	277942	7919399	500	-45	256.5	86.64	SVM	CR4461
2	277953	7919471	500	-60	256.5	69.8	SVM	CR4461
3	277935	7919368	500	-45	281.5	58.67	SVM	CR4461
4	277947	7919429	500	-45	281.5	76.35	SVM	CR4461
5	277953	7919381	500	-55	281.5	70.71	SVM	CR4461
6	277946	7919414	500	-55	281.5	88.24	SVM	CR4461
7	277969	7919448	500	-55	281.5	97.84	SVM	CR4461
8	277969	7919378	500	-70	281.5	88.39	SVM	CR4461
9	277983	7919467	500	-55	281.5	85.95	SVM	CR4461
10	277983	7919518	500	-55	276.5	112.99	SVM	CR4461
11	277982	7919357	500	-60	256.5	46.18	SVM	CR4461
12	277970	7919397	500	-55	281.5	51.82	SVM	CR4461
13	277993	7919374	500	-70	281.5	68.12	SVM	CR4461
14	278053	7919363	500	-90	0	98.15	SVM	CR4461
15	278047	7919302	500	-90	0	82.6	SVM	CR4461
16	278000	7919307	500	-90	0	37.19	SVM	CR4461
17	278061	7919424	500	-90	0	98.76	SVM	CR4461
18	278001	7919432	500	-90	0	74.37	SVM	CR4461
19	277890	7919529	500	-90	0	90.98	SVM	CR4461
20	277925	7919592	500	-90	0	107.29	SVM	CR4461
21	277930	7919656	500	-90	0	123.14	SVM	CR4461
22	277989	7919517	500	-90	0	122.53	SVM	CR4461
23	277926	7919346	500	-90	0	30.94	SVM	CR4461
24	277964	7919340	500	-90	0	46.33	SVM	CR4461
DR1	277911	7919926	500	-60	256.5	151.35	Shell	5474
DR2	277977	7919737	500	-60	256.5	157.3	Shell	5474
DR3	278580	7919881	500	-60	255.5	150.55	Shell	5474
DR4	278073	7919554	500	-60	254.5	260.85	Shell	5474
DR5	277520	7919627	500	-60	256.5	150	Shell	5474

3.4 Sampling and Assaying

A previous data compilation review carried out by Superior found that the sampling and assaying of the drill core by Silver Valley Minerals (SVM) were not ideal for Mineral Resource estimation work.

The geochemical method of analysis used for many of the samples was less precise than methods used today.

The review by Superior also found the approach to sampling intervals by SVM was not ideal, as significantly smaller intervals were used when high grade copper was present, rather than a fixed interval approach.

A highest assay from the historical drilling was 31.1% copper over an interval of 0.76 metres and was recorded in hole 4 from 56.39 metres downhole.



Copper mineralisation intervals from the historical drilling within the Exploration Target area average above 10 metres true width and range in size from approximately 5 to 20 metres true width.

Table 2 - Wyandotte Copper - Drill Hole Intersections

Hole	From M	To M	Cu %	Interval (m)	Lode	East_MGA	North MGA	RL
1	21.34	42.82	1.52	21.48	Main	277919.993	7919393.465	477.316
1	45.72	50.29	0.58	4.57	FW	277909.043	7919390.836	466.055
2	22.86	24.38	0.63	1.52	HW	277941.196	7919468.633	479.544
2	27.43	30.18	0.2	2.75	HW	277938.675	7919468.028	475.054
2	37.34	38.4	0.32	1.06	HW	277934.268	7919466.97	467.204
3	3.05	22.86	0.72	19.81	Main	277926.433	7919369.776	490.839
3	27.13	30.78	0.55	3.65	FW	277915.347	7919372.032	479.526
4	0.3	6.1	0.27	5.8	HW	277945.053	7919429.081	497.737
4	8.66	10.82	0.33	2.16	HW	277940.521	7919430.003	493.113
4	30.61	32.41	0.22	1.8	HW	277925.436	7919433.072	477.719
4	51.82	66.29	3.04	14.47	Main	277906.35	7919436.955	458.242
5	19.56	30.18	4.05	10.62	Main	277939.092	7919383.374	479.628
6	10.67	11.58	1.2	0.91	HW	277939.297	7919415.132	490.887
6	36.09	53.44	0.43	17.35	Main	277920.389	7919418.979	463.331
7	64.62	66.45	0.32	1.83	HW	277931.905	7919455.574	446.317
7	81.08	87.17	1.41	6.09	Main	277921.457	7919457.7	431.089
8	22.71	40.84	2.88	18.13	Main	277958.39	7919379.997	470.141
9	37.49	48.77	0.36	11.28	HW	277958.758	7919471.522	464.67
10	65.53	77.11	0.35	11.58	HW	277942.745	7919522.781	441.578
10	95.1	109.12	1.7	14.02	Main	277925.199	7919524.78	416.356
11	15.24	18.29	0.4	3.05	HW	277974.319	7919355.053	485.481
11	28.04	41.45	1.26	13.41	Main	277965.578	7919352.954	469.91
12	37.19	46.54	0.8	9.35	Main	277946.439	7919401.457	465.706
13	37.19	43.28	0.26	6.09	Main	277979.535	7919376.544	462.191
16	6.1	9.14	0.32	3.04	HW	277999.59	7919307.47	492.38
16	32	33.53	0.31	1.53	HW	277999.59	7919307.47	467.235
17	7.62	9.14	0.12	1.52	HW	278060.5	7919424.32	491.62
19	18.29	21.34	0.72	3.05	HW	277889.87	7919528.52	480.185
19	26.52	29.69	0.68	3.17	HW	277889.87	7919528.52	471.895
20	70.1	74.68	1.36	4.58	Main	277924.71	7919592.18	427.61
20	92.2	97.75	0.26	5.55	FW	277924.71	7919592.18	405.025
21	9.14	12.19	0.42	3.05	HW	277929.56	7919656.07	489.335
21	21.64	23.16	0.37	1.52	HW	277929.56	7919656.07	477.6
21	51.82	81.08	0.47	29.26	Main	277929.56	7919656.07	433.55
22	60.96	73.15	0.36	12.19	HW	277989.48	7919517.25	432.945
22	85.34	88.39	0.48	3.05	HW	277989.48	7919517.25	413.135
23	1.52	6.1	0.33	4.58	Main	277925.88	7919345.9	496.19
24	18.29	34.29	1.65	16	Main	277964.29	7919339.65	473.71
DR1	84.8	86.8	0.49	2	ND	277866.579	7919916.775	427.302
DR1	91.8	94.55	0.29	2.75	ND	277862.448	7919915.901	421.256
DR2	58.4	61.83	0.75	3.43	Main	277947.973	7919729.613	447.939
DR2	88.55	94.15	0.22	5.6	FW	277932.787	7919725.967	420.889
DR2	125.2	126.35	0.97	1.15	FW	277915.392	7919721.411	391.544
DR4	123.45	124.74	0.28	1.29	HW	278013.294	7919532.594	393.047



4. The Estimation Process

The estimation process involved data compilation of the drilling data. This was followed by sectional interpretation of the drilling and surface information. The sectional outlines were then wireframed together and Block Modelled. A total of four estimate scenarios were generated with the scenarios giving different interpretation and latitude to the estimation process. The general processes used are described in detail below.

4.1 Data Compilation

The data compilations were carried out in previous work conducted by competent persons working for Superior.

A data compilation review carried out by Superior found that the sampling and assaying of the drill core by Silver Valley Minerals was not ideal.

Data validation for this report was carried out by the inspection of the previous reports dating back to the earliest drilling. Further data validation processes were also carried out in Micromine mining software to make the data ready for use.

4.2 Sectional Interpretation

Previous interpretations done by Superior were used as a guide to the sectional interpretations used for this Exploration Target estimate, together with the relevant drill hole geology and surface geology information.

A review of the drill hole geological information showed that the mineralisation transcends the geological rock types in many places. Also, the past logging does not clearly separate out the alteration zones in the primary logging (refer Section 3.1 for further details).

Sectional interpretations were made of all zones of mineralisation displaying good continuity. A grade cut-off of 0.25% copper was used generally for the intersections.

Internal waste intervals and a minimum intersection grades were varied for the various scenarios. Some of the models included more of the lower grade copper border of mineralisation than in others and hence these models generally included more intersections below 0.7 % copper.

Any comparison from section to section may contain some risk as to whether the most obvious interpretation is correct. In the case of Wyandotte, the mineralisation may be faulted out in certain areas and the nature of these structural controls is not yet fully ,understood from the previous drilling.

Section to section interpretations were made in 3D using Micromine mining software.

4.3 Wireframing

The wireframing process involves a 3D interpretation of the way in which the sectional outlines are joined together. This process is open to some level of interpretation and as mentioned above, some faulting out of the mineralisation may also be occurring, however in general the sections show reasonably consistent shapes.

Where more than one simple interpretation can be made, it will only significantly impact on the estimate where the other interpretations would significantly change the tonnage of the Exploration Target. The Exploration Target is expressed as a range in terms of tonnages and grades.

The wireframing of the zones indicated that some of the previous deeper holes drilled by Silver Valley Minerals (SVM) may not have been drilled deep enough to intersect the main mineralisation zone. An apparent flexure in the mineralisation zone seems to indicate these holes may have missed their intended targets. Additional to this the SVM holes were not downhole surveyed, so the exact paths of the holes cannot be certain.



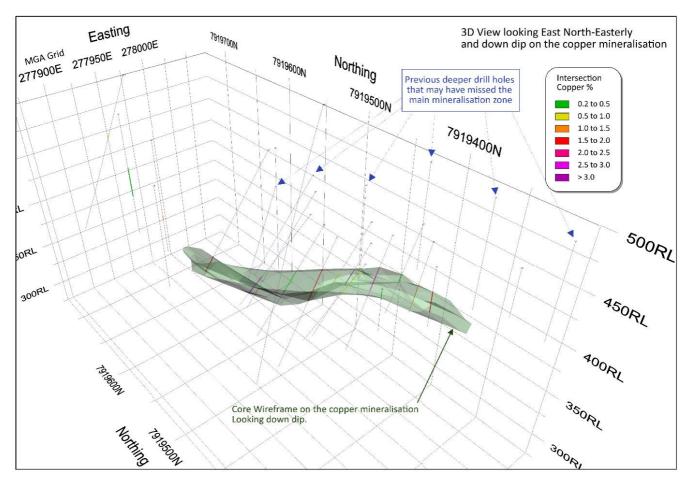


Figure 4. 3D view showing down dip view of copper mineralisation wireframe, this view shows that a number of the deeper historic drill holes may have missed the main copper mineralisation zone at depth.

4.4 Block Modelling

Once wireframes were completed block models were used to make tonnage and grade estimates of the modelled copper mineralisation.

A search criteria of 90 metres to 100 metres was used for the estimates. The assays used in the estimations were filtered from within the respective wireframed zones of the copper mineralisation. An inverse power of 3 was used to more closely map the grade distributions in 3D (somewhat similar to contouring in 3D). This will reflect the grade fluctuations in the mineralisation near the drill holes, but will still result in adequate averaging of the zones in-between and along dip.

As part of the cross checking, inspections of the created grade blocks against the sectional and long section view reflected a good fit with the grade fluctuations in the drilling. The mineralisation model wireframes were used to allocate the proportions of the blocks that lie within the wireframe, to allow estimation of the tonnes and grade.

The results of the block modelling scenarios are show in tables in Section 2. As an additional check to these block models, wireframe estimates were used to cross check the block model volumes. The comparison showed the volumes to be a close match.



A comparison between the global Block Model and Wireframe volumes

Location	Block Model Volum	e Wirefram	e Volume
Wyandotte So	cenario 1 (May 2020)	179,041 m ³	179,171 m ³
Wyandotte So	cenario 2 (May 2020)	153,732 m ³	153,604 m ³
Wyandotte So	cenario 3 (May 2021)	180,744 m ³	180,607 m ³
Wyandotte So	cenario 4 (May 2021)	317,510 m ³	317,479 m ³



APPENDIX 3

JORC Code, 2012 Edition – Table 1

Section 1 Sampling Techniques and Data

(Criteria in this section apply to all succeeding sections.)

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (e.g. 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. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. 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 (e.g. '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 (e.g. submarine nodules) may warrant disclosure of detailed information. 	 Information relating to historical results relies on data contained in reports submitted to the Queensland Department of Natural Resources and Mines as part of the Company Report System attaching to the grant of Exploration Permits. The sampling techniques, where reported, used standard industry approaches. Assaying of samples was completed by commercial laboratory methods that were appropriate at the time the samples were collected. Sample intervals of 4m were commonly used for initial determination of the presence of copper by a geochemical method followed by more detailed sampling of mineralised intervals at usually 1m intervals using a more precise method. Whilst it is not possible to determine the reliability of historical assay results, no issues arose during compilation and interpretation of the results that would suggest that the assay results were not reasonable.
Drilling techniques	 Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g. 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.). 	 Historic Drilling Drill hole data was obtained from historic diamond core drill holes. Data from RC holes was not relied on.



Criteria	JORC Code explanation	Commentary
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 Historic Drilling Recoveries for the diamond drill holes were not recorded.
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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc.) photography. The total length and percentage of the relevant intersections logged. 	 Geological logging of most of the drill holes is available in the Company Report System. The available logging is of a good standard. The logging is generally of a qualitative nature. No core photography is available in the reports.
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. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	The diamond drill core samples were collected from halved core.
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. For geophysical tools, spectrometers, handheld XRF 	 Historic Assaying Sampling and assaying techniques used during various phases of the previous drilling were done by commercial laboratories using industry standard procedures used at the time of drilling.



Criteria	JORC Code explanation	Commentary
	 instruments, etc., the parameters used in determining the analysis including instrument make and model, reading times, calibrations factors applied and their derivation, etc. Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established. 	It is unknown in detail what quality control procedures were adopted.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 Historic Sampling To date, no dedicated twinned holes have been drilled by Superior on the historic drill holes. Most of the historic drill hole data was captured and stored on paper. The compilation of that data in digital form has been completed by the Competent Person.
		 No adjustments have been made to historical sample assay data as there was no apparent reason for such adjustment.
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. Specification of the grid system used. Quality and adequacy of topographic control. 	 Historic Drilling Terra Search undertook rehabilitation work on all historic drill holes in 2002. During this work they recorded GPS coordinates for most of the drill hole locations (Eastings and Northings). No data was picked up in relation to RLs. These GPS locations have been used along with a variety of old drill hole plots to establish reliable locations in MGA coordinates for the purpose of estimating the Exploration Target (refer section 3.3; Appendix 2).
		 Although no RL data is currently available for the drill hole collars, the area is very flat, and an arbitrary RL of 500 metres has been used for all holes. This is sufficient for the Exploration Target estimate, however RL data will need to be collected when the prospect is drilled by Superior.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. 	Historic Drilling ■ Drill hole spacing is variable at the Wyandotte area.



Criteria	JORC Code explanation	Commentary
	Whether sample compositing has been 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. 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. 	 Historic Drilling The orientation of the drill holes is generally ideal for reporting of the intersection results. No orientation sample bias has been identified at this stage.
Sample security	The measures taken to ensure sample security.	Historic Drilling Sample security measures are unknown.
Audits or reviews	 The results of any audits or reviews of sampling techniques and data. 	 No audits or reviews of the sampling techniques and data have been undertaken to date.

Section 2 Reporting of Exploration Results

(Criteria listed in the preceding section also apply to this section.)

Criteria	JORC Code explanation	Commentary
Mineral tenement and	 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 security of the tenure held at the time of reporting along with any known impediments to obtaining a licence to operate in the area. 	• The areas reported lie within Exploration Permit for Minerals 25691 and held 100% by Superior.
land tenure status		Superior holds much of the surrounding area under granted exploration permits.
		• The relevant land has been dedicated as a stock route.
		• Superior has agreements or other appropriate arrangements in place with native title parties with respect to work in the area.
		• No regulatory impediments affect the relevant tenements or the ability of Superior to operate on the tenements.



Criteria	JORC Code explanation	Commentary
Exploration done by other parties	 Acknowledgment and appraisal of exploration by other parties. 	 All historic drilling reported and used for estimating the Wyandotte Exploration Target were conducted by Silver Valley Minerals and Shell Minerals Exploration.
		 All historic drilling reported in this report has been completed and reported in accordance with the current regulatory regime.
		 Compilation in digital form and interpretation of the results of that work in digital form has been completed by a Competent Person.
Geology	Deposit type, geological setting and style of mineralisation.	 The style of mineralisation at Wyandotte is uncertain due to insufficient exploration work performed to date. Previous interpretations speculate that the copper mineralisation is intrusive related mineralisation that has been remobilised to its current position. Petrological analysis work carried out for MIM Exploration in 2002 suggested that the copper mineralisation may be intrusive (porphyry?) related but did not exclude that it could be of volcanogenic massive sulphide (VMS) origin. Superior has not yet carried out any petrological work on the Wyandotte copper mineralisation.
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: easting and northing of the drill hole collar elevation or RL (Reduced Level) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. 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. 	 Drill hole collar and significant intersection tables are set out in sections 3.3 and 3.4 of Appendix 2 to this report.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high grades) and cut-off grades are usually Material and should be stated. 	 Exploration results are reported as a length weighted average of all the assays of the hole intersections. No top cutting has been applied to the exploration results.
	 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 	No metal equivalent values are reported.



Criteria	JORC Code explanation	Commentary
	 typical examples of such aggregations should be shown in detail. The assumptions used for any reporting of metal equivalent values should be clearly stated. 	
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 (e.g. 'down hole length, true width not known'). 	Mineralisation widths reported in drill hole logs are near true mineralisation widths.
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. 	Included.
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. 	 Drill hole collar and significant intersection tables are set out in sections 3.3 and 3.4 of Appendix 2 to this report.
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. 	• Nil.
Further work	 The nature and scale of planned further work (e.g. 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. 	 Subsequent to the Wyandotte Exploration Target estimate, a work program planned for 2021 will include: 14 hole, 1,075m RC and diamond core drilling program Metallurgical studies Field mapping Ground-based geophysical surveying