

# Market Update



24 March 2025

## Highlights

### Cobalt Blue Holdings Limited



ASX Code:

**COB**

#### Commodity Exposure:

**Cobalt, Copper & Sulphur**

#### Directors & Management:

**Robert Biancardi** Non-Exec Chairman  
**Hugh Keller** Non-Exec Director  
**Joe Kaderavek** CEO & Exec Director  
**Kelvin Bramley** CFO & Company Secretary

#### Capital Structure:

Ordinary Shares at 24/03/2025: **439.5m**  
Unlisted options/rights: **52.0m**  
Market Cap (undiluted): **\$26.8m**  
Share Price:  
Share Price at 24/03/2025: **\$0.061**

#### Cobalt Blue Holdings Limited

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## Halls Creek Scoping Study Commences and Refinery Update

### KEY POINTS

#### Halls Creek Project

- Cobalt Blue Holdings Limited ('COB' or 'the Company') (ASX: COB) recently acquired a 51% beneficial interest in the Halls Creek Project ('Halls Creek' or 'the Project') via an earn-in agreement (refer COB's ASX announcement dated 18 February 2025).
- The Project hosts two major deposits with existing Mineral Resource estimates containing a combined 89kt copper (Cu), 69kt lead (Pb), 326kt zinc (Zn), 9.2Moz silver (Ag) and 45koz gold (Au), including:
  - **Sandiego** – Total of 4.1Mt (3.7Mt Indicated / 0.4Mt Inferred) at 1.4% Cu, 0.4% Pb, 4.2% Zn and 25g/t Ag for 56kt contained Cu, 18kt Pb, 175kt Zn, 3.3Moz Ag, and 25koz Au; and
  - **Onedin** – Total of 4.8Mt (Indicated) at 0.7% Cu, 1.1% Pb, 3.1% Zn and 38g/t Ag for 33kt contained Cu, 51kt Pb, 151kt Zn, 5.9Moz Ag and 20koz Au.
- Under the earn-in agreement COB has the right (but not the obligation) to increase its interest in the Project to 75% subject to satisfying certain expenditure thresholds.
- COB has completed a comprehensive desktop review (the 'Review') of Halls Creek and identified development options to be advanced via a Scoping Study—forecast for completion in or around June 2025:
  - The Review included an extensive compilation of historical metallurgical testwork demonstrating that high metal recoveries are achievable.
  - COB intends to advance flowsheet development using two separate processing pathways, with treatment of:
    - Oxide / transition mineralisation via acid leaching (heap leach)
    - Sulphide mineralisation via flotation
  - Mine scheduling will nominally evaluate a proposed process plant with a feed capacity of 700–800ktpa.

#### Kwinana Cobalt Refinery Update

- With 80% of the detailed plant engineering completed, the Kwinana Cobalt Refinery ('KCR') is advancing through the final stages to support a Final Investment Decision ('FID').
- Permitting has progressed through public consultation period and is being assessed by the Western Australian Department of Water and Environmental Regulation.
- COB was pleased to host our potential partner, Iwatani, at the Broken Hill Technology Development Centre in early March.

# Halls Creek Project

## COB to Commence 2025 Scoping Study

The Sandiego and Onedin deposits at Halls Creek have been subject to previous economic evaluations and COB has now completed a comprehensive Review of these evaluations and related data.

The Review has identified options for potential commercial development of the Sandiego and Onedin deposits which are to be advanced via a Scoping Study (the 'Study'). The Study will capitalise on the extensive body of historical work delivered by over A\$20 million of exploration investment undertaken by previous owners and partners.

The Study will be completed by the Company's technical team with engagement of external consultants for select disciplines. Specifically, the Study will provide a preliminary economic assessment of the project and COB expects to have completed the Scoping Study by June 2025.

## Acquisition Rationale

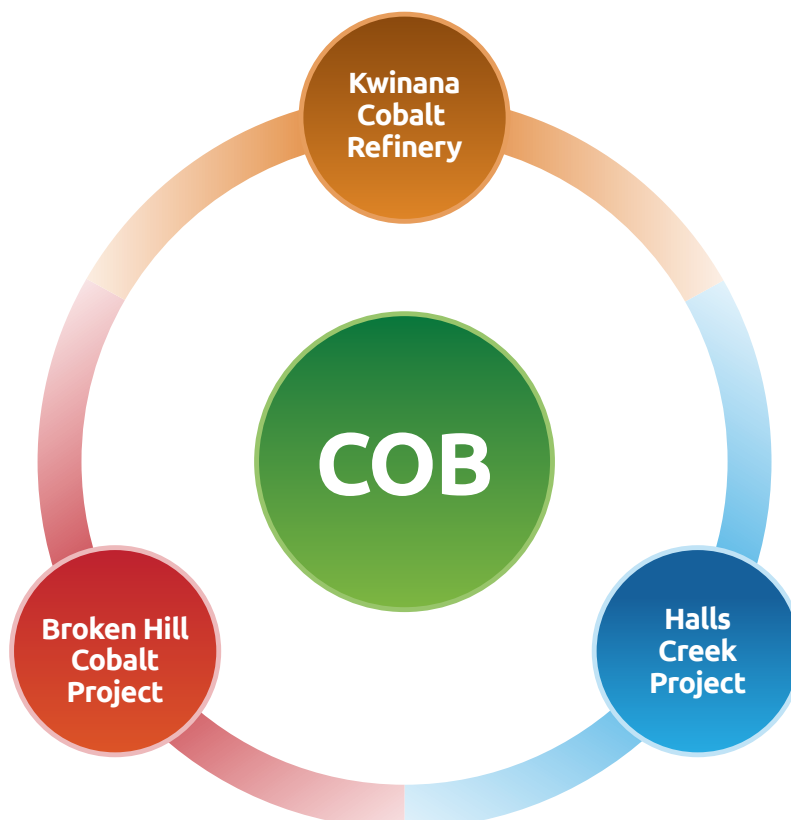
While remaining committed to our current project pipeline, COB actively seeks assets that align with our strategy and expertise. With substantial work already completed, Halls Creek strengthens our portfolio for two key reasons, as follows:

**Near-term cash flow:** With +40 years of groundwork completed, COB is ready to advance Halls Creek, backed by our team's expertise in metallurgical innovation and resource project development. This positions the Project for rapid advancement into an operational asset with near-term cash flow.

**Commodity cycle resilience:** The Project expands our exposure to metals such as copper, zinc, lead, silver, and gold. This diversification strengthens our ability to weather price swings, optimise capital allocation, and seize new opportunities in shifting market conditions.

The recent recovery in cobalt prices aptly highlights cobalt as a cyclical commodity subject to market forces that can rapidly influence supply and demand dynamics. The rapid +60% price rebound in recent weeks is clearly a reaction to a restriction of near-term supply availability in an otherwise saturated market. Although the length of supply tightness is difficult to anticipate, it serves as a reminder that the 2.5-year-long price decline was a supply-driven event. Demand for cobalt remains well above historical trends, and as supply growth normalises, prices may potentially be pressured back toward long-term averages. With progressed cobalt assets, COB remains well positioned to benefit from any such upturn in cobalt markets.

Figure 1 – COB's portfolio comprises a compelling mix of assets across strategic commodities critical to the global economy



## Desktop Review

The Sandiego and Onedin deposits at Halls Creek have been subject to previous economic evaluations COB has now completed a comprehensive Review of these evaluations and related data.

A summary of key outcomes of the Review is provided.

### Metallurgical Factors

An extensive compilation of historical metallurgical testwork has been completed. The previous testwork programs broadly considered the delineation of dominant mineralisation styles differentiated by oxidation state and major element composition (nominally copper and zinc zones) reflective of the domains used to constrain the Mineral Resource estimates.

Previous testwork indicated high metal recoveries are achievable with several processing options evaluated to maximise project economics. Based on these results, COB will advance flowsheet development, evaluating the following proposed processing pathways.

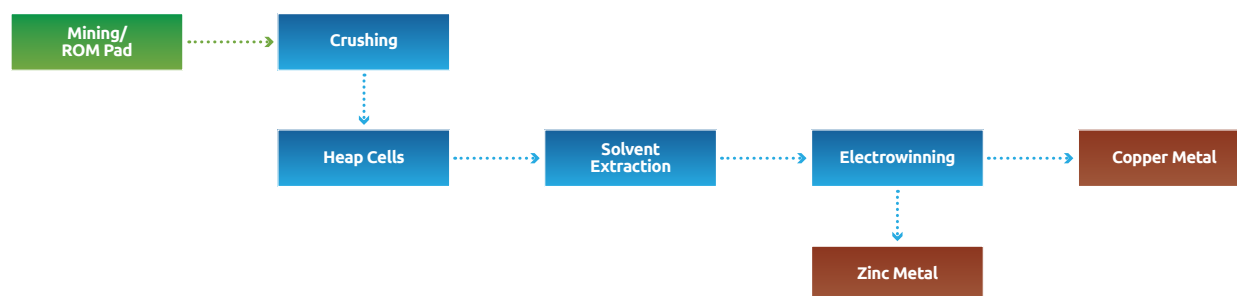
- **Treatment of oxide / transition mineralisation via acid leaching (heap leach)**

Oxide – transition material is delivered to the processing plant and crushed to a desired particle size for stockpiling on the heap leach pad. A leaching solution is applied to the heap leach pad and leaches out the target metals from the material. The leach solution is transferred over to a solvent extraction circuit where copper and zinc are selectively extracted and processed via electrowinning to recover copper and zinc metals.

Initial acid leaching testwork focused on copper extraction and achieved recoveries of 70–75%. The results of the acid leach testwork concluded that heap leaching could be a viable processing route for the oxide material. COB proposes to conduct leaching testwork investigating recovery of copper and additional metals including zinc, silver, gold and cobalt. The economic reclamation of metals within the oxide layer is considered an important step to providing the Project with a near term, lower capital intensity path to first operating cashflows.

The block flow diagram for oxide / transition mineralisation processing is shown in Figure 2.

Figure 2 – Preferred process flowsheet for oxide / transition mineralisation



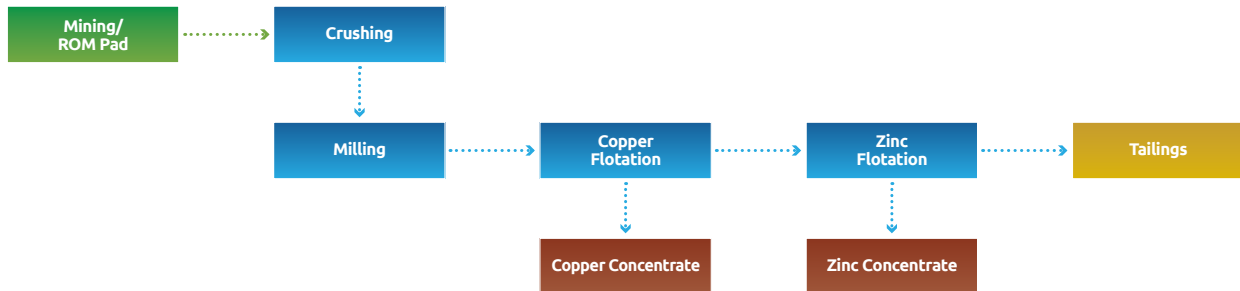
- **Treatment of sulphide mineralisation via flotation**

Crushed material feeds into a mill, which reduces it to a target particle size suitable for flotation. Copper is recovered via flotation through a series of cell stages including rougher, cleaner and scavenger circuits. The copper concentrate produced is dewatered and filtered. Tailings produced from the copper flotation circuit are transferred to the zinc flotation circuit for zinc recovery. Zinc concentrate produced is dewatered and filtered. Tailings produced from the zinc flotation circuit are dewatered and sent to a tailing storage facility for disposal.

Extensive flotation testwork has been conducted on the sulphide composite samples indicating concentrates can be produced with grades of 25% and 55% for copper and zinc respectively. Metal recoveries showed a copper recovery of >90% and zinc recovery of >80%. COB will initiate further testwork to investigate the application of modern flotation equipment to optimise flotation performance (grade-recovery curve) and capital and operating costs.

The block flow diagram for sulphide mineralisation processing is shown in Figure 3.

Figure 3 – Preferred process flowsheet for sulphide mineralisation



The Project includes two Mineral Resources; Sandiego and Onedin (Figure 4), which have previously been reported in accordance with the JORC Code 2012. As an indication of the proportion of each deposit potentially amenable to the two (2) processing pathways described, the Mineral Resources are respectively summarised in Table 1 and Table 2 below by oxidation state.

Figure 4 – Sandiego and Onedin deposit locations within the broader tenement holding

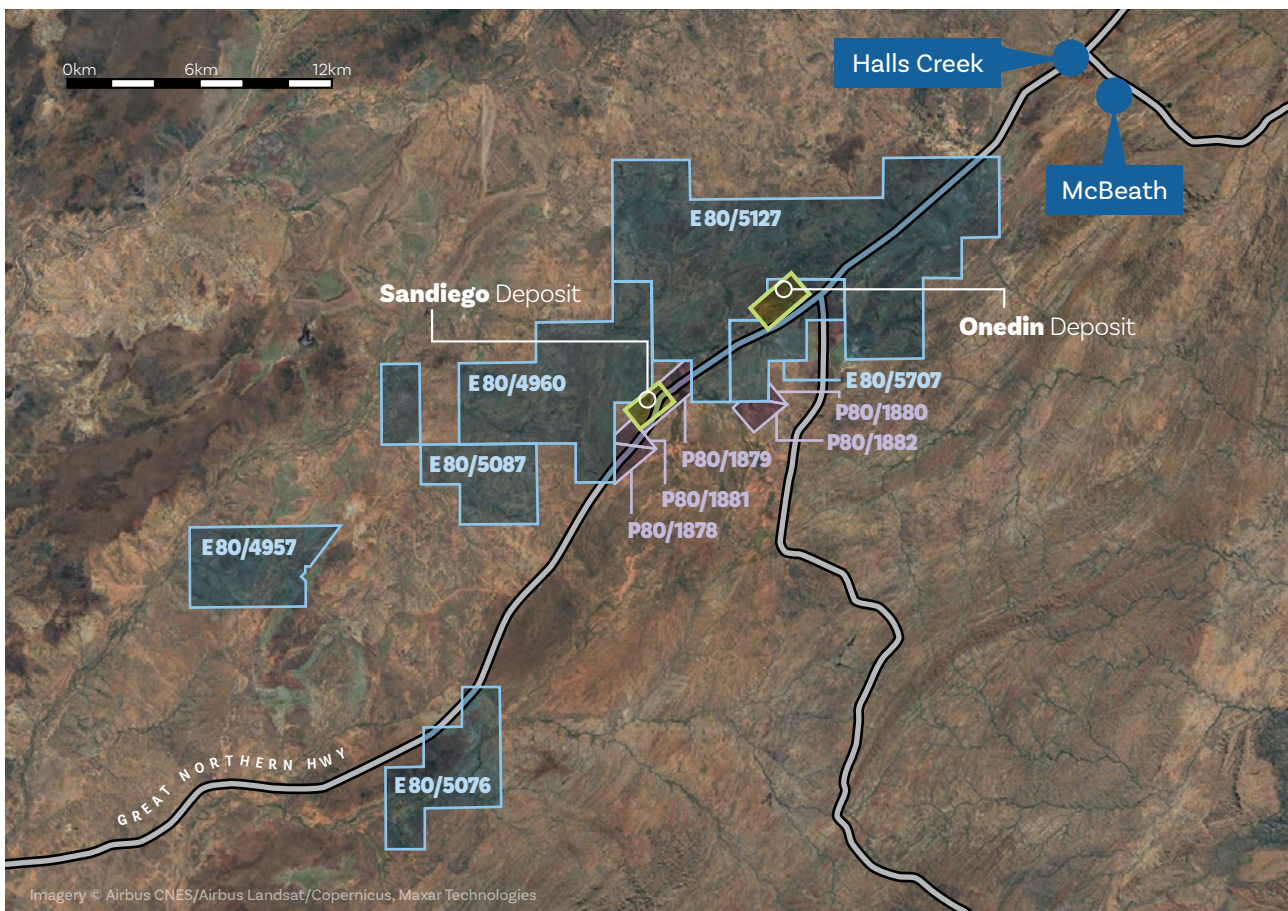


Table 1 – Mineral Resource estimate for the Sandiego deposit detailed by classification.

Classification	Tonnes (Mt)	Grade				
		Copper (%)	Lead (%)	Zinc (%)	Silver (g/t)	Gold (g/t)
<b>Sandiego</b> (Copper zone reported at a 0.8% copper cut-off grade)						
Oxide	0.2	3.5	0.7	0.5	85	0.4
Transition	0.6	2.3	0.1	0.4	11	0.4
Sulphide (Primary)	1.2	1.8	–	1.6	5	0.3
<b>Total</b>	<b>2.0</b>	<b>2.2</b>	<b>0.1</b>	<b>1.1</b>	<b>16</b>	<b>0.3</b>
<b>Sandiego</b> (Zinc zone reported at a 3% zinc cut-off grade)						
Oxide	0.4	0.5	0.9	12.5	75	0.1
Transition	1.0	0.8	0.7	6.0	30	0.2
Sulphide (Primary)	0.7	0.3	0.4	5.9	14	0.1
<b>Total</b>	<b>2.1</b>	<b>0.6</b>	<b>0.7</b>	<b>7.3</b>	<b>34</b>	<b>0.1</b>
<b>Sandiego (Total)</b>						
Oxide	0.7	1.5	0.9	8.4	78	0.2
Transition	1.6	1.4	0.5	3.8	23	0.3
Sulphide (Primary)	1.9	1.3	0.2	3.2	9	0.2
<b>Total</b>	<b>4.1</b>	<b>1.4</b>	<b>0.4</b>	<b>4.2</b>	<b>25</b>	<b>0.2</b>

Note minor rounding errors may have occurred in compilation of this table.

Table 2 – Mineral Resource estimate for the Onedin deposit detailed by classification.

Classification	Tonnes (Mt)	Grade				
		Copper (%)	Lead (%)	Zinc (%)	Silver (g/t)	Gold (g/t)
<b>Onedin</b> (Copper zone reported at a 0.4% copper cut-off grade)						
Oxide	0.8	0.8	1.3	0.6	21	0.2
Transition	0.4	1.6	1.4	0.6	100	0.2
Sulphide	0.2	0.9	0.5	0.4	47	0.1
<b>Sub-total</b>	<b>1.5</b>	<b>1.1</b>	<b>1.2</b>	<b>0.6</b>	<b>47</b>	<b>0.2</b>
<b>Onedin</b> (Zinc zone reported at a 1% zinc cut-off grade)						
Oxide	0.7	0.7	1.4	4.0	26	0.2
Transition	1.4	0.6	1.1	5.3	39	0.1
Sulphide	1.2	0.3	0.6	3.4	32	0.1
<b>Sub-total</b>	<b>3.3</b>	<b>0.5</b>	<b>1.0</b>	<b>4.3</b>	<b>34</b>	<b>0.1</b>
<b>Onedin (Total)</b>						
Oxide	1.5	0.8	1.4	2.2	23	0.2
Transition	1.8	0.8	1.2	4.3	52	0.1
Sulphide (Primary)	1.4	0.4	0.6	2.9	35	0.1
<b>Total</b>	<b>4.8</b>	<b>0.7</b>	<b>1.1</b>	<b>3.1</b>	<b>38</b>	<b>0.1</b>

Note minor rounding errors may have occurred in compilation of this table.

## Historical Testwork Summary

The preferred process flowsheets for each mineralisation type are based on the Review, which assessed extensive testwork programs previously commissioned by Anglo Australian Resources NL ('AAR'). The testwork was completed using eight (8) composite samples derived from four (4) diamond drill holes (Table 3 and Table 4). Testwork focussed on:

- initial acid leaching primarily targeting copper recovery, and
- sequential sulphide flotation considering a range of conditions primarily targeting recovery of copper and zinc.

Table 3 – Composite samples from the Onedin deposit used for metallurgical testwork commissioned by AAR.

Reference	Composite	Drill Hole	Metres		Composite Head Grades	
			From	To	Cu (%)	Zn (%)
A	Onedin Oxide	ORCD45	1.7	14.7	1.57	0.72
B			41.0	54.0		
C			68.0	95.7		
D	Onedin Transition 1 (upper)	ORCD45	116.0	158.0	0.95	13.5
E	Onedin Transition 2 (lower)	ORCD45	181.4	194.0	0.92	8.02
F			204.0	217.0		
G	Onedin Sulphide	ORCD45	240.0	321.0	0.97	4.44

Table 4 – Composite samples from the Sandiego deposit used for metallurgical testwork commissioned by AAR.

Reference	Composite	Drill Hole	Metres		Composite Head Grades	
			From	To	Cu (%)	Zn (%)
H	Sandiego Transition	SRCD24	184.3	201.0	0.53	10.1
I	Sandiego Sulphide Copper	SRCD21	305.0	339.6	1.39	0.33
J		SRCD22	378.0	414.0		
K	Sandiego Sulphide Zinc	SRCD21	282.5	305.0	0.10	5.59
L	Sandiego Sulphide Copper / Zinc	SRCD24	201.0	223.6	0.23	11.86

Figure 5 – Onedin deposit plan illustrating drilling intervals used for metallurgical composites. The extent of oxide, transition and sulphide mineralised domains are shown at 400mRL, 300mRL and 200mRL respectively (approximately 50m, 150m and 250m below surface).

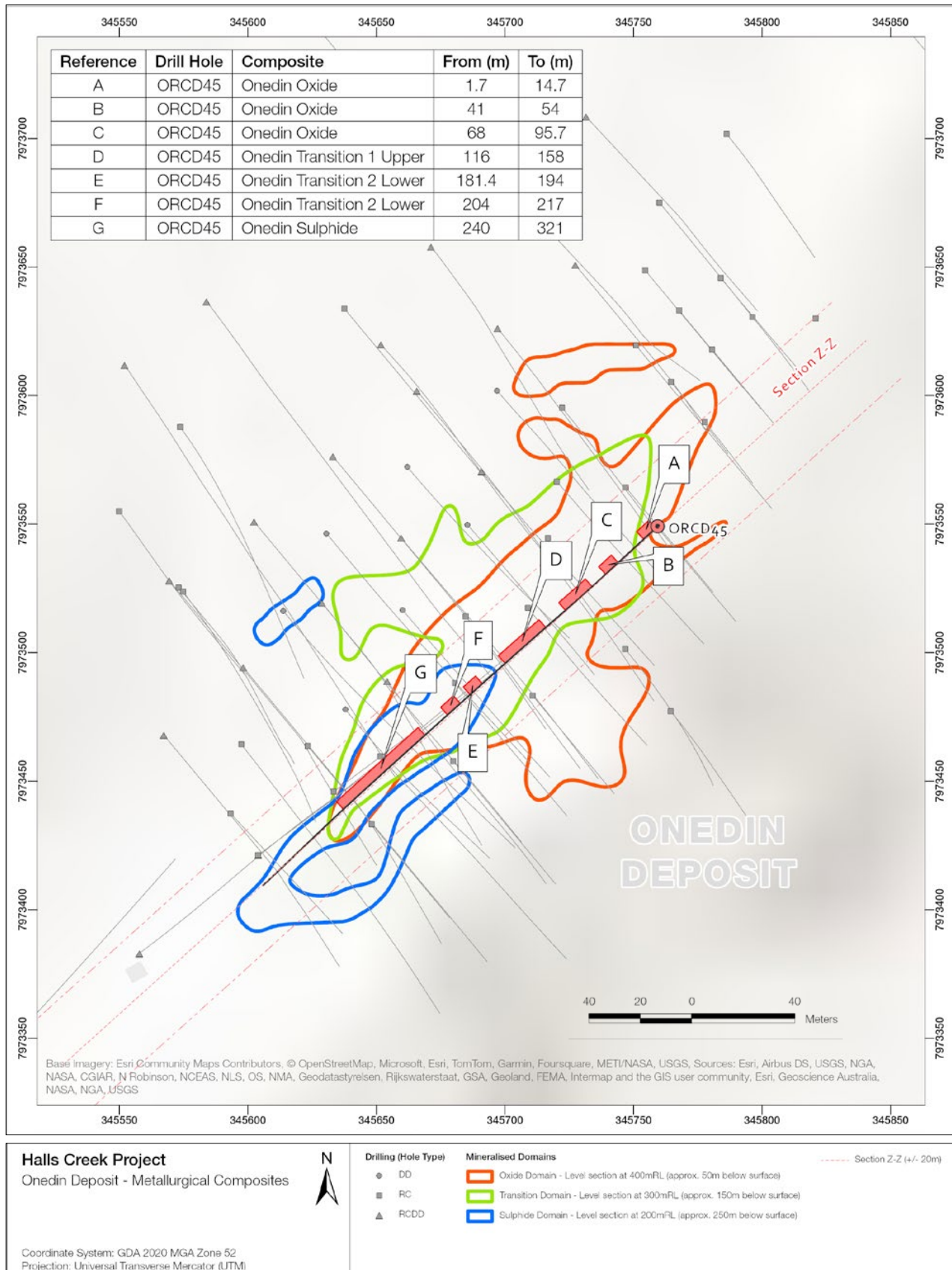


Figure 6 – Onedin deposit long section illustrating drilling intervals used for metallurgical composites

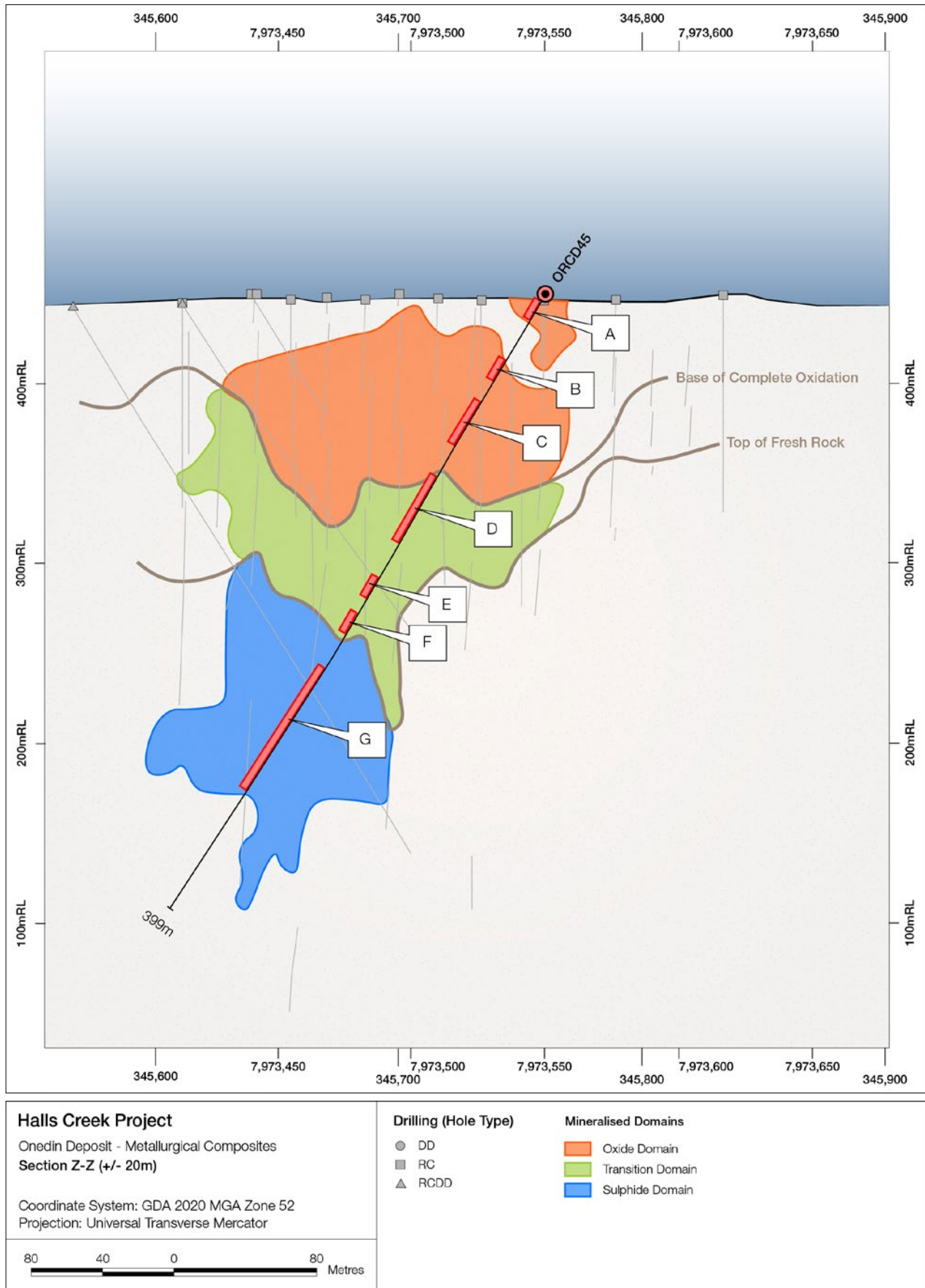




Figure 7 – Sandiego deposit plan illustrating drilling intervals used for metallurgical composites. The extent of transition and sulphide mineralised domains are shown at 100mRL (approximately 320m below surface).

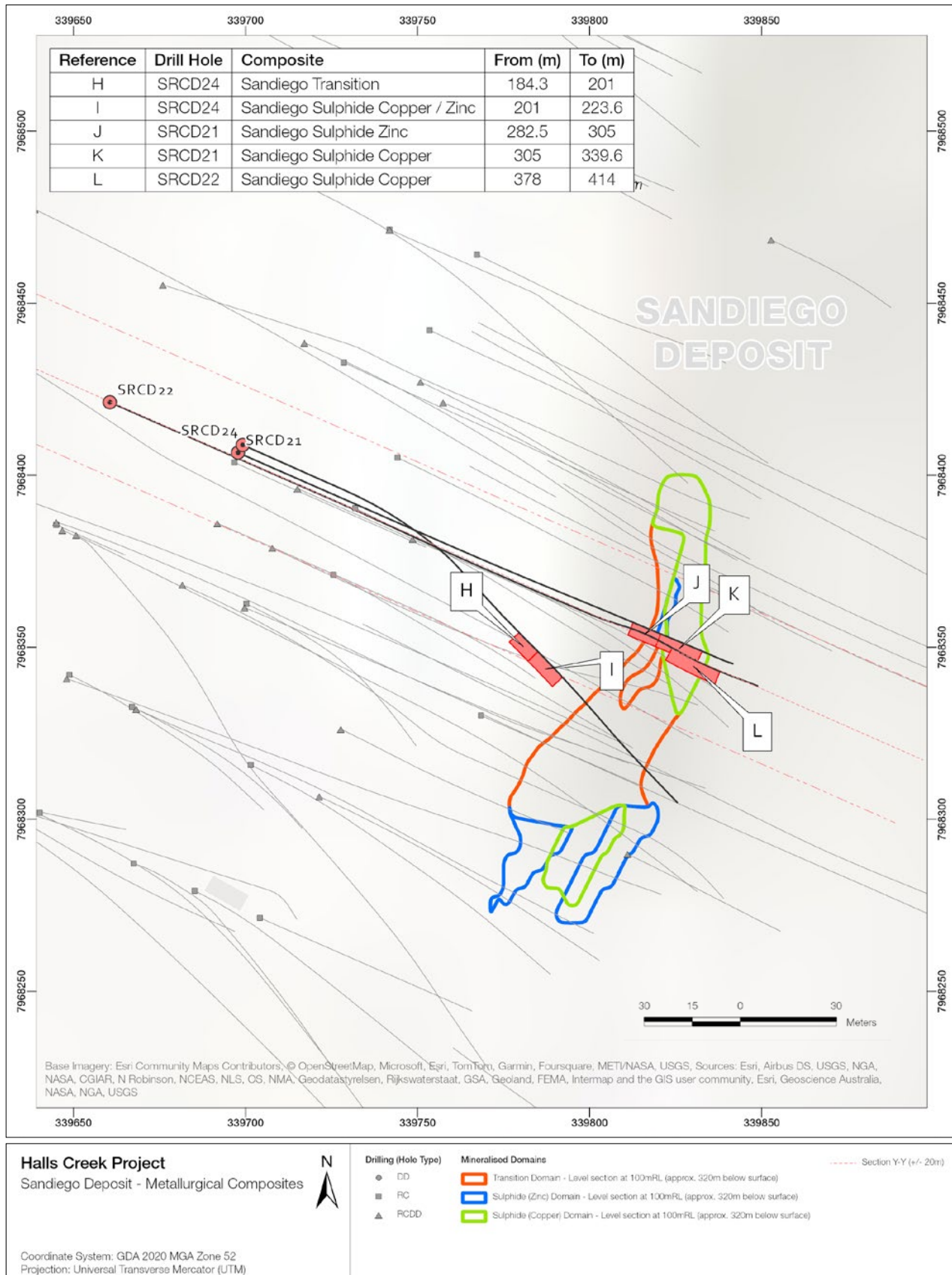
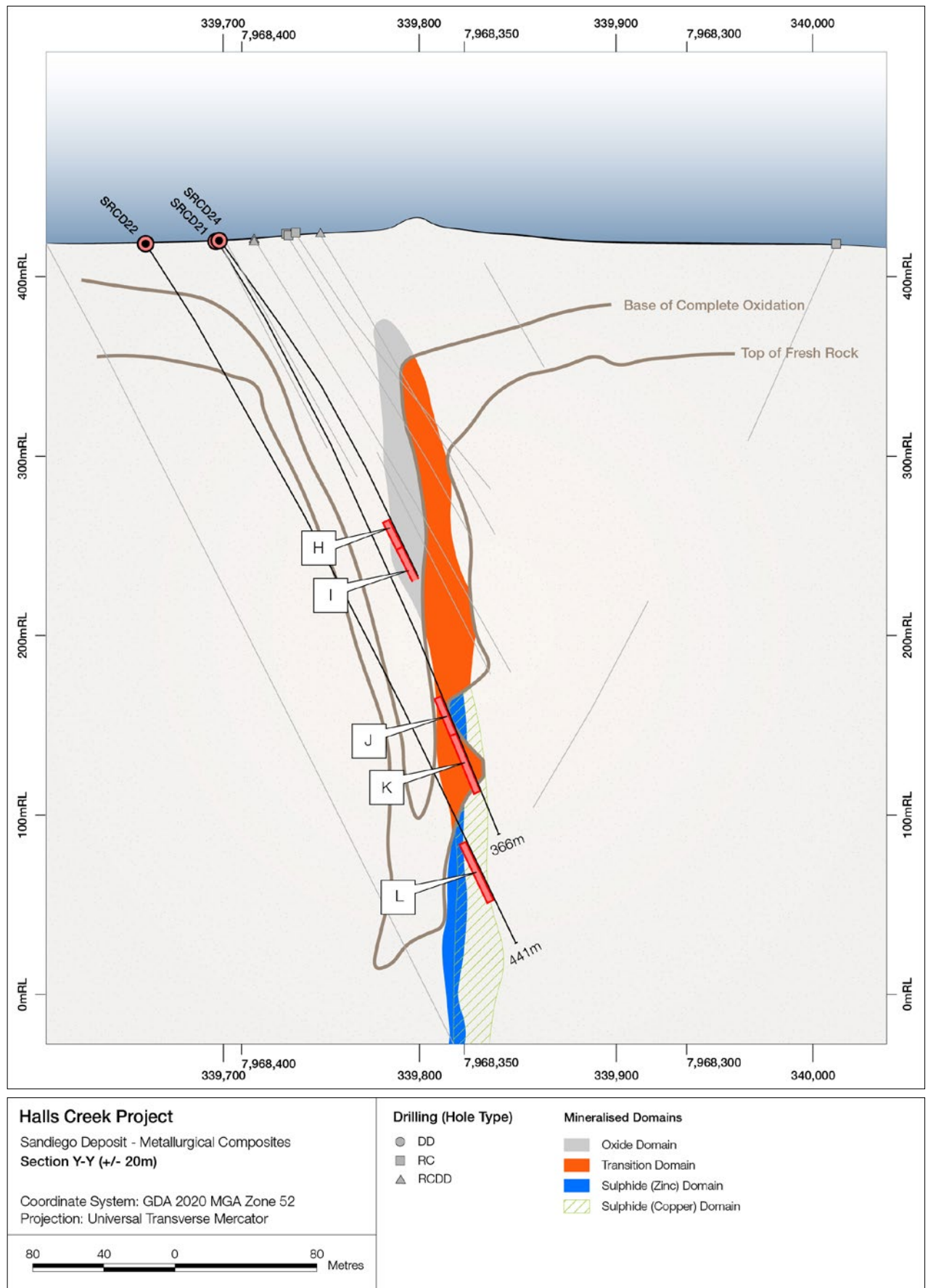


Figure 8 – Sandiego deposit cross section illustrating drilling intervals used for metallurgical composites



As outlined, further metallurgical testwork is proposed to:

- investigate recovery of other metals including zinc, silver, gold and cobalt from oxide-transition material, and
- optimise overall recoveries considering the latest processing technology.

This testwork will follow detailed geometallurgical characterisation to inform future resource domaining having regard to the preferred flowsheets.

## Mining Factors

Economic evaluations undertaken by previous owners and partners have incorporated mining studies contemplating:

- Open cut mining of the Onedin deposit; and/or
- Combined open cut and underground mining of the Sandiego deposit (long hole open stoping)

COB intends to complete the Study considering development of both the Onedin and Sandiego deposits through a combination of open cut and underground mining. Mine scheduling will nominally evaluate a proposed process plant with a feed capacity of 700–800ktpa.

Key optimisation parameters will be informed by the recent Review. With reference to the preferred process flowsheets described herein, the Company will complete a revision of capital ('**CAPEX**') and operating expenditure ('**OPEX**') estimates for both mining and processing.

The Company will also undertake an updated market assessment considering the proposed product suite including copper / zinc concentrates (derived from proposed sulphide feed) and copper / zinc metal (derived from proposed oxide feed). The assessment will inform key potential commercial factors (payabilities, penalties etc.) and provide the basis for pricing inputs noting the most recent mining study undertaken by previous owners and partners considered a price of A\$15,855/t copper and A\$4,189/t zinc compared with current prices around A\$17,000/t copper and A\$4,600/t zinc.

## Growth Potential

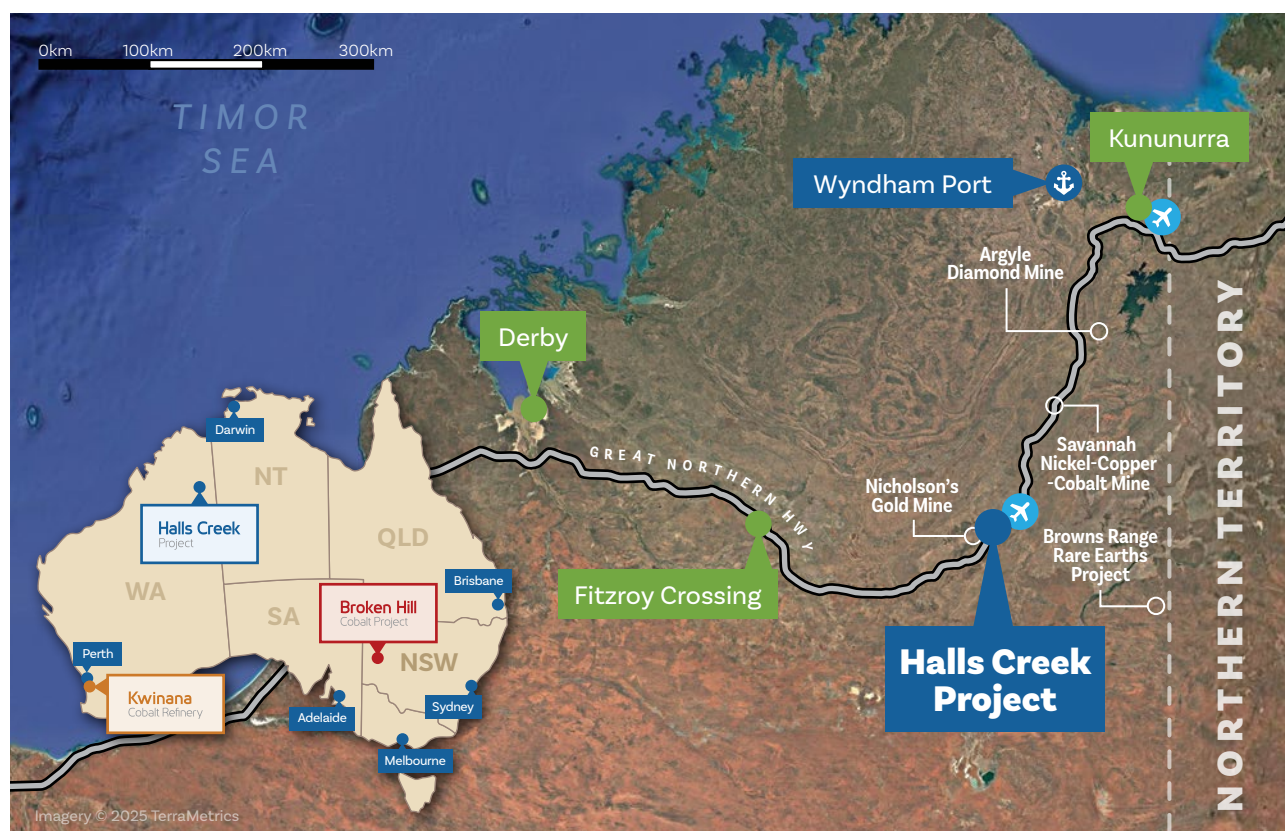
COB is also actively identifying potential opportunities to expand the resource base, thus potentially enlarging the Project's size and/or operating life. Geological modelling undertaken by the previous owners in support of the Sandiego and Onedin Mineral Resource estimates<sup>1</sup> has substantially improved the understanding of structural controls on mineralisation. This insight reveals strong potential for high-grade extensions or repetitions within favourable host rocks and structures near the main deposits and across the broader tenement area

## Halls Creek Background

Halls Creek is located in the Kimberley region of Western Australia; a mature mining jurisdiction with a significant record of resource production including iron ore, mineral sands, rare earths, nickel, copper, cobalt and gold (Figure 7). Located 15 km southwest of the town of Halls Creek (pop. ~3,500), the project comprises two significant deposits, Sandiego and Onedin. The deposits are directly adjacent to the Great Northern Highway which connects the Project to Kununurra and Wyndham Port, respectively some 300 km and 320 km north. Wyndham Port is the only deep-water port between Broome and Darwin servicing exports including crude oil, live cattle, raw mined products, scrap metal and maize from across Northern Australia and produce from the Ord River irrigation area.

<sup>1</sup> The Mineral Resource estimates were independently prepared by ERM Australia Consultants Pty Ltd (formerly CSA Global) and were released to the ASX by COB on 18 February 2025 in the announcement 'COB Diversifies – Major Copper Project Earn In'

Figure 9 – Halls Creek Project – regional location



Halls Creek is inclusive of two existing Mineral Resources including:

- **Sandiego** – 4.1Mt at 1.4% Cu, 0.4% Pb, 4.2% Zn and 25g/t Ag for 56kt contained copper, 18kt lead, 175kt zinc and 3.3Moz silver.
- **Onedin** – 4.8Mt at 0.7% Cu, 1.1% Pb, 3.1% Zn and 38g/t Ag for 33kt contained copper, 51kt lead, 151kt zinc and 5.9Moz silver.

The Mineral Resource estimates were independently prepared by ERM Australia Consultants Pty Ltd (formerly CSA Global) and were originally released to the ASX by COB on 18 February 2025 in the announcement 'COB Diversifies – Major Copper Project Earn In'.

Table 5 – Mineral Resource estimate for the Sandiego deposit detailed by classification.

Classification	Tonnes (Mt)	Grade					Contained Metal				
		Copper (%)	Lead (%)	Zinc (%)	Silver (g/t)	Gold (g/t)	Copper (kt)	Lead (kt)	Zinc (kt)	Silver (Moz)	Gold (Koz)
<b>Sandiego</b> (Copper zone reported at a 0.8% copper cut-off grade)											
Indicated	1.7	2.3	0.2	0.8	18	0.3	39.1	3.4	13.6	0.98	16.4
Inferred	0.3	1.6	–	3.0	5	0.2	4.8	–	9.0	0.05	1.9
Sub-total	2.0	2.2	0.1	1.1	16	0.3	43.9	3.4	22.6	1.03	18.3
<b>Sandiego</b> (Zinc zone reported at a 3% zinc cut-off grade)											
Indicated	2.0	0.6	0.7	7.3	35	0.1	12.0	14.0	146.0	2.25	6.4
Inferred	0.1	0.2	0.1	6.1	10	0.1	0.2	0.1	6.1	0.03	0.3
Sub-total	2.1	0.6	0.7	7.3	34	0.1	12.2	14.1	152.1	2.28	6.7
<b>Total</b>											
Indicated	3.7	1.4	0.5	4.3	27	0.2	51.1	17.4	159.6	3.23	22.8
Inferred	0.4	1.3	0.0	3.8	6	0.2	5.0	0.1	15.1	0.08	2.2
<b>Total</b>	<b>4.1</b>	<b>1.4</b>	<b>0.4</b>	<b>4.2</b>	<b>25</b>	<b>0.2</b>	<b>56.1</b>	<b>17.5</b>	<b>174.7</b>	<b>3.31</b>	<b>25.0</b>

Note minor rounding errors may have occurred in compilation of this table.

Table 6 – Mineral Resource estimate for the Onedin deposit detailed by classification.

Classification	Tonnes (Mt)	Grade					Contained Metal				
		Copper (%)	Lead (%)	Zinc (%)	Silver (g/t)	Gold (g/t)	Copper (kt)	Lead (kt)	Zinc (kt)	Silver (Moz)	Gold (Koz)
<b>Onedin (Copper zone reported at a 0.4% copper cut-off grade)</b>											
Indicated	1.5	1.1	1.2	0.6	47	0.2	16.5	18.0	9.0	2.27	9.7
<b>Onedin (Zinc zone reported at a 1% zinc cut-off grade)</b>											
Indicated	3.3	0.5	1.0	4.3	34	0.1	16.5	33.0	141.9	3.61	10.6
<b>Total</b>	<b>4.8</b>	<b>0.7</b>	<b>1.1</b>	<b>3.1</b>	<b>38</b>	<b>0.1</b>	<b>33.0</b>	<b>51.0</b>	<b>150.9</b>	<b>5.88</b>	<b>20.3</b>

Note minor rounding errors may have occurred in compilation of this table.

## Kwinana Refinery Update

COB and Iwatani are progressing towards a financing decision for the Refinery. Focus remains on the following activities:

- 80% of the detailed plant engineering has been completed with Tetratech.
- A works approval permit application is being assessed by the Department of Water and Environmental Regulation (West Australian Government). The public consultation period for the Works Approval permit has recently closed.
- Offtake negotiations continue. Under 'commercial-in-confidence' agreements, samples of cobalt sulphate are being generated on request at the Broken Hill Technology Centre.
- COB is engaging closely with export credit agencies, commercial banks and potential investors on funding options.

As part of the collaborative relationship, Iwatani visited the Broken Hill Technology Centre in March for a technical workshop.

Figure 10 – Iwatani visit to Broken Hill Technology Centre



## Competent Person's Statements

### Exploration Results

The information in this report that relates to Exploration Results is based on information compiled by Mr Heath Porteous, a Competent Person who is a Member of The Australasian Institute of Mining and Metallurgy (AusIMM). Mr Porteous is employed by Xplore Pty Ltd and engaged on a full-time basis by the Group as Exploration Manager. Mr Porteous has had sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for the Reporting of Exploration Results, Minerals Resources and Ore Reserves (2012 JORC Code). Mr Porteous consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

### Mineral Resources

The information in this announcement that relates to Mineral Resources was reported in the Company's ASX announcement 'COB Diversifies – Major Copper Project Earn In' dated 18 February 2025. The Company confirms that it is not aware of any new information or data that materially affects the information included in that announcement and that all material assumptions and technical parameters underpinning the estimates in that announcement continue to apply and have not materially changed.

## Cobalt Blue Background

Cobalt Blue Holdings Limited is a mining and mineral processing company focussed on the development of a Cobalt-Nickel Refinery in Western Australia, the Halls Creek Project in Western Australia, the Broken Hill Cobalt Project in New South Wales and ReMine+ globally (with a view to global opportunities contained in mine waste). As announced on 18 February 2025, the Company intends to seek shareholder approval to change its name to Core Blue Minerals Limited.

## Forward Looking Statements

This announcement contains "forward-looking statements". All statements other than those of historical facts included in this announcement are forward-looking statements. Where the Company expresses or implies an expectation or belief as to future events or results, such expectation or belief is expressed in good faith and believed to have a reasonable basis. However, forward looking statements are subject to risks, uncertainties and other factors, which could cause actual results to differ materially from future results expressed, projected or implied by such forward-looking statements. Such risks include but are not limited to commodity price volatility, timely completion of project milestones, funding availability, government and other third-party approvals. Readers should not place undue reliance on forward-looking statements. The Company does not undertake any obligation to release publicly any revisions to any "forward-looking statement", unless required by applicable law.

**This announcement was authorised for release to the ASX by the board of Cobalt Blue Holdings Limited.**

For further information, please contact:



Joe Kaderavek

Chief Executive Officer  
Cobalt Blue Holdings

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info@cobaltblueholdings.com

# JORC Code 2012 Edition – Table 1

## Section 1 Sampling Techniques and Data

Criteria	JORC Code Explanation	Commentary
Sampling techniques	<ul style="list-style-type: none"> <li>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.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>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.</li> </ul>	<p><b>Sandiego – Diamond Drilling</b> <b>1995–1996</b></p> <ul style="list-style-type: none"> <li>Diamond drilling was used to obtain core from which intervals averaging 1m in length were sawn to produce samples (typically quarter (25%) core). These samples were crushed, split and pulverised for analysis via atomic absorption spectroscopy (‘AAS’) reporting a limited and variable suite of elements (nominally Cu, Pb, Zn and Ag). Au was variably analysed by fire assay. Details of sub-sampling, lab preparation and digestion techniques are not recorded.</li> </ul> <p><b>2006–2011</b></p> <ul style="list-style-type: none"> <li>Diamond drilling was used to obtain core from which intervals averaging 1m in length were sawn to produce quarter (25%) core or half (50%) core samples from HQ or NQ core respectively. These samples were crushed, split and pulverised to produce a sample for mixed-acid digestion and analysis via Inductively Coupled Plasma – Mass Spectrometry (‘ICP-MS’) or Inductively Coupled Plasma – Optical Emission Spectroscopy (‘ICP-OES’) reporting a variable suite of elements. Au was typically analysed by fire assay using a 40 - 50g charge with an AAS finish. Details of sub-sampling and lab preparation techniques are not recorded.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>Diamond drilling was used to obtain core from which intervals averaging 0.95m in length were sawn to produce half (50%) core samples. These samples were crushed passing -10mm, riffle split and pulverised to produce a sample for mixed-acid digestion and analysis via ICP-OES for a suite of 39 elements. Au was analysed by fire assay using a 30g charge with an AAS finish.</li> <li>The remaining core was retained for archival purposes or metallurgical testwork.</li> </ul> <p><b>Sandiego – RC Drilling</b> <b>1995–1996</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m samples by means of a riffle splitter which were composited into 4m intervals for analysis via AAS reporting a limited suite of elements (nominally Cu, Pb, Zn and Ag). Au was variably analysed by fire assay. Composite samples returning Cu, Pb or Zn &gt;1%, and or Au &gt;1g/t were typically re-assayed at 1m intervals. Details of sample compositing, sub-sampling and lab preparation techniques are not recorded.</li> </ul> <p><b>2006–2008</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 4m composite samples by means of a sample ‘spear’. These samples were crushed, split and pulverised to produce a sample for mixed-acid digestion and analysis via ICP-MS or ICP-OES reporting a variable suite of elements. Au was typically analysed by fire assay using a 40 - 50g charge with an AAS finish. Details of sub-sampling and lab preparation techniques are not recorded.</li> </ul> <p><b>2010–2011</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m samples by means of a cone splitter. These samples were crushed, split and pulverised to produce a sample for mixed-acid digestion and analysis via ICP-OES reporting a variable suite of elements. Au was typically analysed by fire assay using a 50g charge with an AAS finish. Details of sub-sampling and lab preparation techniques are not recorded.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Sampling techniques</b> <i>(continued)</i>		<p><b>2021</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m samples by means of a cone splitter from which up to 3.5kg was pulverised to produce a sample for mixed-acid digestion and analysis via ICP-OES for a suite of 39 elements. Au was analysed by fire assay using a 30g charge with an AAS finish.</li> <li>Unmineralised zones were infrequently composited into 4m intervals for analysis as described above.</li> </ul> <p><b>Onedin - Diamond Drilling</b></p> <p><b>1995-1996</b></p> <ul style="list-style-type: none"> <li>Diamond drilling was used to obtain core from which intervals averaging 1m in length were sawn to produce samples (typically quarter (25%) core). These samples were crushed, split and pulverised for analysis via atomic absorption spectroscopy ('AAS') reporting a limited and variable suite of elements (nominally Cu, Pb, Zn and Ag). Au was variably analysed by fire assay. Details of sub-sampling, lab preparation and digestion techniques are not recorded.</li> </ul> <p><b>2006-2008</b></p> <ul style="list-style-type: none"> <li>Diamond drilling was used to obtain core from which intervals averaging 1m in length were sawn to produce quarter (25%) core or half (50%) core samples from HQ or NQ core respectively. These samples were crushed, split and pulverised to produce a sample for mixed-acid digestion and analysis via ICP-MS or ICP-OES reporting a variable suite of elements. Au was typically analysed by fire assay using a 40 - 50g charge with an AAS finish. Details of sub-sampling and lab preparation techniques are not recorded.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>Diamond drilling was used to obtain core from which intervals averaging 0.96m in length were sawn to produce quarter (25%) core or half (50%) core samples from PQ3 / HQ3 or HQ core respectively. These samples were crushed passing -10mm, riffle split and pulverised to produce a sample for mixed-acid digestion and analysis via ICP-OES for a suite of 39 elements. Au was analysed by fire assay using a 30g charge with an AAS finish.</li> <li>The remaining core was retained for archival purposes or metallurgical testwork.</li> </ul> <p><b>Onedin - RC Drilling</b></p> <p><b>1995-1996</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m samples by means of a riffle splitter which were composited into 4m intervals for analysis via AAS reporting a limited suite of elements (nominally Cu, Pb, Zn and Ag). Au was variably analysed by fire assay. Composite samples returning Cu, Pb or Zn &gt;1%, and or Au &gt;1g/t were typically re-assayed at 1m intervals. Details of sample compositing, sub-sampling and lab preparation techniques are not recorded.</li> </ul> <p><b>2006-2008</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 4m composite samples by means of a sample 'spear'. These samples were crushed, split and pulverised to produce a sample for mixed-acid digestion and analysis via ICP-MS or ICP-OES reporting a variable suite of elements. Au was analysed by fire assay using a 40-50g charge. Details of sub-sampling and lab preparation techniques are not recorded.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>RC drilling was used to obtain 1m samples by means of a cone splitter from which up to 3.5kg was pulverised to produce a sample for mixed-acid digestion and analysis via ICP-OES for a suite of 39 elements. Au was analysed by fire assay using a 30g charge with an AAS finish.</li> <li>Unmineralised zones were infrequently composited into 4m intervals for analysis as described above.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p><b>Sandiego</b></p> <ul style="list-style-type: none"> <li>The Sandiego drilling database comprises drill holes completed from 1995 including 3 diamond drill holes, 53 RC drill holes and 42 diamond drill holes with RC pre-collars ('RCDD') of varying depths. In addition, the database includes 35 drill holes (27 diamond drill holes and 8 RC drill holes) for which no information regarding the date of drilling or details related to drilling techniques is recorded.</li> <li>Between 1995 and 1996, diamond drill holes generally utilised RC pre-collars to an average depth of 141m. Diamond tails were typically completed using HQ3 triple tube, reducing to standard NQ2 on intersection of competent rock. RC drilling utilised standard hole diameters (typically 4.75 – 5.625") though details of bit types were not recorded. Core orientation was completed, where possible, using a Van-Ruth Orientation device.</li> <li>Between 2006 and 2011, diamond drill holes generally utilised RC pre-collars to an average depth of 144m. Diamond tails were typically completed using standard HQ2. RC drilling utilised standard hole diameters (typically 5.25") though details of bit types were not recorded. Core orientation surveys were undertaken as frequently as possible (generally every 12m) though were difficult to maintain in broken ground. Core orientation methods were not recorded.</li> <li>During 2021, diamond drill holes generally utilised RC pre-collars to an average depth of 120m. Diamond tails were typically completed using standard HQ2, reducing to NQ2 to hole completion. RC drilling utilised standard hole diameters (typically 5.5") face-sampling bit. Core was orientated though orientation methods were not recorded.</li> <li>The Mineral Resource block model was prepared using data available as of 7 March 2022 using drilling completed since 1995. Rotary Air Blast ('RAB') and other rotary percussion drill holes were not used in the estimates due to a lack of documentation supporting samples.</li> <li>Two drill holes completed in 2022 are also excluded having been completed post completion of the estimates. These drill holes do not intersect the mineralised domains used to constrain the estimate and therefore are not regarded as material to the estimate.</li> <li>A summary of drill holes and drilling techniques is provided in the following table.</li> </ul>

Year	No. Drill Holes				No. Metres			Drilling Diameters	
	Diamond	RC	RCDD	Total	Diamond	RC	Total	Diamond	RC
1995	–	4	5	9	630.6	1,096.65	1,727.25	NQ2–HQ3	4.75–5.625"
1996	–	6	8	14	1,427.6	1,928.1	3,355.7		
2006*	–	–	4	4	912.65	520.75	1,433.4	NQ2–HQ2	5.25"
2008	–	22	11	33	2,289.8	5,208.4	7,498.2		
2010	2	11	10	23	1,220.1	3,193.9	4,414		
2011	–	3	–	3	–	648	648	NQ2–HQ2	5.5"
2021	1	7	4	12	1,742.58	1,431.33	3,173.91		
<b>Total</b>	<b>3</b>	<b>53</b>	<b>42</b>	<b>98</b>	<b>8,223.33</b>	<b>14,027.13</b>	<b>22,250.46</b>	–	–

\* The drill holes used to obtain the metallurgical composite samples were completed in 2006.

Criteria	JORC Code Explanation	Commentary
<b>Drilling techniques</b>	<ul style="list-style-type: none"> <li>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).</li> </ul>	<p><b>Onedin</b></p> <ul style="list-style-type: none"> <li>The Onedin drilling database comprises drill holes completed from 1995 including 8 diamond drill holes, 41 RC drill holes and 21 diamond drill holes with RC pre-collars ('RCDD') of varying depths. In addition, the database includes 21 diamond drill holes for which no information regarding the date of drilling or details related to drilling techniques is recorded.</li> <li>Between 1995 and 1996, diamond drill holes generally utilised RC pre-collars to an average depth of 154m. Diamond tails were typically completed using HQ3 triple tube, reducing to standard NQ2 on intersection of competent rock. RC drilling utilised standard hole diameters (typically 4.75 – 5.625") though details of bit types were not recorded. Core orientation methods were not recorded.</li> <li>Between 2006 and 2008, diamond drill holes generally utilised RC pre-collars to an average depth of 132m. Diamond tails were typically completed using standard HQ2 or NQ2. RC drilling utilised standard hole diameters (typically 5.25") though details of bit types were not recorded. Core orientation surveys were undertaken as frequently as possible (generally every 12m) though were difficult to maintain in broken ground. Core orientation methods were not recorded.</li> <li>During 2021, diamond drill holes were typically cored from surface using PQ3 triple tube reducing to HQ3 triple tube when intersecting the lower contact of mineralisation. RC drilling utilised standard hole diameters (typically 5.5") face-sampling bit. Core was orientated though orientation methods were not recorded.</li> <li>The Mineral Resource block model was prepared using data available as of 7 March 2022 using drilling completed since 1995. RAB and other rotary percussion drill holes were not used in the estimates due to a lack of documentation supporting samples.</li> <li>Two drill holes completed in 2022 are also excluded having been completed post completion of the estimates. These drill holes do not intersect the mineralised domains used to constrain the estimate and therefore are not regarded as material to the estimate.</li> <li>A summary of drill holes and drilling techniques is provided in the following table.</li> </ul>

Year	No. Drill Holes				No. Metres			Drilling Diameters	
	Diamond	RC	RCDD	Total	Diamond	RC	Total	Diamond	RC
1995	–	22	10	32	759.2	3,918.9	4,678.1	NQ2–HQ3	4.75–5.625"
1996	–	5	6	11	1,004.72	1,661.08	2,665.8		
2006*	1	1	2	4	558.9	383.1	942	NQ2–HQ2	5.25"
2008	–	4	2	6	322.3	1,054	1,376.3		
2021	7	9	1	17	1,627	1,577.7	3,204.7	HQ2/HQ3–PQ3	5.5"
<b>Total</b>	<b>8</b>	<b>41</b>	<b>21</b>	<b>70</b>	<b>4,272.12</b>	<b>8,594.78</b>	<b>12,866.9</b>	–	–

\* The drill holes used to obtain the metallurgical composite samples were completed in 2006.

Criteria	JORC Code Explanation	Commentary
<b>Drill sample recovery</b>	<ul style="list-style-type: none"> <li>■ <i>Method of recording and assessing core and chip sample recoveries and results assessed.</i></li> <li>■ <i>Measures taken to maximise sample recovery and ensure representative nature of the samples.</i></li> <li>■ <i>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.</i></li> </ul>	<p><b>Diamond Drilling</b></p> <ul style="list-style-type: none"> <li>■ Between 1995 and 1996, core recoveries were quantified through measurement of actual core recovered versus drilled intervals. Diamond drilling typically used a HQ3 triple tube configuration to maximise recovery through strongly weathered rock, reducing to standard NQ2 on intersection of competent rock. Core recoveries are recorded for approximately 46% of metres drilled during the respective period and averaged 99%.</li> <li>■ Between 2006 and 2010, core recoveries were quantified through measurement of actual core recovered versus drilled intervals. Diamond drilling typically used standard HQ2 and NQ2 configurations with core loss generally attributed to fault zones characterised by a high fracture frequency. Core recoveries are recorded for approximately 91% of metres drilled during the respective period and averaged 95%.</li> <li>■ During 2021, core recoveries were quantified through measurement of actual core recovered versus drilled intervals. Diamond drilling typically used standard HQ2 / NQ2 and PQ3 / HQ3 triple tube configurations. Core recoveries are recorded for approximately 88% of metres drilled during the year and averaged 94%.</li> <li>■ No relationship between sample recovery and grade has been observed.</li> </ul> <p><b>RC Drilling</b></p> <ul style="list-style-type: none"> <li>■ Between 1995 and 1996, sample recoveries achieved by RC drilling were typically estimated through observation of the volume of the bulk samples. Where recorded the estimates denoted recovery as a range between 0 and 100%. Accepting the inherent subjectivity of the estimates, recoveries generally averaged 100%. Estimated recoveries are recorded for approximately 65% of the RC metres drilled during the respective period.</li> <li>■ Between 2006 and 2011, sample recoveries achieved by RC drilling were estimated through observation of the volume of the bulk samples. Where recorded the estimates denoted recovery as a range between 0 and 100%. Accepting the inherent subjectivity of the estimates, recoveries generally averaged 100%, however estimates are only recorded for a relatively insignificant (1%) proportion of the RC metres drilled during the respective period.</li> <li>■ During 2021, sample recoveries achieved by RC drilling were qualitatively assessed through observation of the volume of the bulk samples. Quantitative estimates were not recorded, with reports indicating recoveries were acceptable.</li> <li>■ No relationship between sample recovery and grade has been observed.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Logging</b>	<ul style="list-style-type: none"> <li>■ <i>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.</i></li> <li>■ <i>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</i></li> <li>■ <i>The total length and percentage of the relevant intersections logged.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ A qualified geoscientist has logged all drill holes (core and chip samples) pertaining to the reported Mineral Resources and exploration results presented herein. The total proportion of logging recorded in the database represents 97% of metres drilled since 1995 (i.e., 33,968m of 35,117m). This logging has been completed to a level of detail considered to accurately support Mineral Resource estimation. The parameters logged include lithology, mineralisation and oxidation. These parameters are both qualitative and quantitative in nature.</li> <li>■ All diamond drill core sampled up to 2006 was relogged by an independent consultant from ERM Australia Consultants Pty Ltd (formerly CSA Global) to ensure consistency. The same geological logging template was used for subsequent diamond drilling up to 2010.</li> <li>■ Diamond drilling completed since 2006 has typically been subject to geotechnical logging with parameters recorded including rock quality indices (e.g., rock quality designation ('RQD')) and geotechnical defects such as fracture frequency.</li> <li>■ Digital core photography for drilling completed in 2021 is retained in both wet and dry states. Core photographs from drilling completed prior to 2021 are available in historical reports (typically in PDF format) though the completeness of these records is unknown.</li> <li>■ Core which was not sampled for geochemical, geotechnical and or metallurgical purposes is retained. The overall condition of this core is unknown.</li> <li>■ Representative reference trays of chips from RC drilling completed in 2021 have been retained. Select reference trays of chips from RC drilling completed prior to 2021 have been retained though the completeness of these records is unknown.</li> </ul>

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<b>Sub-sampling techniques and sample preparation</b>	<ul style="list-style-type: none"> <li>■ <i>If core, whether cut or sawn and whether quarter, half or all core taken.</i></li> <li>■ <i>If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.</i></li> <li>■ <i>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</i></li> <li>■ <i>Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples.</i></li> <li>■ <i>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.</i></li> <li>■ <i>Whether sample sizes are appropriate to the grain size of the material being sampled.</i></li> </ul>	<p><b>Sandiego – Diamond Drilling 1995–1996</b></p> <ul style="list-style-type: none"> <li>■ All core samples (NQ2 – HQ3) were sawn with quarter (25%) core typically submitted for analysis.</li> <li>■ No second half samples were submitted for analysis.</li> <li>■ Quality Assurance and Quality Control (<b>‘QAQC’</b>) procedures adopted for sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> </ul> <p><b>2006–2011</b></p> <ul style="list-style-type: none"> <li>■ All core samples were sawn with quarter (25%) core or half (50%) core typically submitted for analysis from HQ2 or NQ2 core respectively.</li> <li>■ No second half samples were submitted for analysis.</li> <li>■ QAQC procedures adopted for sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> <li>■ Metallurgical composite samples were prepared using half (50%) HQ2 core. Historical records indicate that selected core intervals were immediately refrigerated after logging and cutting, then transported to the laboratory in a refrigerated container. The samples remained under refrigeration until the commencement of test work.</li> </ul> <p><b>Composite Preparation Methodology:</b></p> <p><i>Onedin Oxide</i></p> <ul style="list-style-type: none"> <li>■ Five (5) core samples were selected for density testing.</li> <li>■ Individual intervals, typically one metre in length, were crushed to pass -19mm and then riffle split.</li> <li>■ 25% of the riffle-split sample was retained as a reserve, while the remaining 75% was combined, rotary mixed, and stage-crushed to -2mm.</li> <li>■ Sub-samples were prepared by riffle splitting for selected test work and analysis.</li> </ul> <p><i>Onedin Sulphide / Onedin Transition 2 (Lower) / Onedin Transition 1 (Upper)</i></p> <ul style="list-style-type: none"> <li>■ Nine (9) core samples were allocated for Unconfined Compressive Strength (UCS) density testing.</li> <li>■ Individual one-metre intervals were crushed to pass -19mm and riffle split.</li> <li>■ 25% of the riffle-split sample was retained in reserve, while the remaining 75% was combined, rotary mixed, and stage-crushed to -2mm.</li> <li>■ Sub-samples were then prepared by riffle splitting for selected test work and analysis.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>■ All core samples (NQ2 – HQ2) were sawn with half (50%) core typically submitted for analysis. These samples were crushed (passing -10mm), riffle split and pulverised (80% passing -75µm) to produce a sample for analysis.</li> <li>■ The ‘cut-line’ was observably defined with reference to the core orientation line, typically retained on the portion of core reserved for archival purposes. This ensured that the portion of core selected for analysis remained generally consistent downhole.</li> <li>■ No second half samples were submitted for analysis.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p><b>Sandiego – RC Drilling</b></p> <p><b>1995–1996</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples by means of a riffle splitter which were composited into 4m intervals for analysis. Composite samples returning Cu, Pb or Zn &gt;1%, and or Au &gt;1g/t were typically re-assayed at 1m intervals.</li> <li>■ QAQC procedures adopted for sample compositing and sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> <li>■ Details of field duplicates, if collected are not recorded.</li> </ul> <p><b>2006–2008</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples which were speared to produce 4m composite samples for analysis.</li> <li>■ QAQC procedures adopted for sample compositing and sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period. Sub-sampling with a sample spear to produce composite samples can introduce bias and reduce sample representativity, particularly in heterogeneous materials, where particle segregation and inconsistent sampling can lead to inaccurate assay results. The composite sample intervals are typically external of the mineralised domains and thus are not considered to have introduced any material bias.</li> <li>■ Details of field duplicates, if collected are not recorded.</li> </ul> <p><b>2010–2011</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples by means of a cone splitter for analysis.</li> <li>■ QAQC procedures adopted for sample compositing and sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> <li>■ Details of field duplicates, if collected are not recorded.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples by means of a cone splitter from which up to 3.5kg was pulverised (80% passing -75µm) to produce a sample for analysis. Samples &gt;3.5kg were riffle split and pulverised (80% passing -75µm) to produce a sample for analysis.</li> <li>■ Unmineralised zones were infrequently composited into 4m intervals for analysis as described above.</li> <li>■ Sample condition was typically recorded by means of qualitative observation and generally designated ‘dry’, ‘damp’ or ‘wet’ samples. Records indicate samples were usually ‘dry’. Wet samples were typically sampled using a sample spear.</li> <li>■ During RC drilling completed in 2021 duplicate samples were collected at the time of drilling at an average rate of 1:100 samples. The method used to obtain duplicate samples is not recorded.</li> </ul> <p><b>Onedin – Diamond Drilling</b></p> <p><b>1995–1996</b></p> <ul style="list-style-type: none"> <li>■ All core samples (NQ2 – HQ3) were sawn with quarter (25%) core typically submitted for analysis.</li> <li>■ No second half samples were submitted for analysis.</li> <li>■ Quality Assurance and Quality Control (‘QAQC’) procedures adopted for sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> </ul> <p><b>2006–2008</b></p> <ul style="list-style-type: none"> <li>■ All core samples were sawn with quarter (25%) core or half (50%) core typically submitted for analysis from HQ2 or NQ2 core respectively.</li> </ul>

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		<ul style="list-style-type: none"> <li>■ No second half samples were submitted for analysis.</li> <li>■ QAQC procedures adopted for sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> <li>■ Metallurgical composite samples were prepared using half (50%) HQ2 core. Historical records indicate that selected core intervals were immediately refrigerated after logging and cutting, then transported to the laboratory in a refrigerated container. The samples remained under refrigeration until the commencement of test work.</li> </ul> <p><b>Composite Preparation Methodology:</b></p> <p><i>Onedin Oxide</i></p> <ul style="list-style-type: none"> <li>■ Five (5) core samples were selected for density testing.</li> <li>■ Individual intervals, typically one metre in length, were crushed to pass -19mm and then riffle split.</li> <li>■ 25% of the riffle-split sample was retained as a reserve, while the remaining 75% was combined, rotary mixed, and stage-crushed to -2mm.</li> <li>■ Sub-samples were prepared by riffle splitting for selected test work and analysis.</li> </ul> <p><i>Onedin Sulphide / Onedin Transition 2 (Lower) / Onedin Transition 1 (Upper)</i></p> <ul style="list-style-type: none"> <li>■ Nine (9) core samples were allocated for Unconfined Compressive Strength (UCS) density testing.</li> <li>■ Individual one-metre intervals were crushed to pass -19mm and riffle split.</li> <li>■ 25% of the riffle-split sample was retained in reserve, while the remaining 75% was combined, rotary mixed, and stage-crushed to -2mm.</li> <li>■ Sub-samples were then prepared by riffle splitting for selected test work and analysis.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>■ All core samples were sawn with quarter (25%) core or half (50%) core samples from PQ3 / HQ3 or HQ core respectively submitted for analysis. These samples were crushed (passing -10mm), riffle split and pulverised (80% passing -75µm) to produce a sample for analysis.</li> <li>■ The 'cut-line' was observably defined with reference to the core orientation line, typically retained on the portion of core reserved for archival purposes. This ensured that the portion of core selected for analysis remained generally consistent downhole.</li> <li>■ No second half samples were submitted for analysis.</li> </ul> <p><b>Onedin - RC Drilling</b></p> <p><b>1995-1996</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples by means of a riffle splitter which were composited into 4m intervals for analysis. Composite samples returning Cu, Pb or Zn &gt;1%, and or Au &gt;1g/t were typically re-assayed at 1m intervals.</li> <li>■ QAQC procedures adopted for sample compositing and sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period.</li> <li>■ Details of field duplicates, if collected are not recorded.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<p><b>2006–2008</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples which were speared to produce 4m composite samples for analysis.</li> <li>■ QAQC procedures adopted for sample compositing and sub-sampling are not recorded though are expected to have been undertaken in accordance with standard industry practice for the respective period. Sub-sampling with a sample spear to produce composite samples can introduce bias and reduce sample representativity, particularly in heterogeneous materials, where particle segregation and inconsistent sampling can lead to inaccurate assay results. The composite sample intervals are typically external of the mineralised domains and thus are not considered to have introduced any material bias.</li> <li>■ Details of field duplicates, if collected are not recorded.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>■ RC drilling was used to obtain 1m samples by means of a cone splitter from which up to 3.5kg was pulverised (80% passing -75µm) to produce a sample for analysis. Samples &gt;3.5kg were riffle split and pulverised (80% passing -75µm) to produce a sample for analysis.</li> <li>■ Unmineralised zones were infrequently composited into 4m intervals for analysis as described above.</li> <li>■ Sample condition was typically recorded by means of qualitative observation and generally designated 'dry', 'damp' or 'wet' samples. Records indicate samples were usually 'dry'. Wet samples were typically sampled using a sample spear.</li> <li>■ During RC drilling completed in 2021 duplicate samples were collected at the time of drilling at an average rate of 1:100 samples. The method used to obtain duplicate samples is not recorded. Results suggest good precision and repeatability, with minimal variation between original and duplicate assays.</li> <li>■ Where recorded, the sample preparation techniques are considered to be appropriate and of sufficient quality to support Mineral Resource estimation.</li> <li>■ The sample sizes submitted for analysis are considered to be appropriate for the mineralisation grain size, texture and style.</li> </ul>



Criteria	JORC Code Explanation	Commentary
<b>Quality of assay data and laboratory tests</b>	<ul style="list-style-type: none"> <li>■ <i>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</i></li> <li>■ <i>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.</i></li> <li>■ <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ The nature and quality of all assaying and laboratory procedures employed for samples obtained through drilling (diamond and reverse circulation) are considered 'industry standard' for the respective periods.</li> </ul> <p><b>1995–1996</b></p> <ul style="list-style-type: none"> <li>■ Analysis was primarily conducted via AAS for Cu, Pb, Zn, and Ag, with Au variably analysed by fire assay.</li> <li>■ Samples were crushed, split, and pulverised before analysis; however, details on lab preparation and digestion techniques were not recorded.</li> <li>■ AAS is a well-established method for base metals, but it is a partial digestion technique and may not completely dissolve resistant mineral phases, potentially leading to under-reporting of some elements.</li> </ul> <p><b>2006–2011</b></p> <ul style="list-style-type: none"> <li>■ Analysis was primarily conducted via mixed-acid digestion followed by ICP-MS or ICP-OES. Au was analysed by fire assay with a 40–50g charge and AAS finish.</li> <li>■ Analysis of metallurgical composite samples was primarily conducted via mixed-acid digestion followed by ICP / AAS. Au was analysed by fire assay and AAS finish.</li> <li>■ Samples were crushed, split, and pulverised; however, details of lab preparation techniques were not recorded.</li> <li>■ Mixed-acid digestion is a strong, near-total digestion method capable of dissolving most sulphide minerals but may not fully capture elements hosted in refractory silicates.</li> </ul> <p><b>2021</b></p> <ul style="list-style-type: none"> <li>■ Analysis was primarily conducted via mixed-acid digestion and ICP-OES for a suite of 39 elements, with Au analysed by fire assay using a 30g charge and AAS finish.</li> <li>■ Samples were crushed to pass -10mm, riffle split, and pulverised before analysis.</li> <li>■ The use of mixed-acid digestion and ICP-OES is appropriate for base metals and provides near-total digestion. The reduced Au charge (30g vs. 40–50g in previous campaigns) may slightly impact detection accuracy but remains industry standard.</li> <li>■ To monitor the accuracy of assay results from drilling completed in 2021, Certified Reference Material samples ('<b>CRMs</b>') and blanks were inserted into the sample stream: <ul style="list-style-type: none"> <li>■ A total of 30 blank samples were inserted into the sample sequence to monitor potential contamination. Results indicated generally acceptable levels of accuracy, but instances of contamination in high-grade zones require further review.</li> <li>■ A total of 113 CRMs from Geostats Pty Ltd and OREAS were included across 25 assay batches, covering a range of expected copper and zinc values. Performance varied, with multiple failures outside <math>\pm 3</math> standard deviations ('<b>SD</b>'), particularly for zinc assays. The high failure rate, particularly in zinc assays, raises concerns regarding systematic biases in laboratory analysis. While some results may be attributed to CRM misallocation, the overall frequency of failures suggests potential issues with laboratory accuracy.</li> <li>■ No umpire laboratory checks were conducted.</li> </ul> </li> <li>■ The Competent Person preparing the Mineral Resource estimates reviewed the QAQC data and determined that while sampling and assaying results pose a low to moderate risk to confidence levels in the Mineral Resource estimate, systematic issues with CRM performance warrant further investigation. As such, the Company intends to undertake a comprehensive audit of historical drilling, sampling, sub-sampling and analytical data to inform development of the forward work program for the Project.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Verification of sampling and assaying</b>	<ul style="list-style-type: none"> <li>■ <i>The verification of significant intersections by either independent or alternative company personnel.</i></li> <li>■ <i>The use of twinned holes.</i></li> <li>■ <i>Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols.</i></li> <li>■ <i>Discuss any adjustment to assay data.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ Reported results have been verified by alternative company personnel.</li> <li>■ Validation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols is ongoing and forms part of the Company's audit process (see 'Audits or reviews').</li> <li>■ The drilling database is currently managed by Newexco Exploration; a Perth based exploration consultancy group. All drilling data resides on their NXDB database management system. Newexco is responsible for uploading all analytical and other drilling data and producing audited downloaded data for use in various mining software packages. The NXDB system has stringent data entry validation routines.</li> <li>■ Twinned drilling has not yet been undertaken.</li> <li>■ The Company is not aware of any adjustments having been made to assay data.</li> </ul>
<b>Location of data points</b>	<ul style="list-style-type: none"> <li>■ <i>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.</i></li> <li>■ <i>Specification of the grid system used.</i></li> <li>■ <i>Quality and adequacy of topographic control.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ All data is recorded in the GDA2020 datum; UTM Zone 52 (MGA52).</li> <li>■ Local exploration grids were previously established at the Sandiego and Onedin deposits. Detailed survey work has previously cross-referenced the local grids to the Zone 52 MGA (GDA 2020) coordinate system.</li> <li>■ During 1995 – 1996 drill hole collars were located and surveyed by an independent surveyor using a Trimble Global Positioning system in Real Time Kinematic mode with a reported accuracy of <math>\pm 0.03\text{m}</math> horizontally and <math>\pm 0.05\text{m}</math> vertically. Downhole surveys were completed using an Eastman Downhole Camera at approximately 50m intervals.</li> <li>■ The method used to survey drill collars between 2006 and 2011 is not recorded though is expected to have been standard industry practice for the respective periods. Downhole surveys were typically completed at 30 – 50m intervals.</li> <li>■ During 2021 drill hole collars were located and surveyed using a differential GPS ('DGPS'). Set-up collar azimuths and inclinations have been established using a compass and clinometer. Downhole surveys were typically completed at 30m intervals using a north-seeking gyroscopic tool.</li> <li>■ Anglo Australian Resources NL previously obtained photogrammetric coverage of the tenement areas which provides good control in respect of elevation data.</li> </ul>
<b>Data spacing and distribution</b>	<ul style="list-style-type: none"> <li>■ <i>Data spacing for reporting of Exploration Results.</i></li> <li>■ <i>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.</i></li> <li>■ <i>Whether sample compositing has been applied.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ Drilling at the Sandiego deposit is generally completed on sections between 20 and 40m spacing with drill holes typically intersecting mineralisation between 30 and 40m on section.</li> <li>■ Drilling at the Onedin deposit is generally completed on sections averaging 20m spacing with drill holes typically intersecting mineralisation between 30 and 40m on section.</li> <li>■ The data spacing and distribution is sufficient to establish the degree of geological and grade continuity appropriate for the Mineral Resource estimation procedures and classifications applied.</li> <li>■ Sample compositing has been applied to select samples obtained through RC drilling that were considered unmineralised. These composite samples represent approximately 18% of all samples used to inform the Mineral Resource estimates.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Orientation of data in relation to geological structure</b>	<ul style="list-style-type: none"> <li>■ <i>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</i></li> <li>■ <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ The Sandiego deposit was typically drilled towards 115°, and the Onedin deposit typically drilled towards 140°, both at angles ranging from -50° to -90° (typically -60°) to intersect the mineralised zones as close to perpendicular as possible.</li> <li>■ At the Onedin deposit, five drill holes, including ORCD45, were oriented parallel to the strike. Samples from ORCD45 were used to prepare the metallurgical composites reported in this announcement. The drill hole was strategically positioned to maximise the intersection of mineralised zones and ensure sufficient sample volume for metallurgical test work.</li> <li>■ The orientation of both RC and diamond drillholes at Sandiego and Onedin are generally orthogonal to the perceived strike of mineralisation and limit the amount of geological bias in drill sampling as much as possible.</li> </ul>
<b>Sample security</b>	<ul style="list-style-type: none"> <li>■ <i>The measures taken to ensure sample security.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ Sample security procedures are considered to be 'industry standard' for the respective periods.</li> <li>■ Samples obtained during drilling completed in 2021 were transported from Halls Creek to the laboratory by an independent local courier service.</li> <li>■ The Company considers that risks associated with sample security are limited given the nature of the targeted mineralisation.</li> </ul>
<b>Audits or reviews</b>	<ul style="list-style-type: none"> <li>■ <i>The results of any audits or reviews of sampling techniques and data.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ All diamond drill core sampled up to 2006 was relogged by an independent consultant from ERM Australia Consultants Pty Ltd ('formerly CSA Global) to ensure consistency.</li> <li>■ No audits or reviews are understood to have been carried out for any of the previous sampling programmes.</li> <li>■ The Company intends to undertake a comprehensive audit of historical drilling, sampling, sub-sampling and analytical data to inform development of the forward work program for the Project.</li> </ul>

## Section 2 Reporting of Exploration Results

Criteria	JORC Code Explanation	Commentary
<p><b>Mineral tenement and land tenure status</b></p>	<ul style="list-style-type: none"> <li>■ <i>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.</i></li> <li>■ <i>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.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ The Sandiego and Onedin deposits are hosted within existing Mining Leases M 80/276 and M 80/277 respectively—the Mining Leases expire in 2031.</li> <li>■ The Mining Leases are located 25km and 17km southwest of Halls Creek township and approximately 300km south-southwest of Kununurra, WA.</li> <li>■ The Onedin deposit is located approximately 1.8km north north-east of the Lamboo Gunian Aboriginal community. The Sandiego deposit is located approximately 6km southwest of the Lamboo Gunian Aboriginal community.</li> <li>■ The Sandiego and Onedin deposits are located adjacent to the Great Northern Highway.</li> <li>■ Both mining licences M80/277 and M80/276 were granted in 1989 and therefore prior to the Native Title Act 1993 (Cth) ('NTA') The Koongie-Elvire Native Title Claim WC 1999/040 was also registered after grant of the mining licences and they are not subject to the future act provisions under the NTA.</li> <li>■ The Project is located approximately 100km southwest of the nearest National Park, being the Purnululu National Park.</li> <li>■ There are two existing agreements with respect to the Project, the 'Precious Metals Agreement' and the 'Royalty Agreement'. The Precious Metals Agreement is between AKN and Astral Resources NL ('Astral') who has the right to carry out exploration for gold and platinum group element minerals on the Project, excluding the two Mining Leases where the Onedin and Sandiego deposits are situated and E80/4957 where the Emull deposit is located. The Royalty Agreement provides for a 1% net smelter return royalty payable to Astral in the event of mining activities commencing at the Project.</li> <li>■ Pursuant to this announcement, the Project is subject to an Earn-in agreement between the Company and AKN. Details of the agreement are outlined in the main body of this announcement.</li> <li>■ The Company is not aware of any impediments to obtaining a licence to operate in the area.</li> </ul>
<p><b>Exploration done by other parties</b></p>	<ul style="list-style-type: none"> <li>■ <i>Acknowledgment and appraisal of exploration by other parties.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ The Project area has been explored for base and precious metals on an intermittent basis since 1972.</li> <li>■ All exploration is considered to have been completed to a reasonable standard however documentation pertaining to historical drilling, sampling, sub-sampling and analytical data is incomplete. Where sufficient confidence cannot be established as to data quality, it cannot be used to inform Mineral Resource estimation. Notwithstanding this the cumulative advancement of geological knowledge provided by historical exploration is significant.</li> <li>■ A summary of historical exploration is provided below: <ul style="list-style-type: none"> <li>■ <b>1972–1977:</b> Kennecott pegged tenements over known copper-lead-zinc-silver gossans as part of its Gordon Downs 3 project. Work included geological and structural mapping, rock chip and soil sampling, diamond and percussion drilling. This work outlined significant base metal mineralisation hosted by chert, banded iron formations and carbonate-rich assemblages at Onedin, Sandiego, Hanging Tree and Gosford. Drilling immediately followed at these four prospects, with 29 RC holes with diamond tails, with the most significant deposit defined from this work at Sandiego.</li> <li>■ <b>1978–1979:</b> Newmont continued testing the known mineralisation, using extensive trenching, percussion and diamond drilling, detailed geophysics including ground magnetic surveys and low-level aeromagnetic surveys, which failed to locate significant extensions of the mineralisation in the known prospects.</li> </ul> </li> </ul>

Criteria	JORC Code Explanation	Commentary
<p><b>Exploration done by other parties</b> (continued)</p>		<ul style="list-style-type: none"> <li>■ <b>1980:</b> North Broken Hill concentrated on testing the supergene enriched zone at the base at Sandiego.</li> <li>■ <b>1983–1988:</b> Asarco Australia Ltd carried out RAB drilling in the Mimosa sub-member, along strike of the known mineralisation, locating several significant geochemical anomalies, although not of sufficient grade to support a Mineral Resource estimate. The drilling was to fixed depth and only the bottom of the hole was sampled.  Asarco also completed limited work on the supergene gold and base metal potential at Sandiego.</li> <li>■ <b>1988–1989:</b> BP Minerals and RTZ Mining went into a joint venture (JV) with Asarco and continued testing the gold potential by re-assaying split core samples for gold, which did not identify any significant base metal mineralisation. RTZ Mining sold the property to AAR in 1989.</li> <li>■ <b>1989–1994:</b> Billiton Australia and Anglo Australian Resources NL ('AAR') identified extensions of known mineralisation at Onedin. Billiton carried out a broad-based exploration programme including limited RC and diamond drilling. A grade-tonnage estimate for the Onedin was prepared, for 1 Mt @ 11 % Zn, 1 % Cu and 1 % Pb.</li> <li>■ <b>1995–2002:</b> Lachlan Resources and AAR concentrated on identifying shallow resources at Sandiego and Onedin with percussion and diamond drilling programmes. Two polygonal Mineral Resources were estimated for Sandiego in 1996 and 1997.  AAR was sole tenure holder of the properties between 2002 and 2020. AAR drilled 245 RC and diamond drillholes encompassing 50,417 m, focusing on Mineral Resource, metallurgical and geotechnical drilling at the Sandiego and Onedin base metal deposits. Since 2011, AAR has focused on gold exploration, with little exploration for base metals occurring on the property. AAR reported Mineral Resources for Onedin in 2006, 2008 and 2009.</li> <li>■ <b>2021:</b> AKN's Joint Venture Agreement with AAR commenced in June 2021 and AKN assumed management and control of the exploration activities on the property with additional drilling completed in 2021 and 2022. AKN completed Mineral Resource estimates for the Sandiego and Onedin deposits in 2022 and delivered a Scoping Study in 2023.</li> </ul>
<p><b>Geology</b></p>	<ul style="list-style-type: none"> <li>■ <i>Deposit type, geological setting, and style of mineralisation.</i></li> </ul>	<ul style="list-style-type: none"> <li>■ Rocks of the Halls Creek Project are assigned to the Lamboo Province, of Palaeoproterozoic age (1910–1805 Ma), which formed within the northeast trending Halls Creek Orogen.</li> <li>■ The Central Zone of the Lamboo Province comprises turbiditic metasedimentary and mafic volcanic and volcanoclastic rocks of the Tickalara Metamorphics, deposited by 1865 Ma. These rocks were intruded by tonalitic sheets and deformed and metamorphosed between 1865–1856 Ma and 1850–1845 Ma.</li> <li>■ A younger succession of rocks comprising the sedimentary rocks and mafic and felsic volcanic rocks of the Koongie Park Formation ('KPF') were deposited in a possible rifted arc setting at around 1843 Ma. Layered mafic-ultramafic bodies were intruded into the Central Zone at 1856 Ma, 1845 Ma and 1830 Ma. Large volumes of granite and gabbro of the Sally Downs Supersuite intruded the Central Zone during the Halls Creek Orogeny at 1835–1805 Ma. Researchers interpret the Central Zone to be an arc-like domain developed on a continental fragment.</li> <li>■ The KPF within the Project area is broadly characterised as a low metamorphic-grade sequence composed of mafic and felsic volcanics and associated sedimentary facies including sandstone, mudstone, carbonate, chert and ironstone intruded by rhyolitic to rhyodacitic sills, dolerite bodies and basalt dykes.</li> </ul>

Criteria	JORC Code Explanation	Commentary
		<ul style="list-style-type: none"> <li>■ The KPF hosts numerous base metal occurrences and two significant base metal deposits, Onedin and Sandiego.</li> <li>■ The upper unit of the KPF composes felsic volcanic units, carbonate, ironstone, chert, mudstone, quartz-bearing volcaniclastic beds and lithic sandstone. Currently known base metal prospects are concentrated in the upper KPF (i.e., the trend which includes Sandiego and Onedin deposits).</li> <li>■ Both, the Sandiego and Onedin deposits are situated within the limbs of intensely folded, higher order, double-plunging anticlinal structures that have been interpreted from magnetic images. The axial planes of the fold structures appear to be upright to south-southeast dipping. They trend northeast, sub-parallel to the regional transcurrent and anastomosing fault systems that dominate the Halls Creek Orogen</li> <li>■ The massive sulphide deposits of the Project have been traditionally classified as volcanogenic massive sulphide ('VMS') deposits. A PhD study concluded in 2002 proposed that the best model for the base metal occurrence is as a sub-horizontal basin floor replacement VMS. ERM concurs and considers the weight of evidence supports their interpretation as VMS deposits. Thus, the deposits are interpreted to have been formed around the time of deposition of the host volcanic and sedimentary strata in which they are bound and generally in bedding parallel lenses. Hydrothermal fluids associated with volcanic activity are interpreted to have been the source of the metals and other constituents of the mineralisation.</li> <li>■ Sphalerite is the main sulphide in the primary mineralisation at Onedin with subordinate pyrrhotite-pyrite-chalcopyrite-galena. Sphalerite chiefly occurs as fine-grained masses. In general, the sulphides exhibit replacement textures and show evidence of mobilisation, which is a result of deformation and metamorphism subsequent to initial formation.</li> <li>■ The mineralogy of the primary mineralisation at Sandiego is pyrite-sphalerite-pyrrhotite-chalcopyrite ± galena, which is largely hosted in the magnetite-rich exhalative suite of rocks where it occurs as a massive conformable wedge-shaped lens 200 m in length with a maximum thickness of 75 m. Weak to moderate sulphide vein and stringer mineralisation occur at the base of the exhalite package in the underlying tuffs. Mineralisation is relatively rare in the carbonate zone but may extend into the talc-chlorite schists. Overall, there is poor spatial correlation between copper and zinc mineralisation at Sandiego. However, discrete zinc-rich and copper-rich zones have been identified from core logging and assay results in the vertical dimension.</li> <li>■ The KPF exhibits a deep weathered profile at Sandiego and particularly Onedin, resulting in three weathering domains – oxidised zone at surface, primary zone at depth, and the transition zone in between. Each zone has very different mineral assemblages and consequently very different metallurgical properties.</li> <li>■ The oxidised zone consists of completely oxidised material, above the base of complete oxidation ('BOCO') surface. This surface is on average about 100 m below ground level. It is undulating and deepens significantly in the vicinity of steeply dipping faults. Gossans are developed at surface above the mineral deposits.</li> <li>■ The transition zone consists of partially oxidised material and is located between BOCO and the top of fresh rock ('TOFR'). Supergene mineralisation is comprised of secondary mineralisation hosted in the oxidised and transition zones.</li> </ul>

Criteria	JORC Code Explanation	Commentary
<b>Drill hole Information</b>	<ul style="list-style-type: none"> <li>■ 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: <ul style="list-style-type: none"> <li>■ easting and northing of the drill hole collar</li> <li>■ elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar</li> <li>■ dip and azimuth of the hole</li> <li>■ down hole length and interception depth</li> <li>■ hole length.</li> </ul> </li> <li>■ 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.</li> </ul>	<ul style="list-style-type: none"> <li>■ See drill hole summary below. All coordinates are reported in the GDA2020 datum; UTM Zone 52 (MGA52).</li> </ul>

Hole ID	Easting	Northing	RL	Max Depth (m)	Hole Type	Dip	Azimuth	Year	Deposit
SRC01	339741.8	7968471.4	422.6	100.00	RC	-60	113.7	1995	Sandiego
SRC02	339768.4	7968330.2	424.9	100.00	RC	-61	113.7	1995	Sandiego
SRC06	339696.8	7968403.7	419.5	129.50	RC	-61	114.7	1995	Sandiego
SRC09	339704.2	7968271.4	418.9	131.00	RC	-60	113.7	1995	Sandiego
SRCD03	339757.4	7968421.1	426.1	184.00	RCDD	-60	113.7	1995	Sandiego
SRCD04	339717.1	7968438.5	421.2	307.75	RCDD	-60	113.7	1995	Sandiego
SRCD05	339748.5	7968381.5	423.8	193.90	RCDD	-60	113.7	1995	Sandiego
SRCD07	339681.6	7968368.2	417.5	393.70	RCDD	-60	113.7	1995	Sandiego
SRCD08	339721.4	7968306.7	419.6	187.50	RCDD	-60	114.7	1995	Sandiego
SRC11	339645.0	7968385.6	418.3	46.00	RC	-60	113.7	1996	Sandiego
SRC12	339667.5	7968287.1	418.9	196.00	RC	-58	107.7	1996	Sandiego
SRC17	339812.6	7968661.0	421.6	102.00	RC	-55	113.7	1996	Sandiego
SRC18	339764.3	7968507.1	423.2	119.00	RC	-60	113.7	1996	Sandiego
SRC19	339726.9	7968523.1	421.0	168.00	RC	-60	113.7	1996	Sandiego
SRC20	339779.6	7968543.6	425.0	96.00	RC	-60	117.7	1996	Sandiego
SRCD01	339741.8	7968471.4	424.0	303.70	RCDD	-60	113.7	1996	Sandiego
SRCD10	339691.8	7968386.1	419.9	208.90	RCDD	-60	113.7	1996	Sandiego
SRCD11A	339646.7	7968384.0	418.0	429.80	RCDD	-61	113.7	1996	Sandiego
SRCD11B	339645.0	7968386.4	418.0	494.80	RCDD	-61	107.7	1996	Sandiego
SRCD13	339631.6	7968303.4	418.4	217.90	RCDD	-58	107.7	1996	Sandiego
SRCD14	339715.1	7968396.1	420.6	280.30	RCDD	-58	113.7	1996	Sandiego
SRCD15	339675.9	7968455.3	418.3	369.80	RCDD	-58	107.7	1996	Sandiego
SRCD16	339597.6	7968318.0	418.0	323.50	RCDD	-58	116.7	1996	Sandiego
SRCD21	339697.8	7968406.6	420.1	366.00	RCDD	-58	113.7	2006	Sandiego
SRCD22	339660.6	7968421.2	418.7	440.70	RCDD	-58	113.7	2006	Sandiego
SRCD23	339692.1	7968539.7	418.7	294.00	RCDD	-60	113.7	2006	Sandiego
SRCD24	339699.2	7968408.8	420.2	332.70	RCDD	-52	113.7	2006	Sandiego
SRC026	339577.2	7968328.7	418.1	265.00	RC	-60	115.8	2008	Sandiego

Hole ID	Easting	Northing	RL	Max Depth (m)	Hole Type	Dip	Azimuth	Year	Deposit
SRC027	339667.0	7968332.7	418.7	162.00	RC	-60	115.8	2008	Sandiego
SRC028	339648.8	7968342.0	418.5	204.00	RC	-60	115.8	2008	Sandiego
SRC029	339700.2	7968362.7	419.7	144.00	RC	-60	115.8	2008	Sandiego
SRC033	339656.5	7968555.9	418.0	252.00	RC	-60	115.8	2008	Sandiego
SRC034	339724.6	7968613.9	418.4	180.00	RC	-60	115.8	2008	Sandiego
SRC035	339738.4	7968564.4	419.3	222.00	RC	-60	115.8	2008	Sandiego
SRC036	339759.6	7968642.3	419.6	138.00	RC	-60	115.8	2008	Sandiego
SRC037	339798.1	7968582.5	423.8	120.00	RC	-60	115.8	2008	Sandiego
SRC038	339774.7	7968675.9	419.1	102.00	RC	-63	115.8	2008	Sandiego
SRC039	339792.0	7968712.0	419.2	216.00	RC	-62	111.0	2008	Sandiego
SRC040	339835.1	7968742.1	419.6	94.00	RC	-60	110.0	2008	Sandiego
SRC041	339539.4	7968341.8	418.0	301.00	RC	-60	110.0	2008	Sandiego
SRC043	339941.7	7968910.3	416.0	103.00	RC	-60	290.0	2008	Sandiego
SRC044	339978.1	7968894.3	416.0	103.00	RC	-60	293.6	2008	Sandiego
SRC045	340014.5	7968878.3	417.0	103.00	RC	-60	293.6	2008	Sandiego
SRC046	339925.0	7968873.5	417.0	103.00	RC	-60	293.6	2008	Sandiego
SRC047	339961.9	7968857.6	417.0	103.00	RC	-60	293.6	2008	Sandiego
SRC048	339909.5	7968837.0	420.0	103.00	RC	-60	293.6	2008	Sandiego
SRC049	339945.8	7968821.0	420.0	103.00	RC	-60	293.6	2008	Sandiego
SRC050	339857.0	7968816.3	418.0	103.00	RC	-60	293.6	2008	Sandiego
SRC051	339893.3	7968800.3	419.0	103.00	RC	-60	293.6	2008	Sandiego
SRCD025	339631.7	7968305.1	418.5	450.60	RCDD	-61	113.4	2008	Sandiego
SRCD027A	339668.2	7968332.1	418.7	312.90	RCDD	-56	114.2	2008	Sandiego
SRCD028A	339648.0	7968340.9	418.5	360.70	RCDD	-60	109.8	2008	Sandiego
SRCD029A	339699.7	7968361.6	419.7	252.80	RCDD	-58	112.8	2008	Sandiego
SRCD030	339650.8	7968382.6	418.8	357.70	RCDD	-60	115.8	2008	Sandiego
SRCD031	339750.8	7968427.2	425.3	224.00	RCDD	-60	115.8	2008	Sandiego
SRCD032	339685.5	7968499.7	418.2	339.40	RCDD	-60	115.8	2008	Sandiego
SRCD042	339591.4	7968410.0	421.0	649.50	RCDD	-61	111.2	2008	Sandiego
SRCD052	339638.7	7968477.3	423.0	403.50	RCDD	-60	115.8	2008	Sandiego
SRCD053A	339608.4	7968446.4	422.0	557.00	RCDD	-60	115.8	2008	Sandiego
SRCD054	339704.2	7968579.4	419.0	264.50	RCDD	-60	115.8	2008	Sandiego
SRC056	339685.2	7968279.2	420.0	160.00	RC	-58	115.8	2010	Sandiego
SRC057	339701.5	7968315.8	421.0	208.00	RC	-58	115.8	2010	Sandiego
SRC060	339725.5	7968371.1	423.0	204.00	RC	-60	115.8	2010	Sandiego
SRC061	339731.9	7968390.4	424.0	200.00	RC	-58	115.8	2010	Sandiego
SRC062	339728.6	7968432.8	424.0	204.00	RC	-55	115.8	2010	Sandiego
SRC065	339767.2	7968464.1	427.0	168.00	RC	-60	115.8	2010	Sandiego
SRC066	339746.2	7968515.5	423.0	180.00	RC	-58	115.8	2010	Sandiego
SRC067	339762.1	7968552.3	423.0	150.00	RC	-58	115.8	2010	Sandiego
SRC068	339778.1	7968588.5	423.0	160.00	RC	-60	115.8	2010	Sandiego
SRC076	339744.2	7968405.1	425.0	180.00	RC	-58	115.8	2010	Sandiego
SRC077	339753.5	7968442.2	427.0	180.00	RC	-58	115.8	2010	Sandiego
SRCD058	339727.7	7968326.2	422.0	142.20	RCDD	-58	115.8	2010	Sandiego
SRCD059	339707.8	7968378.9	421.0	276.00	RCDD	-58	115.8	2010	Sandiego
SRCD063	339999.6	7968316.0	419.0	346.70	RCDD	-60	295.8	2010	Sandiego
SRCD064	340050.1	7968293.9	418.0	450.60	RCDD	-60	295.8	2010	Sandiego



Hole ID	Easting	Northing	RL	Max Depth (m)	Hole Type	Dip	Azimuth	Year	Deposit
SRCD069	339924.6	7968750.5	424.0	27.10	DD	-60	157.8	2010	Sandiego
SRCD070	339928.9	7968740.9	425.0	27.10	DD	-60	157.8	2010	Sandiego
SRCD071	339901.6	7968665.4	429.0	51.00	RCDD	-60	115.8	2010	Sandiego
SRCD072	339877.7	7968566.7	431.0	66.00	RCDD	-60	115.8	2010	Sandiego
SRCD073	339852.7	7968468.4	430.0	81.10	RCDD	-60	115.8	2010	Sandiego
SRCD074	339830.8	7968368.8	428.0	90.30	RCDD	-60	115.8	2010	Sandiego
SRCD075	339811.0	7968289.9	423.0	111.30	RCDD	-60	115.8	2010	Sandiego
SRCD078	340095.5	7968274.0	417.0	750.60	RCDD	-65	295.8	2010	Sandiego
SRC079	340020.6	7968348.5	416.0	228.00	RC	-65	295.8	2011	Sandiego
SRC080	340017.7	7968391.8	420.0	220.00	RC	-65	295.7	2011	Sandiego
SRC081	340013.6	7968440.8	419.0	200.00	RC	-64	295.7	2011	Sandiego
ASRC001	339826.7	7968189.9	419.2	158.00	RC	-65	296.8	2021	Sandiego
ASRC002	339648.0	7968032.1	419.5	210.00	RC	-59	292.5	2021	Sandiego
ASRD001	339950.2	7968229.7	418.3	120.53	RC	-60	295.1	2021	Sandiego
ASRD002	340033.0	7968215.3	417.4	218.60	RCDD	-61	291.5	2021	Sandiego
ASRD002A	340033.0	7968215.3	417.4	621.51	DD	-61	291.5	2021	Sandiego
ASRD003	339957.4	7968247.8	418.3	436.50	RCDD	-65	292.9	2021	Sandiego
ASRD004	340012.0	7968289.1	417.8	549.00	RCDD	-66	294.6	2021	Sandiego
ASRD005	339996.9	7968339.6	418.1	531.70	RCDD	-65	292.2	2021	Sandiego
ASRD006	339979.9	7968195.7	417.9	120.00	RC	-67	293.9	2021	Sandiego
ASRD007	340010.9	7968264.7	417.7	120.00	RC	-65	292.4	2021	Sandiego
ASWB01	340144.3	7969049.4	415.2	102.00	RC	-90	0.0	2021	Sandiego
ASWB02	339640.2	7968301.9	418.5	120.00	RC	-90	0.0	2021	Sandiego
ORC03	345747.0	7973564.3	446.0	100.00	RC	-61	140.2	1995	Onedin
ORC04	345722.2	7973595.2	445.8	142.00	RC	-61	140.2	1995	Onedin
ORC05	345716.0	7973539.6	446.1	151.00	RC	-61	140.2	1995	Onedin
ORC07	345746.8	7973501.4	452.1	124.00	RC	-61	140.2	1995	Onedin
ORC08	345764.5	7973477.2	456.9	100.00	RC	-61	140.2	1995	Onedin
ORC09	345684.7	7973514.1	445.9	151.00	RC	-61	140.2	1995	Onedin
ORC14	345764.6	7973605.3	446.5	70.00	RC	-61	140.2	1995	Onedin
ORC15	345777.7	7973589.7	446.5	60.00	RC	-61	140.2	1995	Onedin
ORC16	345783.9	7973645.8	447.3	96.00	RC	-61	140.2	1995	Onedin
ORC17	345796.3	7973630.6	447.4	70.00	RC	-61	140.2	1995	Onedin
ORC18	345760.1	7973675.1	452.0	119.00	RC	-61	140.2	1995	Onedin
ORC19	345780.6	7973617.9	447.0	70.00	RC	-61	140.2	1995	Onedin
ORC20	345767.8	7973633.1	446.9	96.00	RC	-61	140.2	1995	Onedin
ORC21	345754.6	7973648.7	447.3	114.00	RC	-62	140.2	1995	Onedin
ORC22	345759.8	7973548.2	446.4	96.00	RC	-62	140.2	1995	Onedin
ORC23	345648.2	7973433.3	449.3	96.00	RC	-62	140.2	1995	Onedin
ORC24	345679.9	7973457.8	448.9	120.00	RC	-62	140.2	1995	Onedin
ORC25	345710.8	7973483.2	450.8	102.00	RC	-62	140.2	1995	Onedin
ORC29	345573.1	7973525.3	444.5	149.00	RC	-62	140.2	1995	Onedin
ORC30	345623.3	7973463.7	444.1	203.00	RC	-62	140.2	1995	Onedin
ORC32	345637.6	7973633.8	445.3	173.00	RC	-60	140.2	1995	Onedin
ORCD01	345750.9	7973619.5	446.6	158.00	RC	-61	140.2	1995	Onedin
ORCD02	345727.3	7973650.9	446.9	158.10	RCDD	-61	140.2	1995	Onedin
ORCD06	345690.9	7973570.6	445.0	192.70	RCDD	-61	140.2	1995	Onedin

Hole ID	Easting	Northing	RL	Max Depth (m)	Hole Type	Dip	Azimuth	Year	Deposit
ORCD10	345659.6	7973544.7	444.5	202.40	RCDD	-61	140.2	1995	Onedin
ORCD11	345654.2	7973488.9	444.8	177.80	RCDD	-61	140.2	1995	Onedin
ORCD12	345628.8	7973519.4	444.2	225.60	RCDD	-61	140.2	1995	Onedin
ORCD13	345697.1	7973626.2	446.3	201.70	RCDD	-61	140.2	1995	Onedin
ORCD26	345633.0	7973576.4	444.8	258.80	RCDD	-62	140.2	1995	Onedin
ORCD27	345665.7	7973601.9	445.5	224.70	RCDD	-62	140.2	1995	Onedin
ORCD28	345602.4	7973551.0	444.3	288.40	RCDD	-62	140.2	1995	Onedin
ORCD31	345598.2	7973494.3	443.2	265.00	RCDD	-62	140.2	1995	Onedin
ORC35	345549.9	7973554.9	443.7	178.00	RC	-62	140.2	1996	Onedin
ORC39	345621.8	7973749.5	448.1	144.00	RC	-60	140.2	1996	Onedin
ORC40	346097.1	7974053.7	447.8	100.00	RC	-60	140.2	1996	Onedin
ORC41	345846.9	7973754.1	448.7	96.00	RC	-60	140.2	1996	Onedin
ORC43	345786.2	7973701.7	448.2	119.00	RC	-60	140.2	1996	Onedin
ORCD29A	345569.4	7973528.1	442.6	361.60	RCDD	-65	140.2	1996	Onedin
ORCD33	345583.9	7973636.6	446.2	348.40	RCDD	-62	140.2	1996	Onedin
ORCD34	345552.0	7973611.9	447.8	441.90	RCDD	-65	140.2	1996	Onedin
ORCD36	345671.2	7973657.9	444.1	263.30	RCDD	-62	140.2	1996	Onedin
ORCD37	345567.3	7973468.0	445.6	315.80	RCDD	-62	140.2	1996	Onedin
ORCD38	345440.7	7973335.3	439.8	297.80	RCDD	-58	133.2	1996	Onedin
ORCD45	345759.4	7973549.1	448.0	398.70	DD	-60	227.0	2006	Onedin
ORCD46	345731.5	7973708.5	453.0	192.50	RCDD	-60	137.0	2006	Onedin
ORCD47	345700.3	7973682.4	452.0	224.80	RCDD	-60	137.0	2006	Onedin
ORCD48	345593.3	7973437.4	445.0	126.00	RC	-60	137.0	2006	Onedin
ORC049	345633.4	7973445.9	450.0	79.00	RC	-60	53.3	2008	Onedin
ORC052	345458.0	7973300.2	439.7	301.00	RC	-60	53.3	2008	Onedin
ORC053	345574.8	7973523.8	444.3	199.00	RC	-60	143.3	2008	Onedin
ORC054	345573.7	7973587.8	444.8	205.00	RC	-60	143.3	2008	Onedin
ORCD050	345604.0	7973421.3	444.8	234.70	RCDD	-60	53.3	2008	Onedin
ORCD051	345557.8	7973383.0	443.0	357.60	RCDD	-60	53.3	2008	Onedin
AORC001	345651.5	7973459.7	446.4	192.00	RC	-60	139.1	2021	Onedin
AORC002	345680.6	7973488.2	446.7	138.00	RC	-63	141.0	2021	Onedin
AORC003	345709.0	7973517.4	447.0	138.00	RC	-61	142.8	2021	Onedin
AORC004	345720.2	7973566.5	445.6	174.00	RC	-61	138.7	2021	Onedin
AORC005	345651.7	7973619.9	446.1	358.50	RCDD	-70	138.4	2021	Onedin
AORC006	345597.4	7973464.3	442.5	278.00	RC	-60	141.8	2021	Onedin
AORD001	345685.5	7973549.8	445.0	155.00	DD	-60	139.7	2021	Onedin
AORD002	345660.1	7973516.6	444.3	174.80	DD	-60	139.8	2021	Onedin
AORD003	345638.0	7973477.8	444.3	215.30	DD	-67	140.5	2021	Onedin
AORD004	345696.9	7973601.8	445.7	196.20	DD	-60	139.1	2021	Onedin
AORD005	345613.7	7973516.2	443.9	268.00	DD	-63	139.7	2021	Onedin
AORD006	345630.6	7973546.4	444.5	243.80	DD	-60	140.4	2021	Onedin
AORD007	345662.0	7973572.2	445.0	183.10	DD	-60	139.4	2021	Onedin
AOWB01	345604.0	7973421.2	444.9	114.00	RC	-90	0.0	2021	Onedin
AOWB02	345820.8	7973630.0	448.0	120.00	RC	-90	0.0	2021	Onedin
AOWB03	345716.7	7973544.6	445.9	132.00	RC	-90	0.0	2021	Onedin
AOWB04	345721.7	7973539.6	446.2	126.00	RC	-90	0.0	2021	Onedin

Criteria	JORC Code Explanation	Commentary
<b>Data aggregation methods</b>	<ul style="list-style-type: none"> <li>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.</li> <li>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.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	<ul style="list-style-type: none"> <li>No data aggregation has been used to report the assay results in this announcement.</li> <li>No metal equivalents are reported.</li> </ul>
<b>Relationship between mineralisation widths and intercept lengths</b>	<ul style="list-style-type: none"> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>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').</li> </ul>	<ul style="list-style-type: none"> <li>The assay results presented in this announcement correspond to composite samples prepared for metallurgical test work, comprising a combination of multiple intervals (as listed).</li> <li>For the Sandiego deposit, the metallurgical composite samples were derived from drill holes generally oriented orthogonal to the interpreted strike of mineralisation. Given the steeply dipping nature of the mineralisation at Sandiego, the true width is expected to be less than the reported downhole lengths.</li> <li>For the Onedin deposit, metallurgical composites were prepared from samples obtained from drill holes oriented parallel to the interpreted strike of mineralisation. As a result, the reported downhole lengths do not correspond to the true width of mineralisation.</li> </ul>
<b>Diagrams</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Appropriate maps and diagrams are presented in the body of this announcement.</li> </ul>
<b>Balanced reporting</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Only assay data relevant to the metallurgical composite samples and metallurgical testwork results are reported. The proportion of each hole represented by the reported intervals can be ascertained from the sum of the reported intervals divided by the total drill hole depth.</li> <li>All assay results for drill holes included in the Mineral Resource estimates have been considered and comprise results not necessarily regarded as anomalous.</li> </ul>
<b>Other substantive exploration data</b>	<ul style="list-style-type: none"> <li>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.</li> </ul>	<ul style="list-style-type: none"> <li>Density measurements were taken from 1,197 diamond core billets (Sandiego) and 459 billets (Onedin) over the life of the project. Samples were selected from every 1 m or 5 m downhole. Density measurements were carried out by field staff at the Halls Creek sample yard. During AAR's ownership, core billets were initially wrapped in cling film, and density was determined using a conventional sample weight in air and then water. Samples with measured density values of &gt;4.7 were discarded from the density database as these were considered too high for the style of mineralisation.</li> </ul>
<b>Further work</b>	<ul style="list-style-type: none"> <li>The nature and scale of planned further work (e.g., tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul style="list-style-type: none"> <li>The Company intends to undertake a Scoping Study to evaluate development options for the Sandiego and Onedin deposits.</li> </ul>