nouncement

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Gonneville Resource remodelled to support selective mining

New Gonneville high-grade PGE-Ni-Cu-Co Resource model facilitates modelling of a combined open pit/underground starter project

Highlights

- ((Gonneville high-grade sulphide Resource revised to:
 - 59Mt @ 2.0g/t 3E¹, 0.20% Ni, 0.21% Cu, 0.019% Co ((
 - Containing: 3.8Moz 3E, 120kt Ni, 120kt Cu, 11kt Co ((
 - ~61% in the higher confidence Measured and Indicated categories ((
 - ~46% within ~200m from surface u
 - ~2.5x the global Resource average 3E and Cu grades and therefore higher recoveries ((
 - ~25% increase in 3E grade and ~17% increase in Cu grade relative to previous high-grade ((sulphide Resource (28 March 2023)
- The high-grade sulphide Resource begins at a depth of just 40m and extends to ~1.1km below ((surface, where it remains open.
- This new model forms the basis for **selective open-pit and underground mining**, to be investigated ((in a high-grade Scoping Study Starter Case, which is underway.
- Gonneville global Resource also increased by ~18% (since 28 March 2023) after incorporating 15 ((new step-out drill holes:
 - 660Mt @ 0.79g/t 3E, 0.15% Ni, 0.083% Cu, 0.015% Co ((
 - Containing: 17Moz 3E, 960kt Ni, 540kt Cu, 96kt Co ((
 - ~61% in the higher confidence Measured and Indicated categories ((
- The new remodelled Resource could also enhance larger scale, bulk open-pit mining cases by ((improving feed grade and driving higher average metallurgical recoveries.
- The high-grade sulphide Resource provides optionality to potentially accelerate payback before ((expanding to a future bulk mining opportunity - selective mining initially preserves this long-term, larger scale opportunity.
- Work continues on the Pre-Feasibility Study (PFS) for the Project in parallel to the high-grade ((Scoping Study Starter Case – the PFS is targeted for completion in mid CY25.
- A strategic partnering process is continuing in parallel with the progression of development ((studies and regulatory approvals.



^{1 3}E = Palladium (Pd) + Platinum (Pt) + Gold (Au), with an average in-situ ratio of ~4.5:1:0.17 (Pd:Pt:Au)

Overview

Chalice Mining Limited ("Chalice" or the "the Company") (ASX: CHN) is pleased to report an updated Mineral Resource Estimate ("Resource" or "MRE") for the 100%-owned **Gonneville PGE-Ni-Cu-Co Project** ("Project"), located on Chalice-owned farmland ~70km north-east of Perth in Western Australia. This represents a key first step towards optimising the Project in light of a lower commodity price environment.

The large-scale Gonneville orthomagmatic palladium-platinum-nickel-copper-cobalt sulphide deposit was discovered by Chalice in early 2020. Over the last four years, more than 1,200 drill holes for ~320,000m have been completed to define the Resource, which remains open to the north-west and down-dip.

Since the previous Resource update in March 2023, modelling work has focussed on re-interpreting high-grade sulphide zones within the Resource at a much more granular level, to allow the investigation of selective mining methods.

As part of the updated MRE, high-grade palladium, nickel and copper zones have been modelled separately to better define the mineralogical domains. Previous Resource models assumed bulk open-pit mining approaches only (with significantly larger block sizes).

56 additional drill holes have also been incorporated, both to increase confidence in the Resource as well as extend the Resource down-dip to a depth of \sim 1,100m.

The Resource includes a mix of oxide, transitional and fresh mineralisation. The sulphide mineralisation in-pit is reported at two different Net Smelter Return (NSR) cut-offs, one to reflect the initial development focus on a high-grade, selective mining starter case, and a lower cut-off to reflect a future expansion into a bulk open-pit mining method.

The updated Resource for the Gonneville deposit as at 23 April 2024 is shown in Tables 1 and 2 below, with key differences between the March 2023 and April 2024 estimates highlighted in Table 3.

Commenting on the updated Resource, Chalice Managing Director & Chief Executive Officer, Alex Dorsch, said:

"The remodelled high-grade sulphide Resource marks the first step in the reset of the development strategy for the Gonneville Project. The high-grade model provides improved high-grade definition to underpin the design of a more selective, smaller scale starter project.

"The starter project design will target higher grades initially, which drive higher recoveries and better overall margins, with the objective of making the initial stage of the project much more resilient at conservative commodity prices. The smaller scale starter project will also have a reduced development capital cost and therefore a lower risk profile.

"Importantly, a smaller scale starter project design allows for future expansion into a larger scale bulk mining operation, according to prevailing economic conditions at the time. Selective mining initially preserves the optionality of a future expansion, as mined material will be stockpiled for future processing. This staged development approach reduces risk, allows efficient deployment of capital and maximises optionality.

"Pleasingly, recent step-out drill holes have confirmed additional growth of the Resource at depth and further exploration upside, reinforcing the view that Gonneville is a generational scale, worldclass mineral system.

"We are looking forward to completing the revised Scoping Study Starter Case over the coming months and progressing the Pre-Feasibility Study, which is due to be completed in mid CY25. With the improved Resource model and a strong cash balance, Chalice is in a strong position to progress this unique critical minerals project."

Table 1. Gonneville Mineral Resource Estimate (MRE) – 23 April 2024.

Classification*	Mass	Grade	Contained Metal						
	Mt	3E (g/t)	Ni (%)	Cu (%)	Co (%)	3E (Moz)	Ni (kt)	Cu (kt)	Co (kt)
Measured	2.9	1.20	0.21	0.17	0.018	0.12	6.1	4.8	0.52
Indicated	400	0.79	0.15	0.087	0.015	10	610	370	65
Inferred	250	0.80	0.15	0.076	0.014	6.4	370	200	37
Total	660	0.79	0.15	0.083	0.015	17	960	540	96

* Within pit constrained cut-off of A\$25/t NSR and underground MSO cut-off of A\$110/t NSR (refer to Technical overview section for details of cut-off approach and assumptions). Note some numerical differences may occur due to rounding to 2 significant figures.

Table 2. Gonneville High-grade Sulphide Mineral Resource Estimate (MRE) – 23 April 2024.

Classification*	Mass	Grade	Contained Metal						
	Mt	3E (g/t)	Ni (%)	Cu (%)	Co (%)	3E (Moz)	Ni (kt)	Cu (kt)	Co (kt)
Measured	0.77	2.8	0.37	0.35	0.026	0.068	2.8	2.7	0.2
Indicated	35	1.9	0.21	0.23	0.019	2.1	73	80	6.8
Inferred	23	2.1	0.19	0.17	0.018	1.5	44	39	4.1
Total	59	2.0	0.20	0.21	0.019	3.8	120	120	11

* Within pit constrained cut-off of A\$100-110/t NSR and underground cut-off of A\$110/t NSR. Note some numerical differences may occur due to rounding to 2 significant figures.

Key parameter	March 2023	April 2024
High-grade sulphide Resource	120Mt @ 1.6g/t 3E, 0.20% Ni, 0.18% Cu, 0.017% Co	59Mt @ 2.0g/t 3E (+25%), 0.20% Ni (0%), 0.21% Cu (+17%), 0.019% Co (+12%)
Global Resource	560Mt @ 0.88g/t 3E, 0.16% Ni, 0.09% Cu, 0.015% Co	660Mt @ 0.79g/t 3E, 0.15% Ni, 0.083% Cu, 0.015% Co
Global Resource Contained Metal	16Moz 3E, 860kt Ni, 520kt Cu, 83kt Co	17Moz 3E (+6%), 960kt Ni (+12%), 540kt C∪ (+4%), 96kt Co (+16%)
Mineralisation wireframing approach	Modelling of high-grade sulphide rich horizons above a nominal >0.9g/t Pd cut-off grade	Separate Pd, Ni and Cu high- grade sulphide wireframes
No. of wireframes	14	100
Mining approach	Bulk open-pit mining only (larger block sizes)	Selective open-pit and underground mining (smaller block sizes)
Revenue / cut-off approach	Nickel equivalent grade applied to each block – fixed recoveries used in the nickel equivalent formula	Net Smelter Return (NSR) applied to each block – variable recoveries according to grade based on metallurgical testwork to date and offtake terms from indicative western copper smelter proposals, western nickel-cobalt MHP benchmarks and an independent marketing expert
Economic constraint approach	Pit shell and nickel equivalent cut-off determined using Whittle pit optimisation, below-pit	Pit shell and NSR cut-off determined using Whittle pit optimisation, below-pit material reported within Mineable Shape

Key parameter	March 2023	April 2024		
	material reported above sub- level cave cut-off mining method	Optimiser (MSO) based on long- hole open stoping mining method		
Open-pit cut-off	0.35% NiEq ¹	A\$25/t NSR		
Underground cut-off	0.40% NiEq	A\$110/t NSR		
High-grade sulphide cut-off	0.60% NiEq	A\$100-110/t NSR in-pit and A\$110/t NSR underground		

Refer to Net Smelter Return calculation and assumptions in Technical overview section. Refer to metal equivalent assumptions in Section 2 of the attached JORC Code Table 1.

The Resource has been independently prepared by leading mining and geological consultants Cube Consulting. The Resource has been reported in accordance with the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code), is effective 23 April 2024, and is shown in full in Table 4.

Importantly, within the Gonneville global MRE there is a significant high-grade sulphide component at a higher cut-off (Figures 1-3 and Table 5). Approximately 46% of this high-grade sulphide resource is within ~200m of surface. This high-grade sulphide component will be the focus of the Scoping Study Starter Case, which is being completed in parallel to the Pre-Feasibility Study.

The initial phase of open-pit mining is expected to operate at a higher feed grade and with higher metallurgical recoveries in the early years of mining to enhance financial metrics and minimise the capital payback period.

The Resource is reported according to domain (oxide, transitional, fresh) as well as codified confidence levels (Measured, Indicated or Inferred) (Table 4).



Figure 1. Plan view of Gonneville block model (high-grade sulphide only) and new drilling.



Figure 2. 3D view (looking NNE) of Gonneville block model (high-grade sulphide only) and new drilling.



Figure 3. 3D view (looking ESE) of Gonneville block model (high-grade sulphide only) and new drilling.

Domain	Cut-off NSR (A\$/t)	Classification	Mass	Grade						Containe	ed metal				
			(Mt)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ni (%)	Cu (%)	Co (%)	Pd (Moz)	Pt (Moz)	Au (Moz)	Ni (kt)	Cu (kt)	Co (kt)
		Measured	-	-	-	-	-	-	-	-	-	-	-	-	-
Ovida in nit	25	Indicated	7.0	1.9	-	0.05	-	-	-	0.43	-	0.01	-	-	-
Oxide – in-pit	25	Inferred	6.1	0.54	-	0.03	-	-	-	0.11	-	0.01	-	-	-
		Subtotal	13	1.3	-	0.04	-	-	-	0.54	-	0.02	-	-	-
		Measured	0.4	0.82	0.18	0.03	0.19	0.160	0.020	0.01	0.00	0.00	0.67	0.56	0.07
Sulphide (Transitional)	25	Indicated	14	0.68	0.16	0.03	0.16	0.103	0.020	0.30	0.07	0.01	22	14	2.7
– in-pit	25	Inferred	0.1	0.72	0.21	0.02	0.13	0.101	0.014	0.00	0.00	0.00	0.19	0.15	0.02
		Subtotal	14	0.69	0.16	0.03	0.16	0.104	0.020	0.32	0.08	0.01	23	15	2.8
	25	Measured	2.5	1.0	0.22	0.03	0.21	0.168	0.018	0.08	0.02	0.00	5.4	4.3	0.45
Sulphide (Fresh) – in-pit		Indicated	380	0.60	0.14	0.02	0.15	0.088	0.015	7.4	1.7	0.30	570	340	57
solphide (riesh) – ili-pi		Inferred	240	0.60	0.14	0.02	0.15	0.074	0.015	4.6	1.1	0.15	350	170	35
		Subtotal	620	0.60	0.14	0.02	0.15	0.083	0.015	12	2.8	0.45	930	520	92
		Measured	-	-	-	-	-	-	-	-	-	-	-	-	-
Sulphide (Fresh) – MSO	110	Indicated	-	-	-	-	-	-	-	-	-	-	-	-	-
Supilide (Hesh) - MSO	110	Inferred	7.3	1.7	0.38	0.09	0.16	0.192	0.015	0.40	0.09	0.02	12	14	1.1
		Subtotal	7.3	1.7	0.38	0.09	0.16	0.192	0.015	0.40	0.09	0.02	12	14	1.1
		Measured	2.9	0.99	0.21	0.03	0.21	0.167	0.018	0.09	0.02	0.00	6.1	4.8	0.52
All		Indicated	400	0.63	0.14	0.02	0.15	0.087	0.015	8.1	1.8	0.32	600	350	60
		Inferred	250	0.63	0.14	0.02	0.14	0.076	0.014	5.1	1.1	0.18	360	190	36
		Total	660	0.63	0.14	0.02	0.15	0.083	0.015	13	2.9	0.50	960	540	96

Table 4. Gonneville Mineral Resource Estimate (JORC Code 2012), 23 April 2024.

Note some numerical differences may occur due to rounding to 2 significant figures. Includes drill holes drilled up to and including 7 November 2023.

Domain	Cut-off NSR (A\$/t)	Classification	Mass	Grade						Contai	ned met	al			
			(Mt)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ni (%)	Сu (%)	Co (%)	Pd (Moz)	Pt (Moz)	Au (Moz)	Ni (kt)	Cu (kt)	Co (kt)
		Measured	0.8	2.3	0.45	0.05	0.37	0.35	0.026	0.06	0.01	0.00	2.8	2.7	0.20
HG Sulphide – above 200m	100	Indicated	25	1.4	0.32	0.07	0.21	0.22	0.020	1.1	0.26	0.06	54	54	5.1
depth in-pit	100	Inferred	1.1	1.2	0.37	0.04	0.20	0.14	0.019	0.05	0.01	0.00	2.2	1.6	0.21
		Subtotal	27	1.4	0.33	0.07	0.22	0.22	0.020	1.2	0.28	0.06	59	58	5.5
		Measured	-	-	-	-	-	-	-	-	-	-	-	-	-
HG Sulphide – below 200m	110	Indicated	9.7	1.6	0.43	0.13	0.19	0.27	0.018	0.51	0.14	0.04	19	26	1.7
depth in-pit	110	Inferred	15	1.6	0.39	0.07	0.21	0.16	0.019	0.76	0.18	0.03	30	24	2.7
		Subtotal	24	1.6	0.41	0.09	0.20	0.20	0.018	1.3	0.32	0.07	49	50	4.4
		Measured	-	-	-	-	-	-	-	-	-	-	-	-	-
UC Sulphide MSO	110	Indicated	-	-	-	-	-	-	-	-	-	-	-	-	-
HG Sulphide – MSO	110	Inferred	7.3	1.7	0.38	0.09	0.16	0.19	0.015	0.40	0.09	0.02	12	14	1.1
		Subtotal	7.3	1.7	0.38	0.09	0.16	0.19	0.015	0.40	0.09	0.02	12	14	1.1
		Measured	0.8	2.3	0.45	0.05	0.37	0.35	0.026	0.06	0.01	0.00	2.8	2.7	0.20
All HC Sulphide		Indicated	35	1.5	0.35	0.09	0.21	0.23	0.019	1.7	0.39	0.10	73	80	6.8
All HG Sulphide		Inferred	23	1.6	0.39	0.07	0.19	0.17	0.018	1.2	0.29	0.06	44	39	4.1
		Total	59	1.5	0.37	0.08	0.20	0.21	0.019	2.9	0.69	0.15	120	120	11

Table 5. High-grade sulphide (transitional and fresh) breakdown within Gonneville Resource, 23 April 2024.

Note some numerical differences may occur due to rounding to 2 significant figures. This higher-grade component is contained within the reported global Mineral Resource. Includes drill holes drilled up to and including 7 November 2023.

NSR Cut-off in-pit	NSR Cut-off in MSO	Total Mass	Grade							Containe	ed metal					
A\$/t	A\$/t	(Mt)	3E (g/t)	Pd (g/t)	Pt (g/t)	Au (g/t)	Ni (%)	Cu (%)	Co (%)	3E (Moz)	Pd (Moz)	Pt (Moz)	Au (Moz)	Ni (kt)	Cu (kt)	Co (kt)
15	110	690	0.75	0.59	0.14	0.02	0.15	0.082	0.015	17	13	3.0	0.50	1,000	560	100
25	110	640	0.78	0.62	0.14	0.02	0.15	0.085	0.015	16	13	2.9	0.49	960	540	96
35	110	530	0.85	0.67	0.15	0.03	0.16	0.092	0.015	15	12	2.6	0.45	830	490	82
45	110	390	0.97	0.76	0.17	0.03	0.16	0.11	0.016	12	9.6	2.2	0.39	640	410	63
55	110	270	1.1	0.88	0.20	0.04	0.17	0.12	0.017	9.6	7.5	1.7	0.33	460	330	44
65	110	180	1.3	1.0	0.23	0.05	0.18	0.14	0.017	7.6	5.9	1.4	0.27	330	260	31
75	110	130	1.5	1.2	0.27	0.06	0.19	0.16	0.018	6.1	4.8	1.1	0.23	240	210	23
85	110	95	1.7	1.3	0.30	0.06	0.19	0.18	0.018	5.1	4.0	0.93	0.20	180	170	17
95	110	73	1.8	1.4	0.34	0.07	0.20	0.19	0.019	4.3	3.4	0.79	0.17	150	140	14
105	110	58	2.0	1.6	0.37	0.08	0.20	0.21	0.019	3.7	2.9	0.69	0.15	120	120	11
115	110	47	2.2	1.7	0.40	0.09	0.21	0.22	0.019	3.3	2.5	0.61	0.14	99	110	9.0
125	110	40	2.3	1.8	0.42	0.10	0.21	0.23	0.019	2.9	2.3	0.54	0.12	84	93	7.6
135	110	34	2.4	1.9	0.45	0.10	0.21	0.24	0.019	2.7	2.1	0.49	0.11	74	83	6.6
145	110	30	2.5	1.9	0.47	0.11	0.22	0.25	0.019	2.4	1.9	0.45	0.10	65	75	5.8
155	110	27	2.6	2.0	0.48	0.11	0.22	0.26	0.019	2.2	1.7	0.41	0.10	58	68	5.1

 Table 6. Gonneville Resource grade-tonne table (sulphide domains, excluding oxide), 23 April 2024.

Note that the grade-tonnage table includes material classified as Inferred, where data is insufficient to allow the geological grade and continuity to be confidently interpreted. Note that the grade-tonnage curve excludes oxide domains.

Resource growth potential

Resource definition drilling is now largely complete at the Project, with Inferred Resources defined to a vertical depth of ~1,100m in the north-western extension of the deposit. The Resource remains open beyond this depth and along strike to the north.

Results have been received for an additional seven wide-spaced diamond holes at Gonneville drilled beyond the extent of the Resource since 23 January 2024, when the drilling database was closed for the Resource update.

These holes confirm mineralisation continues for considerable distance down dip, within the central 'saddle' area of the Gonneville Resource, below the current extent of the Resource pit shell. These intercepts represent a significant longer term underground resource growth opportunity in this area.

Significant high-grade intersections from wide-spaced step-out drill holes beyond the new Resource include:

- « 5m @ 1.76 g/t 3E, 0.14% Ni, 0.09% Cu, 0.01% Co from 1164m (JD408);
- 10m @ 2.13g/t 3E, 0.18% Ni, 0.21% Cu, 0.01%% Co from 1191m (JD408 the deepest mineralisation intersected at the Project to date);
- (10m @ 1.47g/t 3E, 0.14% Ni, 0.11% Cu, 0.01% Co from 845m(JD430);
- « 7m @ 1.6g/t 3E, 0.19% Ni, 0.09% Cu, 0.02% Co from 1037m (JD430);
- « 8m @ 1.14g/t 3E, 0.15% Ni, 0.13% Cu, 0.01% Co from 1052m (JD430);
- (6m @ 1.55g/t 3E, 0.15% Ni, 0.26% Cu, 0.01% Co from 1159m (JD430);
- (3.9m @ 2.94g/t 3E, 0.23% Ni, 0.55% Cu, 0.02% Co from 1197.1m (JD430);
- (17.1m @ 1.69g/t 3E, 0.16% Ni, 0.22% Cu, 0.02% Co from 1207m (JD430);
- « 2m @ 7.08g/t 3E from 621m (JD431);
- (12m @ 1.48g/t 3E, 0.15% Ni, 0.14% Cu, 0.01% Co from 641m (JD431);
- (3.8m @ 1.6g/t 3E, 0.18% Ni, 0.14% Cu, 0.02% Co from 64.2m (JD432);
- « 6m @ 1.81g/t 3E, 0.15% Ni, 0.08% Cu, 0.01% Co from 217m (JD433);
- (11.2m @ 1.43g/t 3E, 0.22% Ni, 0.12% Cu, 0.02% Co from 305.2m (JD433);
- « 4m @ 1.11g/t 3E, 0.24% Ni, 0.11% Cu, 0.02% Co from 327m (JD433);
- « 2m @ 1.44g/t 3E, 0.17% Ni, 0.02% Co from 620m (JD435);
- (3.2m @ 1.71g/t 3E, 0.23% Ni, 0.22% Cu, 0.02% Co from 765m (JD435);
- (6.4m @ 1.16g/t 3E, 0.14% Ni, 0.14% Cu, 0.01% Co from 412m (JD436);
- (12.6m @ 1.01g/t 3E, 0.21% Ni, 0.08% Cu, 0.02% Co from 442m (JD436);
- « 2m @ 1.16g/t 3E, 0.2% Ni, 0.12% Cu, 0.02% Co from 457m (JD436); and,
- « 3m @ 2.26g/t 3E, 0.32% Ni, 0.15% Cu, 0.03% Co from 624m (JD436).

Refer to Table 9 and Table 10 for further drill hole information.

Forward plan

Chalice continues to progress the Pre-Feasibility Study (PFS) for the Gonneville Project, which is targeted for completion by mid-CY25.

A Scoping Study Starter Case is being progressed in parallel to the PFS. The starter case will use the new high grade Resource model to form the basis for a smaller scale, more selective mine design considering both open-pit and underground mining.

The starter case is targeting a reduced scale processing plant and therefore reduced development capital cost, higher grade, higher recoveries and improved margins, which will support the overall goal of a shorter capital payback period and improved IRR at lower commodity prices.

Other priority activities ongoing on the Project include:

- Metallurgical testwork to support the PFS (on low grade and high-grade samples), including variability tests on defined geo-metallurgical domains and optimisation of comminution and flotation parameters;
- « Progressing the Federal and State approvals process following referral in March 2024; and,
- Investigating key infrastructure routes for power, water, and transport, and completing initial engineering.

Chalice commenced a process in April 2023 to attract a tier-1 strategic partner for Gonneville with the financial, technical, and marketing capabilities to assist Chalice in developing the Project. Chalice remains in active discussions as part of this partnering process, however there can be no guarantee at this time of a transaction.

This announcement is authorised for release by the Board of Directors.

For further information, please visit <u>www.chalicemining.com</u>, or contact:

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Technical overview

The following is a material information summary relating to the Resource, consistent with ASX Listing Rule 5.8.1 requirements. Further details are provided in JORC Code Table 1, which is included as Appendix A.

Project location and history

The 100%-owned Gonneville PGE-Nickel-Copper Project is located on Chalice-owned farmland, ~70km north-east of Perth in Western Australia. The greenfield Project was staked in early 2018 as part of Chalice's global search for high-potential nickel sulphide exploration opportunities.

The Project is centred on the Gonneville deposit – a tier-1 scale greenfield critical minerals discovery by Chalice's geologists in early 2020. The deposit hosts a rare mix of critical minerals required for decarbonisation and urbanisation, such as palladium, platinum, nickel, copper and cobalt. Large-scale deposits like Gonneville are very rare and therefore have high strategic value, as current production of PGEs and nickel is dominated by Russia, South Africa and Indonesia.

Chalice recognises the need to develop the Gonneville Project sustainably and responsibly, with a best practice approach to environmental, social and cultural heritage management. Chalice is currently progressing development studies to determine the feasibility of the Project and has commenced the regulatory approvals process.

The Gonneville Project is favourably located, with access to established road, rail, port and highvoltage power infrastructure nearby, plus access to a significant 'drive-in, drive-out' mining workforce in the Perth surrounds (Figure 4).



Figure 4. Gonneville Project location.

Geology and geological interpretation

The Gonneville deposit is the first major PGE-rich orthomagmatic sulphide discovery in Australia. The deposit is hosted within an Archaean Mafic-Ultramafic intrusive complex, known as the Julimar Complex.

The deposit is located within a \sim 1.9km x 0.9km x >0.8km section of the Julimar Complex, known as the Gonneville Intrusion, which has a north-north-east strike, maximum thickness of approximately 650m, and 45° west-north-west dip.

The Gonneville Intrusion is composed predominantly of serpentinised olivine peridotite / harzburgite (serpentine-magnetite-amphibole-chromite) with lesser intervals of pyroxenite (amphibole-chlorite), gabbro and leucogabbro (clinozoisite-amphibole) divided into a series of eight litho-geochemical domains (Figure 5).

The litho-geochemical domains broadly parallel the strike and dip of the Gonneville Intrusion and are interpreted to represent discrete magma influxes and associated fractionation units. The intrusion is crosscut by a later granite body, which broadly parallels the dip and strike orientation of the Mafic-Ultramafic package. Crosscutting the entire intrusive package is a series of sub vertical, north-east to north-west striking, dolerite dykes. Both the granite body and dolerite dykes are un-mineralised with respect to PGE-Ni-Cu-Co. A package of meta-sedimentary rocks surrounds the Gonneville intrusion.

Although texturally the intrusive rock-types within the complex are moderately well preserved, permitting the use of igneous terminology, all rock units have been replaced by mineral assemblages characteristic of upper greenschist to lower amphibolite facies metamorphism.

The Gonneville Intrusion is bounded to the west (Hanging wall) by felsic gneiss/metasediment and to the east (Footwall) by a succession comprising metasediments (sulphidic pelite) and amphibolite of uncertain parentage.

Primary PGE-Ni-Cu-Co sulphide mineralisation occurs principally within the Ultramafic domains of the Gonneville Intrusion and to a lesser extent in gabbro subunits. Mineralisation is present as sub-parallel sulphide-rich zones (>20% sulphides), typically 5–40 m wide, that occur within broader intervals (~100–150 m wide) of weakly disseminated sulphides. The orientation of the higher-grade mineralised sulphide zones suggests an association with the litho-chronological domains within the intrusion (Figure 6).

There are four typical sulphide mineralisation types recognised at Gonneville:

- « Massive sulphides: >75% (by volume) sulphide,
- " Matrix sulphides: 40% to 75% sulphide; also referred to as net-textured, typically occurs as interconnected pyrrhotite-pentlandite-chalcopyrite mineralisation with silicate gangue,
- Stringer sulphides: 10% to 75% sulphide. Stringer sulphide mineralisation is typically observed around faults or lithological contacts, and
- Oisseminated sulphides: <40% sulphide. Disseminated sulphide mineralisation occurs as either heavily disseminated chalcopyrite or disseminated/blebby sulphides with 0.5 cm to 1.0 cm diameter sulphide blebs with variable pyrrhotite, chalcopyrite and pentlandite contents.

Although the ratio between the primary sulphide phases changes between, and within, the sulphiderich and sulphide-poor zones, sulphide mineralisation consists of a consistent assemblage of pyrrhotite-pentlandite-chalcopyrite +/- pyrite. Sulphide content and metal grade are well correlated, with higher sulphide concentration corresponding to higher metal content.

The weathering profile in the area extends to approximately 30–40 m below surface. A welldeveloped laterite and saprolite profile is present which contains elevated PGE grades from near surface to a depth of approximately 25m. There is a narrow transition zone between the oxide and sulphide zones, which is generally <15m thick.



Figure 5. Gonneville 3D view (looking NNE) – lithogeochemical domains, high-grade sulphide zones and post-mineralisation dolerite dykes.



Figure 6. Gonneville Plan View – lithogeochemical domains, high-grade sulphide zones and postmineralisation dolerite dykes.

Drilling techniques

The drilling database for the Deposit includes data collected by diamond (DD), reverse circulation (RC) and air-core (AC) drilling techniques. The drilling database has been compiled from holes drilled by the Company between 12 March 2020 and 7th November 2023.

A total of 464 DD holes (including wedges) 636 RC drill holes (including RC pre-collars with DD tails), and 107 shallow AC holes for ~320,000m were included in the Resource.

Nominal drill hole spacing at Gonneville is ~40m over the majority of the deposit. The 40m spaced infill drilling has been undertaken to a depth of ~400m. Deeper extensional drilling has been carried out typically on 80m – 160m spacings at irregular intervals throughout the intrusion. The vast majority of DD and RC holes have been drilled towards the east at a dip of -60° and intersections of both the lithological units and mineralised zones approximate true thickness and hence provide representative samples. AC holes have been drilled vertically which is the optimal sampling orientation for the sub-horizontal oxide mineralisation.

A total of 7 DD holes (including wedges) have been completed subsequent to the holes included in the Resource. A total of ~330,000m of RC and diamond drilling has been drilled to date at the project including exploration holes.

Sampling and sub-sampling

Diamond drill core was predominantly HQ diameter with a small number of NQ2 diameter holes drilled. Quarter core samples for HQ and half core samples for NQ were taken for analysis over intervals ranging from 0.2m to 1.2m (typically 1.0m) based on geology, with the same quarter of the drill core consistently sampled. Field duplicates were collected as ¹/₄ core samples. Individual recoveries of diamond core samples were recorded on a quantitative basis. Generally sample weights were comparable, and any bias is considered negligible. Core recovery was excellent, generally >95%.

RC drilling samples were collected as 1m samples from a rig mounted cone splitter. Two 1m assay samples were collected with one sample being sent to the laboratory and the other either kept for reference or used as a duplicate.

AC drilling samples were collected as 1m samples from a rig mounted cone splitter. A single 1m assay sample was collected and sent to the laboratory. The remainder of the sample was bagged and either kept for reference or used as a duplicate.

Samples were collected in polyweave bags either at the drill rig (RC and AC samples) or at the core cutting facility (DD samples). The polyweave bags contain five samples each and are cable tied; samples potentially containing fibrous minerals were segregated into separate bags.

Filled bags were collected into palletised bulka bags at the field office and delivered directly from site to ALS laboratories in Wangara, Perth by a Chalice contractor several times weekly. Certified Reference Materials (CRMs) and blank material were inserted in the sample stream to monitor analytical bias and carry-over contamination, respectively. No unresolved issues were identified through this monitoring.

Sampling analysis and methods

DD, RC and AC samples underwent sample preparation and geochemical analysis by ALS Perth. Au-Pt-Pd was analysed by 50g fire assay fusion with an ICP-AES finish (ALS Method code PGM-ICP24). A 48-element suite was analysed by ICP-MS following a four-acid digest (ALS method code ME-MS61) for holes up to and including JD023 and JRC122.

Later holes were analysed using four-acid digest for 34 elements (ALS method code ME-ICP61) including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn, Zr. Additional analysis was performed on higher grade material as required for elements reporting out of range for Ni, Cr, Cu (ALS method code ME-OG-62) and Pd, Pt (ALS method code PGM-ICP27).

Selected samples were sent to Intertek Genalysis for analysis of other PGEs (Ru, Rh, Os, Ir). These were analysed using nickel sulphide collection fire assay with a 1ppb detection limit (IntertekGenalysis method code NS25/MS). Results for these are all routinely low with maximum values of 75ppb, 333ppb, 21ppb, 92ppb respectively and hence Gonneville contains no appreciable quantities of these metals.

Certified reference materials (CRMs), duplicates and blanks were inserted at rates of approximately 1:10 for all samples. Samples from ~5% of the samples >0.1g/t Pd were sent to Intertek Genalysis laboratory in Perth for cross laboratory checks. All QA/QC samples display results within acceptable levels of accuracy and no significant carry over contamination was observed.

Sample density determinations were carried out on site using the water displacement method. Density determinations were carried out on all fresh rock core samples, and representative oxide samples resulting in ~80% of total drilled diamond core intervals having had density determinations completed. These were then used to assign a bulk density to the block model using a combination of assignment by geological domain, and spatial estimation from sample density determinations from de-surveyed drill holes.



Local Grid Transformation

This Resource update is estimated in a local grid with strike of the high-grade zones approximately parallel to local grid north. The local grid is a 40° anti-clockwise rotation to MGA94 grid north (i.e. local grid north is 040° in MGA94) and 1000m has been added to the RL.

Resource estimation methodology

All geological wireframe interpretations used in the Resource were constructed by Chalice using a combination of Leapfrog and Micromine software. Geological wireframes provided by Chalice include weathering, lithological, litho-geochemical and supergene/dispersion zone interpretations. Block modelling and grade estimation was carried out by Cube Consulting using Surpac, Datamine and Isatis software.

Statistical analysis was carried out by Cube Consulting using Geoaccess Professional and Isatis software. Prior to estimation, variables with below detection limit assays were assigned a positive value equal to half of the detection limit for the relevant grade variable. Intentionally unsampled intervals were retained as absent grade values. The vast majority of the intentionally unsampled intervals occur outside of the host intrusion lithology, and therefore have no bearing on the grade estimates.

Density is generally more poorly informed than the elemental variables, due to only core being sampled for density, but it was deemed possible to fill in unsampled density values on the basis of a multi-linear regression of sampled density values against the well-correlated and more widely informed Co, Fe, Ni and S variables.

All wireframes and drill data were rotated 40° anti-clockwise and placed in a local grid for estimation and mining studies. This brings the average strike of the mineralisation approximately in line with the local north-south axis.

All drillhole samples were flagged according to the geological and mineralisation domain interpretations provided by Chalice. Sample populations were statistically analysed to derive geostatistical domain groupings for Pd, Pt, Ni, Co, Cu, Au, As, S, Mg, Cr and density. Statistical analysis included comparison of global grade distributions, derivation of statistical correlations between grade variables and contact analysis of grade variables across the various geological domains. From analysis, estimation domains were determined for Pd/Pt, Ni/Co, Cu/Au, As, S, Mg, Cr and density variable groupings.

For primary high grade Pd, Pt, Ni and Co, mineralisation located within the Ultramafic intrusion, grade interpolation was undertaken using Ordinary Kriging (OK). For the high grade Cu/Au grouping, a mix of OK and Localised Uniform Conditioning (LUC) was used. For all six economic elements and S, the lower grade material outside of the high grade zones, situated within the general Ultramafic zone, was estimated using LUC. The lower grade general Ultramafic zone was divided into a low-to-moderate grade "Main" sub-domain, and very low-grade northwest sub-domain for Pd, Pt, Ni, Co, Cu, Au and S.

OK estimates for the granite, gabbro, and sediment lithologies were also undertaken, but using restrictive high-grade distance limiting parameters to curtail the propagation of rare high-grade samples. These high-grade samples are believed to be due mainly to re-mobilisation of mineralisation in the case of the surrounding sediments and granite. The mineralisation modelled outside of the Ultramafic envelope has not been classified as a Mineral Resource for reporting purposes.

For the secondary mineralisation, most notably in the supergene horizon, grade interpolation was undertaken using OK.

Indicator kriging was used to model the geometry of dyke material that was logged in the drill holes, typically represented by short and discontinuous intercepts, but which fell outside of the dyke Leapfrog wireframes. This additional dyke volume comprises approximately 1.4% of the total volume

within the estimated Ultramafic intrusion envelope. Detection limit grades were assigned for all elemental variables and density was assigned based on density sample statistics within the dolerite dykes.

OK estimates were run into either 20mE x 20mN x 5mRL (local grid) parent blocks or 10mE x 20mN x 5mRL (local grid) parent blocks, which is approximately half the width of the nominal 40m infill drill spacing in the northing direction. Because of the north-south strike in local space, the nominally 60° easterly inclined drill holes, 1m downhole sample spacing and generally continuous nature of the variograms models for the economic elements, the local easting and RL block dimensions were set at a smaller 10m spacing. LUC estimates, where undertaken, were progressed to smaller 5mE x 10mN x 2.5mRL (local grid) blocks.

Estimation of Pd, Pt, Ni, Co, Cu, Au, As, S, Mg and Cr was undertaken by OK for the primary and secondary mineralisation. As previously mentioned, the OK estimates were progressed to LUC estimates for Pd, Pt, Ni, Co, Cu, Au and S in the transitional + fresh portion of the Ultramafic intrusion outside of the high grade zones and in some of the larger Cu/Au high grade zones. Geostatistical interpolation of density was restricted to the transitional + fresh zones, with assignments being made in the oxide zone. A variable variogram and search ellipse orientation strategy was implemented using Isatis' DA functionality during grade interpolation to honour the local undulations in the mineralisation orientation. The hanging wall and footwall surfaces for the high grade zones were used to define the DA within the envelope of the Ultramafic intrusion. The Ultramafic contact was used for DA in the granite and sediment units. Constant rotations were used in the gabbro units, as these have relatively uniform dip and strike. The dyke hanging wall and footwall surfaces were used to inform the DA parameters for the estimation of the remaining dyke material not captured by wireframes. In the secondary zone, including the Supergene unit, the topographic, bottom of complete oxidation and top of fresh surfaces were used for DA.

Once estimation domains for grade interpolation were defined, composited drill hole sample populations were statistically analysed to derive grade capping values. It was observed that grade capping for the economic elements had an immaterial impact on the global grade. Boundary/contact analysis showed that the high grade mineralisation zones have hard boundaries with respect to the surrounding, lower-grade Ultramafic zone and so hard grade boundaries were applied to this contact. A general Ultramafic Main-NW sub-domain estimation boundary was also defined for Pd, Pt, Ni, Co, Cu, Au and sulphur interpolation, based on a large change in the grade distribution, and was treated as soft during interpolation, although different capping, variogram and search parameters were implemented either side of this boundary.

In addition to the grade caps, distance based grade thresholds were also chosen and implemented for interpolation of those zones where mineralisation is moderately or highly discontinuous (i.e. lower grade Ultramafic zones outside of the high grade domains, granite, gabbro, and sediment). This was based on observed inflexions in the grade histograms that are interpreted as representing the onset of the anomalous high grade sub-population. It is noted that the largely barren zones outside of the Ultramafic intrusion have not been classified as resources, and were modelled only to provide some indication in the block model of where these patches of mineralisation occur, and to show where sometimes high abundances of deleterious elements occur (e.g. high sulphur in the sediment footwall).

Density bottom and top truncations have been applied, based on examination of density histograms, therefore completely excluding the outliers from the estimation process.

Search and block plans were as follows:

Primary mineralisation Pd, Pt, Ni, Co, Cu, and Au (within Ultramafic unit and high grade zones) – A minimum of 4 to 6 and maximum of 16 samples per estimate into a parent block size of 10 m(E) x 20 m(N) x 5 m(RL). The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples

within the block. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. Block discretisation scheme was 5 pts(E) x 5 pts(N) x 2 pts(RL). LUC post-processing of the six economic elements was into a Selective Mining Unit (SMU) block size of 5 m(E) x 10 m(N) x 2.5 m(RL).

Secondary mineralisation Pd, Pt, Ni, Co, Cu and Au (within the Ultramafic, high grade zones and Supergene unit) used a minimum of 4 to 6 and maximum of 16 samples per estimate into a parent block size 10 m(E) x 20 m(N) x 5 m(RL). The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. The block discretisation scheme was 5 pts(E) x 5 pts(N) x 2 pts(RL).

For primary and secondary zones, a minimum of 4 to 6 and maximum of 16 samples per estimate into a parent block size of 20 m(E) x 20 m(N) x 5 m(RL). The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. Block discretisation scheme was 5 pts(E) x 5 pts(N) x 2 pts(RL). LUC post-processing of the S variable, where applicable, was into a Selective Mining Unit (block size of 5 m(E) x 10 m(N) x 2.5 m(RL).

For the primary and secondary zone As, Cr and Mg a minimum of 3 to 6 and maximum of 16 samples per estimate were used into a parent block size of 20 m(E) x 20 m(N) x 5 m(RL). The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. High grade distance limiting was implemented in addition to grade capping in the largely barren units. The block discretisation scheme was 5 pts(E) x 5 pts(N) x 2 pts(RL).

For the primary zone within the Ultramafic intrusion, a minimum of 4 and maximum of 16 samples per estimate were used with a parent block size of 5 m(E) x 10 m(N) x 2.5 m(RL). Outside of the Ultramafic intrusion, a parent block size of 20 m(E) x 20 m(N) x 5 m(RL) was used. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. A single search pass was used. The block discretisation scheme was 5 pts(E) x 5 pts(N) x 2 pts(RL).

For Pd, Pt, Ni, Co, Cu, Au, S, Mg and Cr, un-estimated domains (due to a paucity of samples) have been assigned constant grades based either on sample statistics or interpolated domain analogues. None of the ex-Ultramafic blocks, whether interpolated or assigned, have been classified as Mineral Resource.

For As un-estimated blocks have been assigned half detection limit. For density, un-estimated blocks, inclusive of all secondary estimation domains, were assigned values based on applicable sample statistics.

Final block values for Pd, Pt, Ni, Co, Cu, Au, S, Mg, Cr and density were validated by way of visual review of plans and cross sections (block model and drill samples presented with same colour legend), swath plots, and comparison of estimation domain mean grades with the input grade distribution data.



Classification criteria

The Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC Code 2012 Table 1. The Resource has been classified as either Measured, Indicated or Inferred based on data quality, sample spacing, mineralisation continuity, confidence in the geological interpretations, quality of the grade estimations and metallurgical processing knowledge.

Primary mineralisation within the host Ultramafic intrusion has been classified as a combination of Measured, Indicated and Inferred. Measured, Indicated and Inferred wireframe volumes were developed from sectional interpretation strings, and model cells then coded with Resource Classification codes directly from the wireframe volumes.

All fresh and transitional material within the Ultramafic intrusion, excluding the mostly barren dolerite, and informed by a reasonably consistent drill spacing of 80m, has been classified as Inferred, except in the northwest, where a number of new deeper holes are spaced wider than 80m, but are nevertheless deemed to be sufficient to infer geological and grade continuity at depth. Around the periphery of the drilling pattern, where extrapolation results in lower quality estimates, Pd grade variography has informed a decision to limit the extrapolation of the Inferred material to approximately 50m beyond the last drill hole. The 80m drill spacing corresponds to the nominal initial exploration drill hole spacing used for the deposit.

An 80m drill spacing is considered by the Competent Person as being sufficient to imply, but not verify, geological and grade continuity for the deposit style.

The Supergene unit and all fresh and transitional material within the Ultramafic intrusion, excluding the mostly barren granite, and dolerite dyke units, informed by a consistent drill spacing of 40m has been classified as Indicated. The selection of a 40m drill spacing distance for Indicated was based on:

- Results from a simulation-based drill hole spacing study carried out for the deposit indicating that the resource definition drill-out be conducted on a 40m x 40m drill spacing.
- « Variogram ranges of the main economic grade variable, Pd, indicating that grade continuity is on the order of hundreds of metres in the general Ultramafic zone and approximately 40m to 50m within the high Pd/sulphide zones.
- « Estimation quality metrics, such as slope of regression and average distance to sample were considered during the classification process.

A 40m drill spacing is considered by the Competent Persons as being sufficient to allow estimation of the deposit physical characteristics with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

All fresh and transitional material within the Ultramafic intrusion, excluding the mostly barren granite, and dolerite dyke units, informed by a consistent drill spacing of 10m has been classified as Measured. The selection of a 10m drill spacing distance for Measured was based on:

- « Variogram ranges of the main economic grade variable, Pd, indicating that grade continuity does not exceed 40m to 50m within the high Pd/sulphide zones and are on the order of hundreds of metres in the general Ultramafic zones.
- « Estimation quality metrics, such as slope of regression and average distance to sample were considered during the classification process.

A 10m drill spacing is considered by the Competent Persons as being sufficient to allow estimation of the deposit physical characteristics with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.

All non-Ultramatic material (country rock and dykes) has not been classified and the Supergene unit has been considered ineligible to rise to level of the Measured category of confidence due to metallurgical uncertainty.

Cut-off methodology

A Net Smelter Return (NSR) approach was used to reflect the polymetallic nature of the Resource and the sensitivity of recoveries to grade. The NSR reflects an approximation of revenue, net of all costs after the products leave the mine site. NSR for each block is calculated as follows:

> $\sum_{metal i}^{n=6} [metal grade x metal price x metal recovery x metal payability]$ - downstream treatment, refining and transport costs - royalties

Where metal 'i' is nickel, copper, cobalt, palladium, platinum and gold (the six payable metals from concentrate offtake terms received to date from potential western offtakers).

Metal price, exchange rate and offtake assumptions used in the NSR calculation reflect long term assumptions to satisfy JORC 2012 RPEEE (Table 7). The Resource is reported within a Whittle pit shell (with revenue factor 1.0), generated using the same assumptions.

The Net Smelter Return (NSR) for each block was calculated, using:

- « Current metallurgical recovery vs grade formulae, based on metallurgical test work to date (refer to Mining and metallurgical methods and parameters section and Table 8).
- Indicative metal concentrate offtake payment terms, treatment and refining costs were derived from early stage discussions with western copper smelters, western nickel-cobalt MHP benchmarks (as detailed in "Gonneville Project Scoping Study" – refer to ASX Announcement on 29 August 2023) and an independent marketing expert engaged by Chalice to advise on potential offtake terms from western customers (Table 7). The indicative offtake payment terms quoted by parties were uniformly high and given the low deleterious elements within the concentrate specification, no penalties are envisaged.
- Conter offsite costs (transport costs and royalties) are derived from the "Gonneville Project Scoping Study" – refer to ASX Announcement on 29 August 2023.

Assumptions used to calculate NSR for the Resource Estimation are shown in Table 7.

Key assumption	Unit	April 2024 Resource
Long term metals prices		
Ni	US\$/t	24,000
Cu	US\$/t	10,500
Со	US\$/t	50,000
Pd	US\$/oz	1,800
Pt	US\$/oz	1,200
Au	US\$/oz	1,800
Financial		
Exchange rate	A\$/US\$	0.70
Offtake terms		
Ni payability (in Ni-Co MHP)	% LME	85
Co payability (in Ni-Co MHP)	% LME	85
Cu payability (in Cu conc)	% LME	96.5

Key assumption	Unit	April 2024 Resource
Pd payability (in Cu conc)	% LBMA	96
Pt payability (in Cu conc)	% lbma	92
Au payability (in Cu conc)	% LBMA	97
Cu conc treatment charge	US\$/dmt conc	80
Cu refining charge	US\$/†	176
Pd/Pt refining charge	US\$/oz	25
Au refining charge	US\$/oz	5
Other offsite costs		
Cu royalty rate	%	5.0
Ni-Co-Pd-Pt-Au royalty rate	%	2.5
Transport Costs	A\$/wmt conc	125

The Resource is reported above a A\$25/tonne NSR cut-off in-pit and a A\$110/tonne NSR cut-off within Mineable Shape Optimiser (MSO) shapes below-pit, to reflect estimated mine site operating costs.

A cut-off grade of A\$25/t NSR has been used for all oxide material. A cut-off grade of A\$25/t NSR was selected for transitional and fresh mineralisation in-pit, as this is close to the approximate marginal economic cut-off grade estimated by a Whittle shell optimisation.

The grade-tonnage plots generated for all sulphide material (Measured, Indicated and Inferred) within the optimised pit shell were then used to select a suitable higher cut-off grade of A\$100/t NSR above 200m depth in-pit and A\$110/t NSR below 200m depth in-pit.

Fresh sulphide mineralisation outside the pit shell has been reported above a cut-off grade of A\$110/t NSR. The cut-off grade was derived by taking into account the higher mining costs of a selective underground mining method (long hole open stoping) compared with open pit mining costs. No transitional or oxide mineralisation outside the pit shell was included in the Mineral Resource.

Reasonable prospects for eventual economic extraction

Cube considers that data collection techniques are consistent with good industry practice and are suitable for use in the preparation of a Resource to be reported in accordance with the JORC Code. Available quality assurance and quality control (QA/QC) data supports the use of the input data provided by Chalice.

The Resource is considered to have reasonable prospects for eventual economic extraction (RPEEE) on the following basis:

- The deposit is located in a favourable mining jurisdiction, with no known impediments to land access or tenure status.
- The volume, orientation and grade of the Resource is amenable to mining extraction via traditional open pit and underground mining methods.
- A Whittle pit optimisation, based on the NSR for the block model, was used to generate the resource pit shell and estimate the NSR cut-off.
- « Fresh sulphide mineralisation outside the pit is reported at a higher cut-off grade, which takes into account higher mining costs associated with underground mining methods. The cut-off grade used to constrain mineralisation is based on Mineable Shape Optimiser (MSO) shapes.

Chalice and Cube believe this is a reasonable approach, considering the potential mine life and considerations for reporting Mineral Resources in accordance with the JORC Code.

Mining and metallurgical methods and parameters

Leaching test work on oxide material using a variety of lixiviants has shown similar levels of leach extraction of palladium for each, typically 70% to 80%, and gold extraction of ~90%. Work will continue during the PFS to optimise reagent consumption and to select the preferred recovery method of the extracted palladium and gold from solution.

Processing options for sulphide mineralisation include the generation of separate copper and nickel concentrates, each containing PGE's and suitable for potential sale to smelters, together with local enrichment of lower grade nickel concentrates to produce higher grade intermediate products for potential sale to battery pre-cursor refineries.

Over 20 composite samples spatially covering the resource were collected and used for metallurgical testing in the Scoping Study testwork, which has informed the recovery factors used in the resource estimate. These samples represent the oxide, transitional and sulphide mineralisation types found at Gonneville.

Metallurgical testing involved over 200 tests, included detailed mineralogical analysis, and determination of comminution characteristics (bond ball mill work index, Abrasive index, SMC testing).

Flotation testing carried out also involved over 200 separate tests, utilising both standard batch and locked-cycle flotation tests. All the metallurgical recovery predictions used in the resource estimation are based on the locked-cycle flotation testwork completed.

Additionally, a 60t pilot plant campaign was carried out to produce flotation concentrate for midstream hydrometallurgical testing. The feed for this test was comprised of various RC samples, and also included 10t of diamond drill core. The flotation results of this campaign verified the bench locked-cycle testing completed.

Grade-recovery algorithms have been used to determine recovery for each fresh sulphide block, based on metal grade, consistent with the approach outlined in ASX Announcement "Gonneville Metallurgy Update" dated 7 November 2023. Geo-metallurgical domain-based testwork is currently underway as part of the ongoing Pre-Feasibility Study, however at this stage Scoping Study testwork, which does not take into account domains, is used to determine NSR.

Optimisation of comminution and flotation parameters is ongoing. Non-linear flotation recovery algorithms were developed for each of the metals in the Sulphide (Fresh) domain and are represented in Figure 7.



Palladium and platinum flotation recovery vs grade (fresh sulphide)







Figure 7. Flotation recovery vs grade algorithms and ranges (fresh sulphide).

Flotation recoveries are robust at higher grades and good quality copper and nickel concentrates can be produced.

Copper and PGE flotation recoveries are more variable but still robust at lower grades, however more work is required to optimise flotation recovery of nickel and cobalt (and corresponding PGEs which report to the nickel concentrate) at lower grades. This could entail some form of concentrate enrichment to produce higher grade intermediates in order to maximise recovery, a flowsheet which is currently being investigated. Other investigations underway include:

- « Production of bulk concentrates at lower grades;
- « Leaching of flotation tailings to improve PGE recoveries; and,
- « Recovery algorithm optimisations using geo-metallurgical approaches to refine understanding and definition of variability.

Recoveries for transitional sulphide blocks were assumed to be 50% of fresh sulphide. Recoveries for oxide material were assumed to be constant – 75% for palladium and 90% for gold – no nickel, copper, cobalt or platinum recovery is assumed for the oxide material and thus these metals are omitted in the Resource.

Average metallurgical recoveries for the sulphide Resource domains are shown in Table 8.

Table 8. Average metallurgical recovery for each sulphide Resource domain.

Metal	Average metallurgical recovery (%)									
	HG Sulphide above 200m in pit (A\$100/t NSR cut-off)	HG Sulphide in-pit below 200m (A\$110/t NSR cut-off)	Global Sulphide in-pit (A\$25/t NSR cut-off)							
Pd	83	85	76							
Pt	63	70	42							
Αu	66	67	66							
Ni	53	52	40							
Cu	89	90	73							
Со	50	50	39							

Average recoveries reflect overall metallurgical recovery through to Cu-PGE-Au concentrate, Ni-Co MHP and PGE-Au doré utilising the sequential copper flotation, nickel concentrate enrichment and leaching process flowsheet (refer to ASX Announcement "Gonneville Metallurgy Update" dated 7 November 2023). No modifying factors (ore loss or dilution) has been applied to the Resource and therefore the average recoveries listed are an approximation only at this stage based on conversion of undiluted Resource blocks into recovered metal.

Chalice Mining Limited

ASX:CHN

Independent review and audit

No independent audit has been completed on the Resource, however, the results of this Resource are consistent with the previous Resource estimates (refer to ASX announcements dated 9 November 2021, 8 July 2022 and 28 March 2023) when taking into account the extra drilling, change in input assumptions and differing estimation methodologies (Categorical Indicator Kriging used for MRE#1 dated 9 November 2021).

Competent Person Statements

The information in this announcement that relates to new **Exploration Results** in relation to the Gonneville PGE-Ni-Cu-Co Project is based on and fairly represents information and supporting documentation compiled by Dr. Kevin Frost BSc (Hons), PhD, a Competent Person, who is a Member of the Australian Institute of Geoscientists (#4530). Dr. Frost is a full-time employee of the Company, is entitled to participate in Chalice's Employee Securities Incentive Plan and holds securities in Chalice. Mr Frost has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Frost consents to the inclusion in this announcement of the matters based on his information in the form and context in which it appears.

The information in this announcement that relates to previously reported exploration or metallurgical results for the Gonneville PGE-Ni-Cu-Co Project is extracted from the following ASX announcements:

- « "High Grade Ni-Cu-Pd Sulphide Intersected at Julimar", 23 March 2020
- « "New Wide High-grade Zones in 900m Step-out Drill Hole", 31 July 2023
- « "Gonneville Project Metallurgy Update", 7 November 2023
- « "High-Grade Copper-PGE zones extended at Gonneville, 30 November 2023.

The above announcements are available to view on the Company's website at <u>www.chalicemining.com</u>. The Company confirms that it is not aware of any new information or data that materially affects the exploration results included in the relevant original market announcements. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the relevant original market announcements.

The information in this announcement that relates to **Mineral Resources** in relation to the Gonneville PGE-Ni-Cu-Co Project is based on and fairly represents information and supporting documentation compiled by Mike Millad and Mike Job.

Mr Millad is a full-time employee and director of Cube Consulting and is a member in good standing of the Australian Institute of Geoscientists (#5799). Mr Millad does not hold securities in Chalice. Mr Millad has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Millad consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Mr Job is a full-time employee and director of Cube Consulting and is a Fellow in good standing of the Australasian Institute of Mining and Metallurgy (#201978). Mr Job does not hold securities in Chalice. Mr Job has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity being undertaken to qualify as a Competent Person as defined in the 2012 edition of the Australasian Code for Reporting of Exploration Results, Minerals Resources and Ore Reserves. Mr Job consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This announcement may contain forward-looking statements and forward information, (collectively, forward-looking statements). These forward-looking statements are made as of the date of this Report and Chalice Mining Limited (the Company) does not intend, and does not assume any obligation, to update these forward-looking statements.

Forward-looking statements relate to future events or future performance and reflect Company management's expectations or beliefs regarding future events and include, but are not limited to:

the impact of the discovery on the Gonneville Project's capital payback; the Company's planned strategy and corporate objectives; estimated timing of the Gonneville Project schedule; objectives of the strategic partnering process, the realisation of Mineral Resource Estimates; anticipated production; sustainability initiatives; climate change scenarios; the likelihood of further exploration success; the timing of planned exploration and study activities on the Company's projects; mineral processing strategy; access to sites for planned drilling activities; planned production and operating costs profiles; planned capital requirements; the success of future potential mining operations and the timing of the receipt of exploration results.

In certain cases, forward-looking statements can be identified by the use of words such as, "anticipate" or "anticipated", "commence", "considered", "continue", "could", "estimate", "expected", "for", "forecast", "future", "is", "likely", "may", "open", "plan" or "planned", "potential", "objective", "opportunity", "strategy", "targeted", "upside", "will" or variations of such words and phrases or statements that certain actions, events or results may, could, would, might or will be taken, occur or be achieved or the negative of these terms or comparable terminology. By their very nature forward-looking statements involve known and unknown risks, uncertainties and other factors which may cause the actual results, performance or achievements of the Company to be materially different from any future results, performance or achievements expressed or implied by the forward-looking statements.

Such factors may include, among others, risks related to actual results of current or planned exploration and development activities; whether geophysical and geochemical anomalies are related to economic mineralisation or some other feature; whether visually identified mineralisation is confirmed by laboratory assays; obtaining appropriate approvals to undertake exploration activities; metal grades being realised; metallurgical recovery rates being realised; results of planned metallurgical test work including results from other zones not tested yet; the outcomes of feasibility studies, scaling up to commercial operations; the speculative nature of mineral exploration and development; changes in project parameters as plans continue to be refined and feasibility studies are undertaken; changes in exploration programs and budgets based upon the results of exploration; successful completion of the strategic partnering process; changes in commodity prices and economic conditions; political and social risks, accidents, labour disputes and other risks of the mining industry; delays or difficulty in obtaining governmental approvals, necessary licences, permits or financing to undertake future mining development activities; changes to the regulatory framework within which Chalice operates or may in the future; movements in the share price of investments and the timing and proceeds realised on future disposals of investments as well as those factors detailed from time to time in the Company's interim and annual financial statements, all of which are filed and available for review on the ASX at asx.com.au.

Although the Company has attempted to identify important factors that could cause actual actions, events or results to differ materially from those described in forward-looking statements, there may be other factors that cause actions, events or results not to be as anticipated, estimated, or intended. There can be no assurance that forward-looking statements will prove to be accurate, as actual results and future events could differ materially from those anticipated in such statements. Accordingly, readers should not place undue reliance on forward-looking statements.

Mineral Resources Reporting Requirements

As an Australian Company with securities listed on the Australian Securities Exchange (ASX), Chalice is subject to Australian disclosure requirements and standards, including the requirements of the Corporations Act 2001 and the ASX listing rules. It is a requirement of the ASX listing rules that the reporting of exploration results and mineral resources estimates are in accordance with the 2012 edition of the Australasian Code for Reporting of exploration Results, Minerals Resources and Ore Reserves ("JORC Code").

The requirements of the JORC Code differ in certain material respects from the disclosure requirements of United States securities laws and other reporting regimes. There is no assurance that the Company's mineral resource estimates and related disclosures prepared under the JORC Code would be the same as those prepared under United States securities law and other reporting regimes. The terms used in this announcement are as defined in the JORC Code. The definitions of these terms differ from the definitions of such terms for purposes of the disclosure requirements in the United States and other reporting regimes.

Mineral Resource Estimates that are not Ore Reserves do not have demonstrated technical feasibility and economic viability. Due to lower certainty, the inclusion of Mineral Resource Estimates should not be regarded as a representation by Chalice that such amounts can be economically exploited, and investors are cautioned not to place undue reliance upon such figures. No assurances can be given that the estimates of Mineral Resources presented in this report will be recovered at the tonnages and grades presented, or at all.

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Hole ID	From	То	Interval	Pd	Pt	Au	Ni	Cu	Co	Ni Eq (%)	Туре
	(m)	(m)	(m)	(g/t)	(g/t)	(g/t)	(%)	(%)	(%)		Type
JD427	464.0	475.0	11.0	0.61	1.26	0.01	0.03	0.02	0.01	0.52	Extension
incl	466.0	468.0	2.0	1.49	4.16	0.01	0.03	0.02	0.01	1.40	Extension
JD427	483.0	496.0	13.0	0.38	0.14	0.01	0.10	0.05	0.01	0.33	Extension
JD427	502.6	563.0	60.4	0.72	0.15	0.01	0.15	0.10	0.02	0.52	Extension
incl	506.0	513.0	7.0	0.91	0.19	0.02	0.16	0.17	0.02	0.69	Extension
and	523.0	525.0	2.0	0.97	0.22	0.01	0.14	0.08	0.01	0.61	Extension
and	529.0	543.0	14.0	0.95	0.20	0.00	0.17	0.11	0.02	0.66	Extension
JD427	585.0	725.0	140.0	0.63	0.15	0.01	0.14	0.08	0.02	0.48	Extension
incl	587.0	595.0	8.0	1.08	0.28	0.01	0.13	0.09	0.02	0.65	Extension
and	621.0	627.0	6.0	0.95	0.20	0.01	0.17	0.10	0.02	0.66	Extension
and	633.0	635.0	2.0	0.85	0.21	0.01	0.18	0.13	0.02	0.67	Extension
and	656.0	662.0	6.0	0.89	0.18	0.01	0.14	0.13	0.02	0.63	Extension
and	666.0	674.0	8.0	0.89	0.17	0.01	0.18	0.14	0.02	0.67	Extension
and	679.0	682.6	3.6	1.01	0.41	0.05	0.18	0.23	0.02	0.86	Extension
and	715.0	719.0	4.0	1.07	0.23	0.01	0.15	0.05	0.02	0.64	Extension
JD427	734.9	752.8	17.9	0.41	0.10	0.01	0.15	0.05	0.02	0.40	Extension
JD427	757.0	767.4	10.4	0.32	0.07	0.02	0.14	0.16	0.02	0.45	Extension
incl	761.6	764.6	3.0	0.24	0.06	0.03	0.17	0.40	0.03	0.68	Extension
JD427	777.4	781.0	3.6	0.31	0.06	0.00	0.16	0.02	0.01	0.33	Extension
JD428	642.0	647.0	5.0	0.82	1.89	0.02	0.03	0.00	0.01	0.71	Extension
JD428	652.0	655.0	3.0	1.06	0.49	0.03	0.07	0.03	0.01	0.57	Extension
incl	653.0	655.0	2.0	1.28	0.55	0.03	0.07	0.04	0.01	0.67	Extension
JD428	662.0	689.0	27.0	0.76	0.26	0.11	0.12	0.17	0.01	0.62	Extension
incl	677.0	688.0	11.0	1.06	0.38	0.06	0.14	0.10	0.01	0.68	Extension
JD428	779.0	785.0	6.0	0.29	0.06	0.04	0.12	0.35	0.02	0.58	Extension
JD428	793.0	912.1	119.1	0.56	0.13	0.01	0.14	0.09	0.01	0.45	Extension
incl	831.0	837.0	6.0	0.93	0.21	0.02	0.13	0.11	0.01	0.61	Extension

Table 9. Significant new drill intersections (Oxide: >0.5g/t Pd, >0.9g/t Pd. Sulphide: >0.3% NiEq, >0.6% NiEq) – Gonneville Project.

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	From	То	Interval	Pd	Pt	Au	Ni	Cu	Co		-
Hole ID	(m)	(m)	(m)	(g/t)	(g/t)	(g/t)	(%)	(%)	(%)	Ni Eq (%)	Туре
and	852.0	857.0	5.0	0.83	0.20	0.02	0.16	0.15	0.01	0.64	Extension
and	866.0	875.0	9.0	1.07	0.21	0.01	0.22	0.15	0.02	0.80	Extension
and	893.1	898.0	4.9	1.19	0.33	0.01	0.18	0.07	0.02	0.74	Extension
JD428	925.0	943.0	18.0	0.48	0.11	0.01	0.16	0.06	0.02	0.44	Extension
JD428	955.0	973.3	18.3	0.63	0.11	0.02	0.13	0.08	0.01	0.46	Extension
incl	966.0	968.0	2.0	1.16	0.16	0.04	0.19	0.08	0.02	0.73	Extension
JD428	982.9	1010.8	27.9	0.58	0.12	0.04	0.15	0.08	0.02	0.48	Extension
incl	988.0	990.0	2.0	0.83	0.14	0.09	0.16	0.25	0.02	0.69	Extension
JD429	207.0	226.0	19.0	0.97	0.48	0.01	0.10	0.16	0.01	0.69	Infill
incl	213.0	221.0	8.0	1.87	0.68	0.02	0.18	0.34	0.02	1.27	Infill
JD429	233.0	238.0	5.0	0.46	0.51	0.01	0.04	0.02	0.01	0.34	Infill
JD429	252.0	262.0	10.0	0.53	0.34	0.03	0.05	0.03	0.01	0.35	Infill
JD429	348.8	369.9	21.1	0.25	0.07	0.01	0.11	0.09	0.01	0.32	Extension
JD429	376.1	465.0	88.9	0.71	0.15	0.04	0.14	0.16	0.02	0.59	Extension
incl	392.1	398.0	5.9	1.24	0.33	0.03	0.16	0.07	0.02	0.75	Extension
and	404.0	411.0	7.0	0.98	0.22	0.03	0.15	0.08	0.01	0.60	Extension
and	416.0	423.0	7.0	0.62	0.14	0.06	0.13	0.22	0.02	0.61	Extension
and	432.0	441.0	9.0	1.49	0.18	0.20	0.24	0.94	0.03	1.70	Extension
and	445.0	449.0	4.0	0.88	0.19	0.01	0.17	0.08	0.02	0.62	Extension
and	452.0	457.0	5.0	1.02	0.18	0.01	0.16	0.10	0.02	0.65	Extension
JD429	472.6	483.0	10.4	0.43	0.09	0.00	0.14	0.04	0.01	0.38	Extension
JD429	489.4	553.6	64.2	0.42	0.09	0.00	0.15	0.03	0.02	0.36	Extension
incl	534.0	536.0	2.0	0.90	0.18	0.00	0.18	0.06	0.02	0.62	Extension
JD429	570.9	620.0	49.2	0.65	0.14	0.03	0.15	0.07	0.02	0.50	Extension
incl	598.6	601.0	2.4	0.83	0.21	0.43	0.17	0.07	0.02	0.74	Extension
and	604.5	607.0	2.5	1.53	0.28	0.00	0.22	0.06	0.02	0.89	Extension
JD429	628.0	634.1	6.1	0.44	0.09	0.00	0.14	0.04	0.01	0.38	Extension
JD429	638.0	645.0	7.0	0.42	0.08	0.01	0.15	0.05	0.02	0.39	Extension
JD429	652.0	693.2	41.2	0.51	0.11	0.01	0.17	0.06	0.02	0.44	Extension
incl	671.9	674.3	2.5	0.70	0.15	0.01	0.20	0.30	0.02	0.77	Extension
JD429	735.2	764.0	28.8	0.85	0.13	0.12	0.18	0.27	0.02	0.79	Extension
incl	751.0	763.0	12.0	1.38	0.15	0.22	0.22	0.51	0.02	1.27	Extension
JD430	811.0	819.0	8.0	0.38	0.93	0.03	0.04	0.09	0.01	0.46	Extension
JD430	828.0	831.0	3.0	1.20	0.41	0.04	0.09	0.01	0.01	0.62	Extension
JD430	836.0	891.0	55.0	0.96	0.40	0.11	0.13	0.12	0.01	0.69	Extension
incl	837.9	842.0	4.1	1.10	0.36	0.04	0.15	0.13	0.01	0.74	Extension
and	845.0	855.0	10.0	1.01	0.41	0.05	0.14	0.11	0.01	0.71	Extension
and	858.0	887.0	29.0	1.14	0.47	0.18	0.14	0.14	0.01	0.81	Extension
JD430	897.0	899.0	2.0	1.18	0.59	0.11	0.11	0.09	0.01	0.76	Extension
JD430	991.0	1103.0	112.0	0.60	0.15	0.01	0.15	0.08	0.02	0.48	Extension

	From	То	Interval	Pd	Pt	Au	Ni	Cu	Co		
Hole ID	(m)	(m)	(m)	(g/t)	(g/t)	(g/t)	(%)	(%)	(%)	Ni Eq (%)	Туре
incl	1015.0	1017.0	2.0	0.56	0.16	0.07	0.22	0.26	0.02	0.75	Extension
and	1037.0	1044.0	7.0	1.29	0.29	0.02	0.19	0.09	0.02	0.81	Extension
and	1052.0	1060.0	8.0	0.82	0.30	0.02	0.15	0.13	0.01	0.63	Extension
and	1080.0	1082.0	2.0	1.39	0.46	0.01	0.21	0.09	0.02	0.90	Extension
and	1086.0	1089.0	3.0	0.74	0.14	0.01	0.25	0.25	0.03	0.80	Extension
JD430	1129.0	1226.5	97.5	0.78	0.19	0.07	0.14	0.14	0.01	0.60	Extension
incl	1159.0	1165.0	6.0	1.08	0.24	0.24	0.15	0.26	0.01	0.88	Extension
and	1173.0	1179.0	6.0	0.76	0.19	0.12	0.15	0.16	0.01	0.65	Extension
and	1191.0	1193.0	2.0	0.81	0.15	0.04	0.18	0.12	0.02	0.63	Extension
and	1197.1	1201.0	3.9	2.47	0.31	0.17	0.23	0.55	0.02	1.66	Extension
and	1207.0	1224.1	17.1	1.13	0.42	0.14	0.16	0.22	0.02	0.89	Extension
JD431	616.2	664.0	47.8	0.67	0.54	0.04	0.09	0.09	0.01	0.54	Extension
incl	621.0	623.0	2.0	1.78	5.25	0.05	0.03	0.00	0.01	1.75	Extension
and	635.0	638.0	3.0	1.49	0.45	0.03	0.11	0.03	0.01	0.72	Extension
and	641.0	653.0	12.0	1.03	0.40	0.05	0.15	0.14	0.01	0.74	Extension
JD431	741.5	877.9	136.4	0.50	0.12	0.01	0.13	0.07	0.01	0.41	Extension
incl	789.0	791.0	2.0	1.17	0.26	0.02	0.17	0.10	0.02	0.74	Extension
and	833.0	835.6	2.6	0.68	0.17	0.00	0.22	0.12	0.02	0.66	Extension
JD431	884.0	887.9	3.9	0.65	0.14	0.02	0.18	0.05	0.01	0.50	Extension
JD431	909.0	1001.1	92.1	0.48	0.10	0.03	0.15	0.08	0.02	0.44	Extension
incl	968.0	970.0	2.0	0.85	0.17	0.04	0.22	0.14	0.02	0.72	Extension
and	974.0	977.0	3.0	0.58	0.09	0.04	0.16	0.23	0.02	0.63	Extension
and	998.2	1001.1	3.0	1.02	0.13	0.19	0.12	0.38	0.01	0.72	Extension
incl	3.0	10.1	7.1	1.32	0.41	0.09	0.26	0.29	0.09	1.23	Infill
JD432	3.0	15.3	12.3	1.06	0.33	0.10	0.23	0.24	0.08	1.07	Infill
JD432	25.0	27.0	2.0	0.23	0.08	0.01	0.13	0.22	0.02	0.46	Infill
JD432	35.0	42.0	7.0	0.25	0.06	0.01	0.12	0.07	0.02	0.32	Infill
JD432	53.0	55.0	2.0	0.25	0.06	0.01	0.15	0.01	0.02	0.31	Infill
JD432	56.0	68.7	12.7	0.56	0.13	0.01	0.14	0.08	0.01	0.47	Infill
incl	64.2	68.0	3.8	1.27	0.30	0.02	0.18	0.14	0.02	0.83	Infill
JD432	79.4	81.7	2.3	0.42	0.19	0.03	0.26	0.39	0.02	0.83	Infill
JD433	170.0	223.9	53.9	0.51	0.13	0.03	0.13	0.11	0.01	0.46	Infill
incl	186.0	191.0	5.0	0.37	0.08	0.09	0.14	0.31	0.02	0.62	Infill
and	210.0	212.1	2.1	1.00	0.25	0.02	0.14	0.10	0.02	0.65	Infill
and	217.0	223.0	6.0	1.44	0.35	0.03	0.15	0.08	0.01	0.80	Infill
JD433	231.5	248.9	17.4	0.64	0.15	0.04	0.13	0.14	0.01	0.53	Infill
incl	246.0	248.9	2.9	0.92	0.22	0.06	0.16	0.20	0.01	0.74	Infill
JD433	257.7	298.0	40.3	0.51	0.10	0.00	0.15	0.02	0.01	0.39	Infill
incl	259.0	261.0	2.0	1.02	0.19	0.01	0.17	0.05	0.02	0.62	Infill
JD433	303.0	396.1	93.1	0.53	0.11	0.00	0.16	0.06	0.02	0.44	Infill

	From	То	Interval	Pd	Pt	Au	Ni	Cu	Co		
Hole ID	(m)	(m)	(m)	(g/t)	(g/t)	(g/t)	(%)	(%)	(%)	Ni Eq (%)	Туре
incl	305.2	316.4	11.2	1.13	0.29	0.01	0.22	0.12	0.02	0.80	Infill
and	327.0	331.0	4.0	0.92	0.18	0.01	0.24	0.11	0.02	0.73	Infill
and	345.0	347.0	2.0	0.87	0.16	0.01	0.20	0.13	0.02	0.68	Infill
and	388.0	392.7	4.7	0.76	0.15	0.01	0.21	0.10	0.02	0.63	Infill
JD433	417.0	421.0	4.0	0.57	0.09	0.01	0.14	0.08	0.01	0.45	Infill
JD433	439.0	519.0	80.1	0.55	0.11	0.01	0.15	0.05	0.01	0.44	Infill
incl	468.0	475.3	7.3	1.46	0.26	0.02	0.38	0.17	0.03	1.14	Infill
JD433	539.9	568.0	28.1	0.62	0.12	0.01	0.18	0.05	0.02	0.50	Infill
incl	543.2	545.7	2.5	0.57	0.10	0.01	0.31	0.17	0.03	0.75	Infill
JD433	582.0	587.7	5.7	0.67	0.16	0.02	0.17	0.05	0.01	0.51	Extension
JD433	603.0	607.0	4.0	0.26	0.05	0.01	0.12	0.08	0.01	0.33	Extension
JD433	611.4	621.1	9.7	0.43	0.12	0.02	0.17	0.08	0.02	0.46	Infill
JD433	633.2	642.8	9.5	0.68	0.49	0.63	0.04	0.01	0.00	0.62	Extension
JD434	328.0	334.0	6.0	0.41	0.09	0.02	0.10	0.12	0.01	0.40	Extension
JD434	342.0	344.5	2.5	0.60	0.13	0.02	0.14	0.08	0.02	0.48	Extension
JD435	434.2	437.1	3.0	0.23	0.05	0.07	0.09	0.15	0.02	0.37	Extension
JD435	461.4	464.0	2.6	0.94	0.18	0.27	0.10	0.18	0.02	0.75	Extension
JD435	549.3	552.7	3.5	0.33	0.10	0.04	0.12	0.14	0.01	0.42	Extension
JD435	574.0	635.5	61.5	0.48	0.11	0.03	0.13	0.14	0.01	0.47	Extension
incl	577.0	580.0	3.0	0.43	0.08	0.19	0.14	0.60	0.02	0.91	Extension
and	591.5	597.0	5.5	0.37	0.13	0.06	0.23	0.51	0.03	0.90	Extension
and	620.0	622.0	2.0	1.20	0.23	0.01	0.17	0.03	0.02	0.67	Extension
JD435	640.0	776.0	136.0	0.46	0.10	0.01	0.14	0.07	0.01	0.42	Extension
incl	663.5	666.0	2.5	0.67	0.14	0.01	0.17	0.20	0.02	0.64	Extension
and	765.0	768.2	3.2	1.10	0.38	0.23	0.23	0.22	0.02	0.99	Extension
JD435	818.8	858.8	39.9	0.40	0.10	0.01	0.13	0.01	0.01	0.33	Extension
JD435	866.0	877.0	11.0	0.55	0.16	0.01	0.14	0.05	0.02	0.44	Extension
JD435	897.0	922.0	25.0	0.36	0.08	0.02	0.13	0.10	0.02	0.41	Extension
JD436	313.0	342.5	29.5	0.21	0.06	0.05	0.10	0.13	0.01	0.35	Extension
JD436	401.7	587.2	185.6	0.50	0.11	0.01	0.15	0.06	0.01	0.43	Extension
incl	412.0	418.4	6.4	0.94	0.19	0.02	0.14	0.14	0.01	0.65	Extension
and	442.0	454.6	12.6	0.80	0.20	0.01	0.21	0.08	0.02	0.64	Extension
and	457.0	459.0	2.0	0.95	0.21	0.01	0.20	0.12	0.02	0.69	Extension
JD436	604.7	651.4	46.7	0.57	0.12	0.00	0.16	0.05	0.01	0.45	Extension
incl	604.7	607.0	2.3	0.84	0.23	0.01	0.28	0.36	0.02	0.97	Extension
and	624.0	627.0	3.0	1.85	0.41	0.01	0.32	0.15	0.03	1.20	Extension
JD436	655.6	678.0	22.4	0.39	0.08	0.00	0.14	0.02	0.02	0.34	Extension
JD436	683.0	688.0	5.0	0.41	0.10	0.00	0.12	0.02	0.01	0.33	Extension
JD436	691.0	714.0	23.0	0.40	0.09	0.00	0.13	0.03	0.01	0.35	Extension
JD436	728.1	775.0	46.9	0.40	0.11	0.01	0.13	0.05	0.01	0.37	Extension

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NiEq (Nickel Equivalent %) = Ni (%) + 0.32x Pd(g/t) + 0.21x Pt(g/t) + 0.38x Au(g/t) + 0.83x Cu(%) + 3x Co(%). Refer to metal equivalent assumptions in Section 2 of the attached JORC Code Table 1.

Hole ID	Easting	Northing (m)	RL	Depth	Survey	Azi	Dip	Assay status
	(m)		(m)	(m)	type	(°)	(°)	
JD427	424920	6513596	269.4	873.1	GPS-RTK	130	-79	Final
JD428	424589	6513521	270.2	1066.3	GPS-RTK	128	-69	Final
JD429	424873	6513278	266.6	801.6	GPS-RTK	133	-69	Final
JD430	424250	6513600	265.3	1274.8	GPS-RTK	130	-71	Final
JD431	424487	6513393	262.7	1054.1	GPS-RTK	126	-71	Final
JD432	425289	6512062	231.1	115.4	GPS-RTK	90	-90	Final
JD433	424986	6513087	266.9	711.3	GPS-RTK	130	-63	Final
JD434	424651	6513044	263.1	344.5	GPS	131	-70	Final
JD435	424614	6513288	265.8	949.0	GPS	130	-70	Final
JD436	424776	6513146	265.5	853.1	GPS	130	-67	Final
	JD427 JD428 JD429 JD430 JD431 JD432 JD433 JD434 JD435	Hole ID (m) JD427 424920 JD428 424589 JD429 424873 JD430 424250 JD431 424487 JD432 422589 JD433 424986 JD434 424651 JD435 424614	Hole ID(m)JD4274249206513596JD4284245896513521JD4294248736513278JD4304242506513600JD4314244876513393JD4324252896512062JD4334249866513087JD4344246516513044JD4354246146513288	Hole ID(m)(m)JD4274249206513596269.4JD4284245896513521270.2JD4294248736513278266.6JD4304242506513600265.3JD4314244876513393262.7JD4324252896512062231.1JD4334249866513087266.9JD4344246516513044263.1JD4354246146513288265.8	Hole ID(m)(m)JD4274249206513596269.4873.1JD4284245896513521270.21066.3JD4294248736513278266.6801.6JD4304242506513600265.31274.8JD4314244876513393262.71054.1JD4324252896512062231.1115.4JD4334249866513087266.9711.3JD4344246516513044263.1344.5JD4354246146513288265.8949.0	Hole ID (m) (m) (m) type JD427 424920 6513596 269.4 873.1 GPS-RTK JD428 424589 6513521 270.2 1066.3 GPS-RTK JD429 424873 6513278 266.6 801.6 GPS-RTK JD430 424250 6513600 265.3 1274.8 GPS-RTK JD431 424487 6513393 262.7 1054.1 GPS-RTK JD432 425289 6512062 231.1 115.4 GPS-RTK JD433 424651 6513087 266.9 711.3 GPS-RTK JD434 424651 6513044 263.1 344.5 GPS JD434 424651 6513288 265.8 949.0 GPS	Hole ID (m) (m) (m) type (°) JD427 424920 6513596 269.4 873.1 GPS-RTK 130 JD428 424589 6513521 270.2 1066.3 GPS-RTK 128 JD429 424873 6513278 266.6 801.6 GPS-RTK 133 JD430 424250 6513600 265.3 1274.8 GPS-RTK 130 JD431 42487 6513393 262.7 1054.1 GPS-RTK 126 JD432 425289 6512062 231.1 115.4 GPS-RTK 90 JD433 424986 6513087 266.9 711.3 GPS-RTK 130 JD434 424986 6513087 266.9 711.3 GPS-RTK 130 JD433 424986 6513087 266.9 711.3 GPS-RTK 130 JD434 424651 6513044 263.1 344.5 GPS 131 JD435 424614 <td< td=""><td>Hole ID(m)(m)(m)type(°)(°)JD4274249206513596269.4873.1GPS-RTK130-79JD4284245896513521270.21066.3GPS-RTK128-69JD4294248736513278266.6801.6GPS-RTK133-69JD4304242506513600265.31274.8GPS-RTK130-71JD4314244876513393262.71054.1GPS-RTK126-71JD4324252896512062231.1115.4GPS-RTK90-90JD4334246516513087266.9711.3GPS-RTK130-63JD4344246516513044263.1344.5GPS131-70JD4354246146513288265.8949.0GPS130-70</td></td<>	Hole ID(m)(m)(m)type(°)(°)JD4274249206513596269.4873.1GPS-RTK130-79JD4284245896513521270.21066.3GPS-RTK128-69JD4294248736513278266.6801.6GPS-RTK133-69JD4304242506513600265.31274.8GPS-RTK130-71JD4314244876513393262.71054.1GPS-RTK126-71JD4324252896512062231.1115.4GPS-RTK90-90JD4334246516513087266.9711.3GPS-RTK130-63JD4344246516513044263.1344.5GPS131-70JD4354246146513288265.8949.0GPS130-70

Table 10. New drill hole collar, survey data and assaying status – Gonneville Project.

A-1 Se	ction 1 Sampling Techniques and Da			
Criteria	JORC Code explanation	Commentary		
	Nature and quality of sampling (eg. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.	HQ diamond core was quarter cored and NQ2 was half cored with samples taken over selective intervals ranging from 0.2m to 1.2m (typically 1.0m). Reverse Circulation (RC) drilling samples were collected as 1m samples from a rig mounted cone splitter. Aircore (AC) drilling samples were collected as 1m samples.		
		Qualitative care taken when sampling diamond drill core to sample the same half of the drill core.		
Sampling techniques	Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.	For RC, two 1m assay samples were collected as a split from the rig cyclone using a cone splitter with the same split consistently sent to the laboratory for analysis.		
		For AC, one 1m assay sample was collected as a split from the rig cyclone using a cone splitter with the same split consistently sent to the laboratory for analysis.		
	Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg. submarine nodules) may warrant disclosure of detailed information.	Mineralisation is recognised by the presence of sulphides within the host Ultramafic rock. In diamond core sample intervals were selected on a qualitative assessment of the geology and sulphide content.		
		Drilling has been undertaken by diamond, Reverse Circulation (RC) and Aircore (AC) techniques.		
Drilling techniques	Drill type (eg. core, reverse circulation, open- hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by	Diamond drill core is predominantly HQ size (63.5mm diameter). Limited NQ2 (47.6mm diameter) drilling and PQ (85mm) has also been completed. Triple tube has been used from surface until competent bedrock and then standard tube thereafter.		
	what method, etc).	HQ is drilled at a maximum of 3m runs. NQ2 is drilled at a maximum of 6m runs at the discretion of the geologist		
		Core orientation is by an ACT Reflex (ACT III RD) tool		

A-1 Section 1 Sampling Techniques and Data

Criteria	JORC Code explanation	Commentary
		RC Drilling uses a face-sampling hammer drill bit with a diameter of 5.5 inches (140mm). AC drilling used a bladed 100mm bit and was only used in the oxide
Drill sample recovery	Method of recording and assessing core and chip sample recoveries and results assessed.	Individual recoveries of diamond drill core samples were assessed quantitively by comparing measured core length with expected core length from drillers mark. Generally core recovery was excellent in fresh rock and approaching 100%. Core recovery in oxide material is often poor due to sample washing out. Core recovery in the oxide zone averages 60% Individual recoveries for RC composite samples were recorded on a qualitative basis. Sample weights were observed to be slightly lower through transported cover whereas drilling through bedrock yielded samples with more consistent weights. Two separate studies were completed where all the sample was weighed and compared with the expected weight. These indicated that as with the diamond core, sample recovery in the oxide is moderate and good in the fresh rock Individual recoveries for AC composite samples were recorded on a qualitative basis. Bag weighing was completed on every 5th hole to verify the recovery and provide a basis on which to estimate the sample recovery in other holes.
	Measures taken to maximise sample recovery and ensure representative nature	With diamond drilling triple tube coring in the oxide zone is undertaken to improve sample recovery. This results in better recoveries but recovery is still only moderate to good Diamond core samples were consistently taken from the same side of the core and
	of the samples.	RC samples were consistently taken from the same split on the cyclone AC drilling was focused on sample recovery by using low air pressure. Bag weighing was completed on every 5th hole to verify the recovery
		There is no evidence of a sample recovery and grade relationship in unweathered material.
	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.	Paired statistical analyses comparing AC, RC and DD samples show that there isn't a statistically significant difference between these sample types. RC grades are observed to be slightly higher than DD grades, but mostly in the <0.1 ppm Pd range, which means that the impact on the resource would be immaterial. All three sample types were therefore

Criteria	JORC Code explanation	Commentary			
		considered compatible for use in the grade interpolation.			
	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.	All drill holes were logged geologically including, but not limited to; weathering, regolith, lithology, structure, texture, alteration and mineralisation. Logging was at an appropriate quantitative standard for infill drilling and resource estimation.			
Logging	Whether logging is qualitative or quantitative	Logging is considered qualitative in nature.			
	in nature. Core (or costean, channel, etc) photography.	Diamond drill core is photographed wet before cutting.			
	The total length and percentage of the relevant intersections logged.	All holes were geologically logged in full.			
	If core, whether cut or sawn and whether quarter, half or all core taken.	For fresh rock, diamond core was sawn in half and one-half quartered and sampled over 0.2-1.2m intervals (mostly 1m). In the oxide zone where core could not be reliably cut, diamond core was split with a chisel and the equivalent of quarter core sampled.			
		RC assay samples were collected as two 1 m splits from the rig cyclone via a cone splitter. The cone splitter was horizontal to ensure sample representivity. Wet or damp samples were noted in the sample logging sheet. A majority of samples were dry.			
Sub-sampling techniques and sample preparation	If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry.	AC assay samples were collected as 1m splits from the rig cyclone via a cone splitter. The cone splitter was horizontal to ensure sample representivity. Wet or damp samples were noted in the sample logging sheet. There was a higher percentage of wet samples than in the RC drilling, but a review of the assay results do not indicate any downhole smearing of samples			
	For all sample types, the nature, quality and appropriateness of the sample preparation technique.	Sample preparation is industry standard and comprises oven drying, jaw crushing and pulverising to -75 microns (80% pass).			
	Quality control procedures adopted for all sub-sampling stages to maximise	Field duplicates were collected from AC, RC and diamond drilling at an approximate ratio of one in twenty five. Diamond drill core field duplicates collected as ¹ / ₄ core. RC Field duplicates were collected from			
	representivity of samples.	selected sulphide zones as a second 1m split directly from the cone splitter. AC field duplicates were selected randomly from the bulk sample.			
	Measures taken to ensure that the sampling is representative of the in-situ material collected, including for instance results for field duplicate/second-half sampling.	In the majority of cases the entire hole has been sampled and assayed. Duplicate sample results were compared with the original sample results and there is no bias observed in the data.			

Criteria	JORC Code explanation	Commentary		
	Whether sample sizes are appropriate to the grain size of the material being sampled.	Drill sample sizes are considered appropriate for the style of mineralisation sought and the nature of the drilling program.		
Quality of assay data and laboratory tests	The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.	Diamond drill core, RC and AC samples underwent sample preparation and geochemical analysis by ALS Perth. Au-Pt- Pd was analysed by 50g fire assay fusion with an ICP-AES finish (ALS Method code PGM-ICP24). A 48-element suite was analysed by ICP-MS following a four-acid digest (ALS method code ME-MS61) for holes up to and including JD023 and JRC122. Later holes including all AC holes were analysed using four-acid digest for 34 elements (ALS method code ME-ICP61) including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Co, Cr, Cu, Fe, Ga, K, La, Mg, Mn, Mo, Na, Ni, P, Pb, S, Sb, Sc, Sr, Th, Ti, Tl, U, V, W, Zn, Zr. Additional ore-grade analysis was performed as required for elements reporting out of range for Ni, Cr, Cu (ALS method code ME-OG-62) and Pd, Pt (ALS method code PGM-ICP27). These techniques are considered total digests.		
	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.	Not applicable as no such tools or instruments were used		
	Nature of quality control procedures adopted (eg. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie. lack of bias) and precision have been established.	Certified analytical standards, blanks and duplicates were inserted at appropriate intervals for diamond, RC and AC drill samples with an insertion rate of >10%. Approximately 5% of >0.1g/t Pd assays were sent for cross laboratory checks. All QAQC samples display results within acceptable levels of accuracy and precision.		
	The verification of significant intersections by either independent or alternative company personnel.	Significant drill intersections are checked by the Project Geologist and then by the General Manager Exploration. Significant intersections are cross-checked with the logged geology and drill core after final assays are received.		
Verification of sampling and assaying	The use of twinned holes.	Eight sets of twinned holes (RC versus Diamond) have been drilled to provide a comparison between grade/thickness variations over a maximum of 5m separation between drill holes. Palladium assays have been focused on as part of twin hole comparisons for six sets, with no significant grade bias observed.		
Criteria	JORC Code explanation	Commentary		
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		Two sets of twins have been analysed for Pd, Ni and Cu with no significant grade bias apparent.		
		Assays correlate well between holes. In detail there is variation for higher grade samples in terms of both location and grade. There is no discernible bias between drill types.		
	Documentation of primary data, data entry procedures, data verification, data storage	Primary drill data was collected digitally using OCRIS software before being transferred to the master SQL database. All procedures including data collection,		
	(physical and electronic) protocols.	verification, uploading to the database etc are captured in detailed procedures and summarised in a single document.		
	Discuss any adjustment to assay data	No adjustments were made to the lab reported assay data.		
	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.	Diamond, RC and AC drill hole collar locations are initially recorded by Chalice employees using a handheld GPS with a +/- 3m margin of error and then picked up with an RTK-DGPS which have +/-20 mm margin of error.		
Location of data points		Planned and final hole coordinates are compared after pick up to ensure that th original target has been tested.		
	Specification of the grid system used.	The grid system used for th– location of al drill holes is GDA94 - MGA (Zone 50).		
		The resource model has been estimated in a local grid which has a 40° anti-clockwist rotation with 1,000m added to the RL		
	Quality and adequacy of topographic control.	RLs for reported holes were derived from RTK-DGPS pick-ups.		
Data spacing and distribution	Data spacing for reporting of Exploration Results.	Drill hole spacing varies from between 40m x 40 m in the south to 160m x 160m ir the north-west.		
	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.	Results from the drilling to date are considered sufficient to assume geological or grade continuity appropriate for Mineral Resource estimation procedure(s) and classifications.		
	Whether sample compositing has been applied.	No compositing undertaken for diamond drill core or RC samples.		
Orientation of data in relation to geological	Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.	RC and Diamond drill holes were typically oriented within 15° of orthogonal to the interpreted dip and strike of the known zone of mineralisation. However, several holes were drilled at less optimal azimuths due to site access constraints or to test fo alternative mineralisation orientations.		
structure	If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have	The orientation of the drilling is not considered to have introduced sampling bias.		

Criteria	JORC Code explanation	Commentary
	introduced a sampling bias, this should be assessed and reported if material.	
Sample security	The measures taken to ensure sample security.	Samples were collected in polyweave bags either at the drill rig (RC and AC samples) or at the core cutting facility (diamond samples). The polyweave bags have five samples each and are cable tied.
		Filled bags were collected into palletised bulk bags at the field office and delivered directly from site to ALS laboratories in Wangara, Perth by a Chalice contractor several times weekly.
		Cube Consulting conducted a site visit and review of the sampling techniques and data as part of the Mineral Resource Estimate on 12 May 2022.
Audits or reviews		SRK completed an independent assurance review of the Chalice procedures and documentation in 2021, which continue to apply in 2022 and 2023, and the appropriateness of Cube Consulting estimation methods employed.

A-2 Section 2 Reporting of Exploration Results

Criteria	JORC Code explanation	Commentary
Mineral tenement	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.	Exploration activities are ongoing over E70/5118 and 5119 and the tenements are in good standing. The holder CGM (WA) Pty Ltd is a wholly owned subsidiary of Chalice Mining Limited. There are no known encumbrances.
and land tenure status	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.	All drilling has occurred on granted Exploration Licences. There are no known impediments to obtaining a licence to operate. E70/5119 partially overlaps ML1SA, a State Agreement covering Bauxite mineral rights only.
		There is no previous exploration at Gonneville, and only limited exploration has been completed by other exploration parties in the vicinity of the targets identified by Chalice to date.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	Chalice has compiled historical records dating back to the early 1960's which indicate only three genuine explorers in the area, all primarily targeting Fe-Ti-V mineralisation.
		Over 1971-1972, Garrick Agnew Pty Ltd undertook reconnaissance surface sampling over prominent aeromagnetic anomalies in a search for 'Coates deposit style' vanadium mineralisation. Surface

Criteria	JORC Code explanation	Commentary
		sampling methodology is not described in detail, nor were analytical methods specified, with samples analysed for V2O5, Ni, Cu, Cr, Pb and Zn, results of which are referred to in this announcement.
		Three diamond holes were completed by Bestbet Pty Ltd targeting Fe-Ti-V situated approximately 3km NE of JRC001. No elevated PGE-Ni-Cu-Co assays were reported.
		Bestbet Pty Ltd undertook 27 stream sediment samples within E70/5119. Elevated levels of palladium were noted in the coarse fraction (-5mm+2mm) are reported in this release. Finer fraction samples did not replicate the coarse fraction results.
		A local AMAG survey was flown in 1996 by Alcoa using 200m line spacing which has been used by Chalice for targeting purposes.
Geology	Deposit type, geological setting and style of mineralisation.	The target deposit type is an orthomagmatic PGE-Ni-Cu-Co sulphide deposit, within the Yilgarn Craton. The style of sulphide mineralisation intersected consists of massive, matrix, stringer and disseminated sulphides typical of metamorphosed and structurally overprinted orthomagmatic Ni sulphide deposits.
	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:	Provided in the body of the text.
Drill hole	Easting and northing of the drill hole collar Elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar	
Information	Dip and azimuth of the hole Down hole length and interception depth hole length.	
	If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	No material information has been excluded.
Data aggregation methods	In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg. Cutting of high grades) and cut-off grades are usually Material and should be stated.	Significant intercepts are reported using a length-weighted >0.3% NiEq cut off. A maximum of 4m internal dilution has been applied. Higher grade internal intervals are reported using a >0.6% NiEq length- weighted cut off. A maximum of 2m internal dilution has been applied.

Criteria	JORC Code explanation	Commentary
		No top cuts have been applied.
	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.	Higher grade intervals are reported using a >0.9g/t Pd length-weighted cut off for oxide and >0.6% NiEq length-weighted cut off. A maximum of 2m internal dilution has been applied for intercepts calculated using >0.6% NiEq cut offs.
		Metal equivalent calculation was used to report the March 2023 Resource and continues to be used to report drill intersections only. The April 2024 Resource estimate does not utilise a metal equivalent calculation. Metal price assumptions used in the metal equivalent calculations are: US\$1,800/oz Pd, US\$1,200/oz Pt, US\$1,800/oz Au, US\$24,000/t Ni, US\$10,500/t Cu, US\$72,000/t Co. Metallurgical recovery assumptions used in the metal equivalent calculation for the oxide material are: Pd – 75%, Au –
	The assumptions used for any reporting of	90%. Hence for the oxide material PdEq (g/t) = Pd (g/t) + 1.27 x Aυ (g/t).
	metal equivalent values should be clearly stated.	Metallurgical recovery assumptions used in the metal equivalent calculation for the sulphide (fresh) material are: Pd – 60%, Pt —60%, Au – 70%, Ni – 45%, Cu – 85%, Co – 45%.
		Hence for the sulphide material NiEq = Ni (%) + 0.32x Pd(g/t) + 0.21x Pt(g/t) + 0.38x Au(g/t) + 0.83x Cu(%) + 3x Co(%)
		The volume of transitional material is small and considered unlikely to materially affect the overall metal equivalent calculation.
		The cut-off grade for the sulphide domain was determined using NiEq in preference over PdEq, due to the assumed requirement for sulphide flotation to recover the metals.
Relationship between mineralisation widths and intercept lengths	These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.	RC and Diamond drill holes were typically oriented within 15° of orthogonal to the interpreted dip and strike of the known zone of mineralisation. However, several holes were drilled at less optimal azimuths due to site access constraints or to test for alternative mineralisation orientations.
	If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg. 'down hole length, true width not known').	All widths are quoted down-hole. True widths vary depending on the orientation of the hole and the orientation of the mineralisation. For low grade intercepts (> 0.40% NiEq) true width approximates downhole width. For high grade intercepts (>0.6% NiEq) true width is generally between 80 and 100% of the downhole width.

Criteria	JORC Code explanation	Commentary
Diagrams	Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.	Refer to figures in the body of text.
		The last release dated 30 th Nov 2023 reported holes up to JD426 The resource update includes holes up to JD429.
	Where comprehensive reporting of all Exploration Results is not practicable,	Holes JD430 to 436 are reported within this release.
Balanced reporting	representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Reporting of infill holes within the Gonneville Resource including those drilled prior December 11 th 2022 have not been reported as it is not practicable, results have been used in the Resource update and/or are in line with results in the resource estimation.
Other substantive exploration data	Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.	Not applicable. All meaningful data relating to the Mineral Resource and exploration drilling has been included.
Further work	The nature and scale of planned further work (eg. Tests for lateral extensions or depth extensions or large-scale step-out drilling).	Pre-Feasibility study work has commenced including additional metallurgical testwork, mining studies, hydrogeology studies, tailings studies and waste rock characterisation etc.
	Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.	Any potential extensions to mineralisation are shown in the figures in the body of the text.

A-3 Section 3 Estimation and Reporting of Mineral Resources

Criteria	JORC Code explanation	Commentary
Database	Database integrity Measures taken to ensure that data has not been corrupted by, for example, transcription or keying errors, between its initial collection and its use for Mineral Resource estimation purposes.	OCRIS data logging software is used by Chalice for front end data collection and has in-built validation for all geological logging and sampling.
		All logging, sampling and assay files are stored in a SQL Server database using DataShed (industry standard drill hole database management software).
megniy		User access to the database is regulated by specific user permissions. Only the Database Manager can overwrite data.
	All data has passed a validation process; any discrepancies have been checked by Chalice personnel before being updated in the database.	

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	Data validation procedures used.	Cube Consulting completed validation checks on the drill hole data extraction provided by Chalice for use in the Mineral Resource Estimate. Multiple collar entries, potentially suspect collar and downhole survey results, absent survey or assay data, overlapping intervals, negative sample lengths, out of range assay values and sample intervals which extended beyond the hole depth defined in the collar table were reviewed. Only minor validation issues were detected which were communicated to Chalice and corrected prior to the preparation of the Mineral Resource estimate.
Site visits	Comment on any site visits undertaken by the Competent Person and the outcome of those visits.	A site visit to the Gonneville Project was completed by Mike Job (Principal Geologist/Geostatistician at Cube Consulting) and Mike Millad (Principal Geologist/Geostatistician at Cube Consulting) on 12 May 2022, and an inspection of the ALS sample preparation and analytical laboratories was undertaken by Mike Job on 2 June 2022. Mike Job and Mike Millad assume Competent Persons status for the Mineral Resource estimate. During the Gonneville site visit, the drilling, sampling, geological logging, density measurement and sample storage facilities, equipment and procedures were witnessed, and discussions held with Chalice representatives. The facilities and equipment were appropriate, and the procedures were well-designed and being implemented consistently. The sample preparation and analytical laboratories were well equipped and were operated to a very high standard. In the Competent Persons' opinion, the geological and analytical data being produced is appropriate for use in a Mineral Resource estimate.
	If no site visits have been undertaken indicate why this is the case.	Not applicable (see above).
Geological interpretation	Confidence in (or conversely, the uncertainty of) the geological interpretation of the mineral deposit.	The location and orientation of the primary PGE-Ni-Cu-Co mineralisation within the Ultramafic host unit are reasonably well understood and have been developed over the course of the drill-out phase of the project. Geological controls on the supergene/dispersion zone material are reasonably simple and well understood. Confidence in the orientations of the barren Dolerite dyke lithology is variable over the footprint of the deposit, due to the geological complexity shown by this lithology unit. However, volumetrically the unit is considered as having been appropriately captured in the geological interpretation and by geostatistical interpolation of minor dolerite intervals not

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		captured in the Leapfrog wireframes generated by Chalice. Work on improving definition of, and confidence in, the Dolerite lithology by Chalice is ongoing.
		Sample intercept logging and assay results from drill core and RC samples form the basis for the geological interpretations.
		A criterion of > 0.9ppm Pd has been used by Chalice to construct the supergene/dispersion zone mineralised wireframe. The logged oxide-transition boundary in the weathering profile was taken into account when developing the interpretation. A minimum intersection width of 2m was applied.
	Nature of the data used and of any assumptions made.	High grade mineralisation wireframes were constructed separately for Pd, Cu and Ni using separate cut-off grades for each. The cut-off grades used were based on inflexions representing natural population breaks in the log probability plots. To preserve a level of continuity when interpreting higher grade zones, modelling allows a maximum of 1 hole with mineralisation below the cut-off grade between mineralised holes. i.e.: -If one hole with mineralisation below the cut-off grade is present between higher grade holes then the wireframe is pushed through the interpreted position using the minimum mining width. If two or more holes with mineralisation below the cut-off grade are present, the wireframe is not continued through the drillholes. Any high-grade intercepts which do not fit these criteria are not included in the wireframes and will instead be dealt with as part of the surrounding mineralised general Ultramafic zone.
		The high grade Pd zones were modelled first as the previous MRE#3 "G Zones" could be used to provide the general geometry. A mineralised intercept above a 0.9 Pd ppm cut off was calculated with the economic composite tool in LeapfrogGeo using the sulphide assay table. The intercept calculation allowed for a minimum ore composite length of 4m with a maximum 4m of internal waste and a maximum of 2m consecutive waste. The Pd intercepts were then classified using the interval select tool and finally domained using the vein tool. Sections were drawn viewing towards 40° N (NW-SE strike) for correlating the Pd zones. A mineralised intercept above a 0.18% Cu cut off was calculated with the economic composite tool in LeafrogGeo using the sulphide assay table. The intercept calculation allowed for a minimum ore composite length of 4m with a maximum 4m of internal waste and a maximum of 2m consecutive waste. The high grade Cu mineralisation could not be modelled in the same way as Pd as the intercepts were thicker but not as continuous

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		from south to north through the Gonneville Ultramafic. Instead, the intrusion tool was utilised and the geometry based on the "nose" and the "embayment" models of MRE#3.
		A mineralised intercept above a 0.2% Ni cut off was calculated with the economic composite tool in LeafrogGeo using the sulphide assay table. The intercept calculation allowed for a minimum ore composite length of 4m with a maximum 4m of internal waste and a maximum of 2m consecutive waste. A mixture of the vein tool and intrusion tools were used to model the high grade Ni zones due to the varying geometry of mineralisation.
	The effect, if any, of alternative interpretations on Mineral Resource estimation.	Alternative interpretations are likely to materially impact on the Mineral Resource estimate on a local, but not global, basis.
	The use of geology in guiding and controlling Mineral Resource estimation.	The litho-geochemical domains within the host Ultramafic unit are known to have an association with the orientation of the primary mineralisation zones. The grades of the economic elements and geological interpretations for these features have been incorporated into the resource estimation approach via the development of trend surfaces informing a variable variogram and search ellipse orientation strategy (Dynamic Anisotropy (DA)).
		The deposit represents part of a large layered intrusion. Sulphide content and metal grade are well correlated, with higher sulphide concentration generally corresponding to higher metal content within the Ultramafic intrusion.
	The factors affecting continuity both of grade and geology.	On a global scale the mineralisation displays good geological and grade continuity, which is largely governed by magmatic fractionation processes within the host intrusion. On a local scale geological and grade continuity is disrupted by the presence of variably oriented barren dolerite dykes and granite inclusions, both of which post-date and therefore overprint the mineralisation.
Dimensions	The extent and variability of the Mineral Resource expressed as length (along strike or otherwise), plan width, and depth below surface to the upper and lower limits of the Mineral Resource.	The main part of the mineral resource within the Ultramafic extends for a strike length of approximately 1.8km and is 600 to 800 m thick. Plan width of the sub-parallel, high grade Pd zones ranges from m to ~60m, for the high grade Cu zones from 4m to ~160m and for the high grade Ni zones from m to ~60m. Plan width of the encompassing sulphide poor zones varies from 100 to 150m. The reported Measured Mineral Resource is within approximately 130m of surface. The reported Indicated Mineral Resource is within approximately 450m below surface. The reported Inferred Mineral Resource is within approximately 900m below surface.

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		All geological and mineralisation wireframe interpretations used in the Resource were constructed by Chalice using a combination of Leapfrog and Micromine software. Geological wireframes provided by Chalice include weathering, lithological, litho- geochemical and supergene/dispersion zone interpretations. Block modelling and grade estimation was carried out by Cube Consulting using Surpac, Datamine and Isatis software. Statistical analysis was carried out by Cube Consulting using Geoaccess Professional and Isatis software. All wireframes and drill data were rotated 40°
		anti-clockwise and placed in a local grid for estimation and mining studies. This brings the average strike of the mineralisation approximately in line with the local grid north- south axis.
Estimation and modelling techniques	The nature and appropriateness of the estimation technique(s) applied and key assumptions, including treatment of extreme grade values, domaining, interpolation parameters and maximum distance of extrapolation from data points. If a computer assisted estimation method was chosen include a description of computer software and parameters used.	 Prior to estimation of variables, below detection limit assays were assigned a positive value equal to half of the detection limit for the relevant grade variable. Intentionally unsampled intervals were retained as absent grade values. The vast majority of the intentionally unsampled intervals occur outside of the host intrusion lithology, and therefore have no bearing on the grade estimates. All drillhole samples were flagged according to the geological and mineralisation domain interpretations provided by Chalice. Sample populations were statistically analysed to derive geostatistical domain groupings for Pd, Pt, Ni, Co, Cu, Au, As, S, Mg, Cr and density. Statistical analysis included comparison of global grade distributions, derivation of statistical correlations between grade variables and contact analysis of grade variables across relevant geological domains. From analysis, estimation domains were determined for Pd/Pt, Ni/Co, Cu/Au, As, S, Mg, Cr and density variable groupings. Information regarding the in-situ mineral chemistry of the various mineral species for the deposit is currently not available. Mineral speciation was therefore not incorporated into the definition
		of the geostatistical domains. For primary high grade Pd, Pt, Ni and Co, mineralisation located within the Ultramafic intrusion, grade interpolation was undertaken using Ordinary Kriging (OK) For the high grade Cu/Au grouping, a mix of OK and Localised Uniform Conditioning (LUC) was used. For all six economic elements, the lower grade material outside of the high grade zones, situated within the general Ultramafic zone, was estimated using LUC. The lower grade general Ultramafic zone was divided into a low-to-moderate grade "Main" sub-domain, and very low-grade northwest sub-domain for

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	Pd, Pt, Ni, Co, Cu and Au. OK estimates for the granite, gabbro, and sediment lithologies were also undertaken, but using restrictive high-grade distance limiting parameters to curtail the propagation of rare high-grade samples. These high-grade samples are believed to be due mainly to re-mobilisation of mineralisation in the case of the surrounding sediments and granite. The mineralisation modelled outside of the Ultramafic envelope has not been classified as a Mineral Resource for reporting purposes.
	Indicator kriging was used to model the geometry of dyke material that was logged in the drill holes, typically represented by short and discontinuous intercepts, but which fell outside of the dyke Leapfrog wireframes. This additional dyke volume comprises approximately 1.4% of the total volume within the estimated Ultramafic intrusion envelope. Detection limit grades were assigned for all elemental variables and density was assigned based on density sample statistics.
	Arsenic only occurs in very low abundances and was modelled using OK throughout. As is of higher grade in the southeast of the Ultramafic intrusion, and of lower grade to the north of this, hence a Main-SE subdivision was implemented.
	Sulphur was modelled using OK in the high grade domains and with LUC in the surrounding general Ultramafic. S estimation domains differed slightly from the economic elements, in that the litho-geochemical units were split about the top-of-fresh surface whereas the economic elements were split about the base of complete oxidation surface. The Main vs northwest domain subdivisions of the fresh Ultramafic zone was used for S modelling, similar to the economic elements. S was also interpolated using OK in the granite, gabbro, dyke and sediment lithologies, with appropriate high grade distance limits applied. It is noteworthy that in the immediate hanging wall and footwall of the Ultramafic intrusion, within the sediment lithological unit, S grades are elevated, which may have environmental implications for waste disposal.
	Mg and Cr were modelled using OK. It was observed that Mg is relatively depleted in the oxide zone while Cr is relatively enriched in the oxide zone and that there is no significant difference between Mg and Cr grades in the high grade mineralisation zones and surrounding general Ultramafic zones. A relatively simple domaining scheme was therefore used, whereby the general Ultramafic and high grade zones were rolled together into a single domain for estimation, with a split about the base of oxide surface.

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		Density was modelled using OK within the transitional + fresh portion of the Ultramafic intrusion, granite, gabbro and sediment lithologies. Constant density assignments were made in the oxide zone, where the paucity of data did not justify using geostatistical interpolation. Density is generally more poorly informed than the elemental variables, due to only core being sampled for density, but it was deemed possible to fill in unsampled density values in the based on a multi-linear regression of sampled density values against the well-correlated and more widely informed Co, Fe, Ni and S variables, with which density is generally well correlated.
		All of the estimated variables were modelled independently using OK in the Supergene enrichment zone.
		economic elements had an immaterial impact on the global grade. Boundary/contact analysis showed that the high grade mineralisation zones have hard boundaries with respect to the surrounding, lower-grade Ultramafic zone and so hard grade boundaries were applied to this contact. A general Ultramafic Main-NW sub- domain estimation boundary was also defined for Pd, Pt, Ni, Co, Cu, Au and S interpolation, based on a large change in the grade distribution, and was treated as soft during interpolation, although different capping, variogram and search parameters were implemented either side of this boundary. In addition to the grade caps,

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		distance-based grade thresholds were also chosen and implemented for interpolation those zones where mineralisation is moderately or highly discontinuous (i.e. lower grade Ultramafic zones outside of the high grade domains, granite, gabbro, and sediment). This was based on observed inflexions in the grade histograms that are interpreted as representing the onset of the anomalous high grade sub-population. It is noted that the largely barren zones outside of the Ultramafic intrusion have not been classified as resources, and were modelled only to provide some indication in the block model of where these patches of mineralisation occur, and to show where sometimes high abundances of deleterious elements occur (e.g. high sulphur in the sediment footwall).
		Density bottom and top truncations have been applied, based on examination of density histograms, therefore completely excluding the outliers from the estimation process.
		Estimation of Pd, Pt, Ni, Co, Cu, Au, As, S, Mg and Cr was subsequently undertaken by OK for the primary and secondary mineralisation. As previously mentioned, the OK estimates were progressed to LUC estimates for Pd, Pt, Ni, Co, Cu, Au and S in the transitional + fresh portion of the Ultramafic intrusion outside of the high grade zones and in some of the larger Cu/Au high grade zones. Geostatistical interpolation of density was restricted to the transitional + fresh zones, with assignments being made in the oxide zone. A variable variogram and search ellipse orientation strategy was implemented using Isatis' DA functionality during grade interpolation to honour the local undulations in the mineralisation orientation. The hanging wall and footwall surfaces for the high grade zones were used to define the DA within the envelope of the Ultramafic intrusion. The Ultramafic contact was used for DA in the granite and sediment units. Constant rotations were used in the gabbro units, as these have relatively uniform dip and strike. The dyke hanging wall and footwall surfaces were used to inform the DA parameters for the estimation of the remaining dyke material not captured by wireframes. In the secondary zone, including the Supergene unit, the topographic, bottom of complete oxidation and top of fresh surfaces were used for DA. Search and block plans were as follows:
		Primary mineralisation Pd, Pt, Ni, Co, Cu, and Au (within Ultramafic unit and high grade zones) – A minimum of 4 to 6 and maximum of 16 samples per estimate into a parent block size of 10 ml x 20 m(N) x 5 m(RL). The maximum

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		limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. Block discretisation scheme was 5 I(E) x 5 pts(N) x 2 pts(RL). LUC post-processing of the six economic elements was into a Selective Mining Unit (SMU) block size I5 m(E) x 10 m(N) x 2.5 m(RL).
		Secondary mineralisation Pd, Pt, Ni, Co, Cu and Au (within the Ultramafic, high grade zones and Supergene unit)used a minimum of 4 to 6 and maximum of 16 samples per estimate into a parent block sizlf 10 m(E) x 20 m(N) x 5 m(RL). The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. The block discretisation schelwas pts(E) x 5 pts(N) x 2 pts(RL).
		For primary and seco-dary zones, S - A minimum of 4 to 6 and maximum of 16 samples per estimate into a parent blolsize of 20 m(E) x 20 m(N) x 5 m(RL). The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. Block discretisatiolcheme was 5 pts(E) x 5 pts(N) x 2 pts(RL). LUC post-processing of the S variable, where applicable, was into a Selective Mining Unit (SI block size of 5 m(E) x 10 m(N) x 2.5 m(RL).
		For the primary and secondary zone As, Cr and Mg, a minimum of 3 to 6 and maximum of 16 samples per estimate were used into a plnt block size of 20 m(E) x 20 m(N) x 5 m(RL). The maximum number of samples per drillhole was limited by using anisotropic distances for sample selection in combination with a maximum of 4 samples per search ellipse quadrant. A single search pass was used. High grade distance limiting was implemented in addition to grade capping in

The availability of check estimates, providue standard domain grade and providue standard domain grade density were allocate some or so some standard blocks income and some previous estimates and/or some some some some some some some some	Criteria	JORC Code explanation	Commentary
For the primary zone density within the Ultramofic inclusion, a minimum of 4 and maximum of 1 6 samples per estimate were used it a parent block size of 5 m(E) x 10 m(N) x 2.5 m(R). Outside of the Ultramofic intrulon, a parent block size of 20 m(E) x 20 m(N) x 5 m(R). You sued. The maximum number of samples per difficult were selection in combination with a maximum of 4 samples per sarch ellipse quadrant. The maximum limit was allowed to be exceeded in cases where samples are situated within any given block, since the condition was set whereby the OK would by default use all samples within the block. A single search pass was used. The bit discretisation scheme was 5 phS[] x 5 ptN(N 2 ptS(R). For Pd, PT, Ni, Co, Cu, Au, S. Mg and Cr, un- estimated domains (due to a paucity of samples) hove been assigned constant grades based either on sample statistics or interpolated domain analogues. None of the ex-Ultramofic blocks, whether intepolated or assigned, have been classified as Mineral Resource. For As un-estimated blocks have been assigned halt detection inmit. For density, un-estimated blocks have been assigned halt detection inmit. For density, un-estimated blocks inclusive of interpolated domain analogues. None of the ex-Ultramofic blocks, whether intepolated or assigned values based on applicable sample statistics. Final block walks for Pd, Pt, Ni, Co, Cu, Au, S, Mg, Cr and density were validated by wary of visual review of plans and crass sections (block model and diffi samples presented with same clocul legend), swith plats, and comparison of estimation domain mean grades with the fingut grade distribution data. The availability of check estimates, previous estimate hakes appropriate account of such data. The Winerol Resource estimateses aprovius estimate takes appropriate account			
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	Estimation of deleterious elements or other non-grade variables of economic significance (eg. sulphur for acid mine drainage characterisation).	Sulphur, magnesium, chromium and arsenic have been estimated. As is observed to generally be of very low grade, while S is notably enriched in the immediate hanging wall and footwall sediments of the Ultramafic intrusion, and especially so on the footwall side. Magnesium is observed to be relatively depleted in the oxide zone, while the opposite is true for chromium.
		No other deleterious variables have been estimated but to date there are no indications of any deleterious elements in concentrate samples.
	In the case of block model interpolation, the block size in relation to the average sample spacing and the search employed.	OK estimates were run into either 10mE x 20mN x 5mRL or 20mE x 20mN x 5mRL (local grid) parent blocks, which is approximately half the width of the nominal 40m infill drill spacing in the northing direction. Because of the north-south orebody strike in local space, the nominally 60° easterly inclined drill holes, 1m downhole sample spacing and generally continuous nature of the variograms models for the economic elements, the local easting and RL block dimensions were set at a smaller 10m and 5m, respectively. LUC estimates, where undertaken, were progressed to smaller 5mE x 10mN x 2.5mRL (local grid) blocks.
	Any assumptions behind modelling of selective mining units.	Within the Ultramafic unit the LUC modelling process for Pd, Ni, Cu, Au, Co, Pt and S has assumed an SMU size of 5 m E x 10 m N x 2.5 m RL.
-	Any assumptions about correlation between variables.	The high degree of observed correlation between Ni and Co grade meant that Ni variograms were used for Co interpolation. These elements are mostly bound together in pentlandite, hence the close relationship. Density was also observed to be well correlated with Ni, Fe, Co and S.
_	Description of how the geological interpretation was used to control the resource estimates.	The litho- geochemical domains within the host Ultramafic unit are known to have an association with the orientation of the primary mineralisation zones (i.e. the high grade mineralisation zones). Geological interpretations for these features have been incorporated into the resource estimation approach via the development of trend surfaces informing a variable search ellipse orientation strategy (Dynamic Anisotropy). The geological interpretation for the supergene/dispersion zone has been used to constrain the resource estimate for The reported weathering zone material. a variable search ellipse orientation strategy (Dynamic Anisotropy) was employed to capture local undulations in the supergene/dispersion zone during grade estimation.
	Discussion of basis for using or not using grade cutting or capping.	The need for grade capping was assessed for all estimated variables on a per estimation domain basis prior to estimation.

Criteria

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		Histograms and log-probability plots were used to review composited sample grade distributions graphically. Additionally, a visual inspection was carried out in Surpac for potential clustering of very high-grade sample data prior to selecting a capping value.
		Capping values, where deemed necessary, were applied to the composited sample grades.
		In addition to the grade caps, high grade distance limiting was implemented for high grade sub-populations in the largely barren domains and in the lower grade portion of the Ultramafic intrusion.
		Bottom and top truncations were applied to density composites on a per estimation domain basis.
	The process of validation, the checking process used, the comparison of model data to drill hole data, and use of reconciliation data if available.	Final block values for Pd, Pt, Ni, Co, Cu, Au, As, S, Mg, Cr and density were validated by way of visual review of plans and cross sections (block model and drill samples presented with same colour legend), swath plots, and comparison of estimation domain mean grades with the input grade distribution data. The block model reflected the variability of the grades in the drillhole samples both globally and locally.
		No previous mining has taken place at the Project, and production data is not available to reconcile against the block model estimates.
Moisture	Whether the tonnages are estimated on a dry basis or with natural moisture, and the method of determination of the moisture content.	Tonnages are estimated on a dry basis. No moisture data are available.
		Any oxide block within the optimisation pit shell above a Net Smelter Return (NSR) cut-off of A\$25/t is considered as Mineral Resource amenable to mining by open pit methods.
		Any transitional or fresh block within the optimised pit shell above a NSR cut-off of A\$25/t is considered as Mineral Resource amenable to mining by open pit methods. Any transitional or fresh block outside of the optimised pit shell, within a MSO shape and
Cut-off parameters	The basis of the adopted cut-off grade(s) or quality parameters applied.	above a NSR cut-off of A\$110/t is considered as Mineral Resource amenable to mining by underground methods.
		The determination of the NSR uses metal recovery assumptions and also incorporates assumptions relating to metal prices, metal payabilities, exchange rates, royalties, transport and treatment charges.
		For further information on the assumptions used in the NSR estimation refer to the Cut-off methodology section contained within the main body of this announcement.

Criteria	JORC Code explanation	Commentary
Mining factors or assumptions	Assumptions made regarding possible mining methods, minimum mining dimensions and internal (or, if applicable, external) mining dilution. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential mining methods, but the assumptions made regarding mining methods and parameters when estimating Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the mining assumptions made.	This Mineral Resource estimate is based on conventional open cut drill, blast, load, and haul mining methods for the open pit portion of the resource. The pit optimisations prepared to support reasonable prospects for eventual economic extraction had appropriate mining dilution and ore loss applied. The Mineral Resource estimate itself is reported without mining dilution or ore loss. Consideration was given to the possibility of applying long hole open stoping underground mining methods to the sulphide resource outside of the optimised pit shell. Appropriate mining cost and commodity prices have been used to determine a cut-off grade for such an underground mining approach.
Metallurgical factors or assumptions	The basis for assumptions or predictions regarding metallurgical amenability. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider potential metallurgical methods, but the assumptions regarding metallurgical treatment processes and parameters made when reporting Mineral Resources may not always be rigorous. Where this is the case, this should be reported with an explanation of the basis of the metallurgical assumptions made.	Metallurgical test work on oxide material conducted includes: Detailed QEMSCAN and XRD mineralogy on composites. Approximately 60 laboratory batch leach tests using a variety of reagent suites to assess potential extraction. Metallurgical test work on sulphide material conducted includes: Detailed QEMSCAN and XRD mineralogy on 18 composites and a further 4 sets of mineralogy of flotation test products. Comminution testing includes 17 SMC SAG milling tests plus Ball Mill Work Indices. Flotation testwork on a suite of six ore type composites and four mining composites comprising over 200 individual tests, over 20 locked cycle tests (LCT). LCT results were used as a basis for estimating metallurgical recovery. Recovery of intermediate products (enriched Cu/PGE concentrate and Ni/Co MHP) from concentrate enrichment of low grade nickel concentrates has been estimated using pilot plant data from similar projects and scouting tests on samples from Gonneville. The base case assumption is for flotation to produce a copper concentrate for sale, and a bulk nickel concentrate for enrichment in a midstream facility. Palladium recovery was predominantly into the copper concentrate. Cobalt is mineralogically associated with nickel and can be assumed to behave in a similar manner. Metallurgical recoveries used in the pit optimisation are based on testwork completed to date. Recovery algorithms
		calculated for each element were used as inputs into the pit optimisation and NSR calculations.

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Environmental factors or assumptions	Assumptions made regarding possible waste and process residue disposal options. It is always necessary as part of the process of determining reasonable prospects for eventual economic extraction to consider the potential environmental impacts of the mining and processing operation. While at this stage the determination of potential environmental impacts, particularly for a greenfields project, may not always be well advanced, the status of early consideration of these potential environmental impacts should be reported. Where these aspects have not been considered this should be reported with an explanation of the environmental assumptions made.	The environmental approval process has commenced but is still at an early stage. Hence environmental considerations for potential mining have not yet been evaluated in detail. At this stage Chalice is unaware of any specific environmental issues that would preclude potential eventual economic extraction, subject to government approvals.
	Whether assumed or determined. If assumed, the basis for the assumptions. If determined, the method used, whether wet or dry, the frequency of the measurements, the nature, size and representativeness of the samples.	Sample density determinations were carried out using the water displacement method. Incompetent oxide core samples from the weathering profile are wax-coated prior to density determination. Density standards are employed in the density determination process. Sample density determinations were carried out on all fresh rock core samples, and representative oxide samples resulting in ~80% of total drilled diamond core intervals having had density determinations completed.
Bulk density	The bulk density for bulk material must have been measured by methods that adequately account for void spaces (vugs, porosity, etc), moisture and differences between rock and alteration zones within the deposit.	Incompetent oxide core samples are wax- coated prior to density determination.
	Discuss assumptions for bulk density estimates used in the evaluation process of the different materials.	Sample density determinations were used to assign a bulk density value to the block model using a combination of assignment by geostatistical domain, and spatial estimation from density determinations from de-surveyed drillholes. Model tonnages are subsequently estimated on a dry basis.
Classification	The basis for the classification of the Mineral Resources into varying confidence categories.	The Resource has been classified following due consideration of all criteria contained in Section 1, Section 2 and Section 3 of JORC Code 2012 Table 1. The Resource has been classified as either Measured, Indicated or Inferred based on data quality, sample spacing, mineralisation continuity, confidence in the geological interpretations, quality of the grade estimations and metallurgical processing knowledge.
		Primary mineralisation within the host Ultramafic intrusion has been classified as a combination of Measured, Indicated and Inferred. Measured, Indicated and Inferred wireframe volumes were developed from

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		sectional interpretation strings, and model cells then coded with Resource Classification codes directly from the wireframe volumes.
		All fresh and transitional material within the Ultramafic intrusion, excluding the mostly barren dolerite, and informed by a reasonably consistent drill spacing of 80m, has been classified as Inferred, except in the northwest, where a number of new deeper holes are spaced wider than 80m, but are nevertheless deemed to be sufficient to infer geological and grade continuity at depth. Around the periphery of the drilling pattern, where extrapolation results in lower quality estimates, Pd grade variography has informed a decision to limit the extrapolation of the Inferred material to approximately 50m beyond the last drill hole. The 80m drill spacing corresponds to the nominal initial exploration drill hole spacing used for the deposit.
		An 80m drill spacing is considered by the Competent Person as being sufficient to imply, but not verify, geological and grade continuity for the deposit style.
		All fresh and transitional material within the Ultramafic intrusion, excluding the mostly barren granite, and dolerite dyke units, informed by a consistent drill spacing of 40m has been classified as Indicated. The selection of a 40m drill spacing distance for Indicated was based on results from a simulation-based drill hole spacing study carried out for the deposit indicating that the resource definition drill-out be conducted on a 40 m x 40 m drill spacing.
		Variogram ranges of the main economic grade variable, Pd, indicating that grade continuity does not exceed 40 m to 50 m within the high grade zones.
		Estimation quality metrics, such as slope of regression and average distance to sample were considered during the classification process.
		A 40 m drill spacing is considered by the Competent Person as being sufficient to allow estimation of the deposit physical characteristics with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit.
		All fresh and transitional material within the Ultramafic intrusion, excluding the mostly barren granite, and dolerite dyke units, informed by a consistent drill spacing of 10m has been classified as Measured. The selection of a 10m drill spacing distance for Measured was based on:
		Variogram ranges of the main economic grade variable, Pd, indicating that grade

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		 continuity averages 40m to 50m within the high Pd/sulphide zones and is on the order of hundreds of metres in the general Ultramafic zones. Estimation quality metrics, such as slope of regression and average distance to sample were considered during the classification process. A 10m drill spacing is considered by the Competent Persons as being sufficient to allow estimation of the deposit physical characteristics with sufficient confidence to allow the application of Modifying Factors in sufficient detail to support mine planning and evaluation of the economic viability of the deposit. All non-Ultramafic material (country rock and dykes) has not been classified and the Supergene unit has been considered ineligible to rise to level of the Measured category of confidence due to metallurgical uncertainty, hence it is capped at an Indicated classification where the drill spacing is 40m x 40m or tighter.
	Whether appropriate account has been taken of all relevant factors (i.e. relative confidence in tonnage/grade estimations, reliability of input data, confidence in continuity of geology and metal values, quality, quantity and distribution of the data).	Appropriate account has been taken of all relevant criteria including data quality, sample spacing, mineralisation continuity, confidence in the geological interpretations, quality of the grade estimations and the availability of Modifying Factors.
	Whether the result appropriately reflects the Competent Person's view of the deposit.	The Mineral Resource appropriately reflects the Competent Person's views of the deposit.
Audits or reviews	The results of any audits or reviews of Mineral Resource estimates.	Cube Consulting has undertaken internal peer reviews. Mr Mark Noppé of SRK Consulting completed in-stream reviews of previous Resource Estimates. No external review has been completed for this estimate.
Discussion of relative accuracy/ confidence	Where appropriate a statement of the relative accuracy and confidence level in the Mineral Resource estimate using an approach or procedure deemed appropriate by the Competent Person. For example, the application of statistical or geostatistical procedures to quantify the relative accuracy of the resource within stated confidence limits, or, if such an approach is not deemed appropriate, a qualitative discussion of the factors that could affect the relative accuracy and confidence of the estimate.	The Mineral Resource accuracy is communicated through the classification assigned to this Mineral Resource. The Resource has been classified in accordance with the JORC Code (2012 Edition) using a qualitative approach. All factors that have been considered have been adequately communicated in Section 1 and Section 3 of this table.
	The statement should specify whether it relates to global or local estimates, and, if local, state the relevant tonnages, which should be relevant to technical and economic evaluation. Documentation should include	The Mineral Resource statement relates to a global tonnage and grade estimate. Grade estimates have been made for each block in the block model.

Criteria	JORC Code explanation	Commentary
	assumptions made and the procedures used.	
	These statements of relative accuracy and confidence of the estimate should be compared with production data, where available.	No previous mining has taken place at the project, and production data is not available to reconcile against the block model estimates.