



# **ASX ANNOUNCEMENT**

29<sup>th</sup> May 2023

# DRILLING CONFIRMS GROWTH POTENTIAL AT MT THIRSTY

- Further shallow, thick & high-grade nickel-cobalt-manganese-scandium results from Mt Thirsty, including:
  - MTRC005D: 48.0 metres @ 0.08% Co, 0.44% Ni, 0.13% Mn & 47.6g/t Sc from 2.0 metres, including:
    - 6.0 metres @ 0.14% Co, 0.62% Ni, 0.85% Mn & 57.4/t Sc from 5.0 metres
  - MTRC006D: 70.0 metres @ 0.05% Co, 0.45% Ni, 0.47% Mn & 36.3/t Sc from 3.0 metres, including:
    - 26.0 metres @ 0.11% Co, 0.59% Ni, 1.06% Mn & 28.2g/t Sc from 47 metres
  - MTRC007D: 29.0 metres @ 0.09% Co, 0.62% Ni, 0.73% Mn & 33.2g/t Sc from 0.0 metres, including:
    - 13.0 metres @ 0.15% Co, 0.62% Ni, 1.36% Mn & 34.1g/t Sc from 6.0 metres
- Majority of remaining drill results sit outside current Resource, highlighting potential for resource growth
- Scoping Study underway assessing adoption of HPAL<sup>1</sup> & production of pCAM<sup>2</sup> (expected July 2023)
- Metallurgical test work confirming recoveries ongoing following recent resource increase of over 145%<sup>5</sup>
- Addition of pCAM and HPAL to the Mt Thirsty project could potentially transform project economics.
  - Comparable HPAL projects typically receive Co and Ni recoveries of 90% and 92%, respectively<sup>3</sup>
  - pCAM typically receives a ~50% pricing premium over intermediatory products (MHP / MSP)<sup>4</sup>
- Scoping Study to provide foundation for future studies & potential consolidation to support an IPO

Greenstone Resources Limited (ASX:GSR) (Greenstone or the Company) is pleased to provide an update on exploration activities at the Mt Thirsty Joint Venture (MTJV), with assays having now been received for the remaining five drill holes targeting Co-Ni-Mn-Sc mineralisation.

The Mt Thirsty Co-Ni-Mn-Sc project is located 16 kilometres North-Northwest of Norseman, Western Australia (50% Greenstone Resources, 50% Conico Limited) and is supported by a network of existing infrastructure (road, rail, port & power). The Project hosts the Mt Thirsty cobalt-nickel-manganese deposit with a current JORC Resource of 66.2Mt at 0.06% cobalt, 0.43% nickel, 0.45% Manganese for which a Scoping Study (Study) is currently underway and expected in July (see ASX Announcement: GSR 26/04/2020).

Remaining assays have now been received for the last five reverse circulation (RC) pre-collars completed late last year as part of the Phase I drill campaign. During the course of the Phase I drill campaign at Mt Thirsty, three distinct zones of flat-lying horizontal mineralisation were intersected across the eastern licence area, including an upper zone consisting of a weathered ultramafic peridotite rock hosting nickel-cobalt-manganese-scandium mineralisation. The most recent significant intercepts from the upper Co-Ni-Mn-Sc zone include:

- MTRC005D: 48.0 metres @ 0.08% Co, 0.44% Ni, 0.13% Mn & 47.6g/t Sc from 2.0 metres, including:
  - 6.0 metres @ 0.14% Co, 0.62% Ni, 0.85% Mn & 57.4/t Sc from 5.0 metres
- MTRC006D: 72.0 metres @ 0.05% Co, 0.44% Ni, 0.47% Mn & 38.8g/t Sc from 3.0 metres, including:

Precursor Cathode Active Material (pCAM)

<sup>5</sup> See ASX:GSR 26/04/2023

**ASX:GSR** 

<sup>&</sup>lt;sup>1</sup> High-Pressure Acid Leaching (HPAL)

Based on comparable projects (ASX:NC1 22/12/2022; ASX:CLQ 25/06/2018)

See ASX:GSR 03/04/2023





- 26.0 metres @ 0.11% Co, 0.59% Ni, 1.06% Mn & 28.2g/t Sc from 47 metres
- MTRC007D: 29.0 metres @ 0.09% Co, 0.62% Ni, 0.73% Mn & 33.2g/t Sc from 0.0 metres, including:
  - 13.0 metres @ 0.15% Co, 0.62% Ni, 1.36% Mn & 34.1g/t Sc from 6.0 metres
- MTRC010D: 38.0 metres @ 0.05% Co, 0.43% Ni, 0.34% Mn & 48.8g/t Sc from 3.0 metres, including:
  - 6.0 metres @ 0.09% Co, 0.51% Ni, 0.99% Mn & 50.1g/t Sc from 3.0 metres

The Phase I drill campaign utilised a combination of both RC and diamond drilling methods which allowed holes to be extended to an average depth of ~350 metres below surface, significantly deeper than the historical air-core drilling methods previously deployed at Mt Thirsty. As a result of this historical air-core drilling, large areas beneath and adjacent to the existing resource still remain untested and provides potential for future Co-Ni-Mn resource additions (Figure 1).

These latest results largely sit outside the current resource envelope and with the recent drilling located approximately 100m east of the current resource, this highlights the unrealised growth potential further to the east.

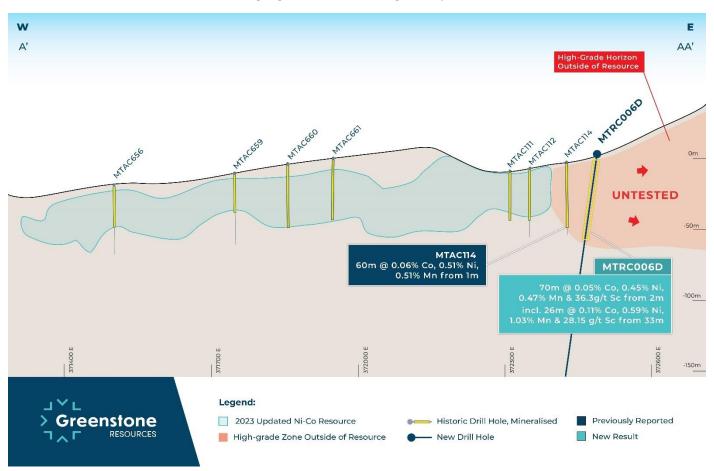


Figure 1: Cross-section showing MTRC006D (372125E +/- 12.5m)

The Phase I drill campaign also employed a comprehensive multi-element assay suite, serving to identify the presence of scandium which had not previously been assayed for, and is not included within the existing resource estimate. Scandium is a rare earth metal that is highly valued for its unique properties, including high strength, light weight, and resistance to corrosion. It has a wide range of applications, including aerospace, defence, hydrogen fuel cells and electronics industries. In 2021 the global scandium market size was valued at US\$460.9 million, however this is projected to reach US\$977.3 million by 2030, growing at a forecasted compound annual growth rate (CAGR) of 8.7%





from 2022 to 2030<sup>5</sup>. The potential addition of scandium to the Co-Ni-Mn-Sc Mt Thirsty Project may provide a valuable by-product revenue stream.

The current price of scandium oxide is A\$1,376,600/t; cobalt is A\$55,500/t; nickel is A\$37,800/t and manganese is  $A$3,200/t^6$ .

Managing Director and CEO, Chris Hansen, commented: "These latest results continue to highlight the prospectivity of the Mt Thirsty project to provide a low-cost, ethical and sustainable source of cobalt and nickel outside of the Democratic Republic of the Congo and Russia. Of importance, is that the majority of these results remain outside of the recent resource update and present an opportunity for further resource growth and mine life extensions.

Importantly the Mt Thirsty project is uniquely positioned to support the continued decarbonisation of our economy, not only containing cobalt and nickel, but also hosting manganese and scandium, allowing the Project to potentially produce a high-value pCAM product containing Co, Ni and Mn sourced from the Mt Thirsty deposit.

We are very much entering a transformational phase for the Mt Thirsty project with metallurgical studies progressing on track that will feed into a Scoping Study currently underway, with reporting expected to be finalised in July. We look forward to keeping shareholders updated on a regular basis as we continue to unlock the true potential of the Mt Thirsty project."

## MINERAL RESOURCE ESTIMATE & SCOPING STUDY UPDATE

A specialist team of independent consultants has been engaged to undertake a Scoping Study at Mt Thirsty, including Simulus Pty Ltd (Simulus) and WSP Australia Pty Limited (WSP).

Simulus is a leading hydrometallurgy and mineral processing services group that specialises in metallurgical testwork, process simulation, engineering studies and the development of hydrometallurgical flowsheets. Simulus bring extensive HPAL experience having been involved in the assessment, development, design, commissioning, or operation of 22 nickel projects over the past 19 years.

WSP is a full-service mining consultancy with a global team of over 4,400 dedicated mining professionals covering geology, resource estimation, mining, processing and environmental. WSP's mining team (formally Golder Associates) have extensive experience with the Mt Thirsty project, having undertaken the previous mineral resource estimate and tailings design, as well as the most recent resource update released in late-April. As part of the Scoping Study, WSP will be undertaking an updated mineral resource estimate (completed), mine design, tailings management plan and associated site infrastructure design.

The Scoping Study is underway and remains on schedule for completion in July. It is expected that the Scoping Study, leveraging off a materially larger resource will provide the foundation for a potential ownership consolidation and IPO of the Mt Thirsty project later this year, followed by a Pre-Feasibility study, which will seek to supply a low-cost, ethical and sustainable source of cobalt and nickel outside of the Democratic Republic of the Congo and Russia.



Straits Research, Scandium Market research

<sup>&</sup>lt;sup>6</sup> Shanghai Metals Market 26/05/2023; AUD:USD 0.65





This announcement is authorised by the Board of Directors.

- END -

Chris Hansen

Managing Director & Chief Executive Officer Greenstone Resources Limited

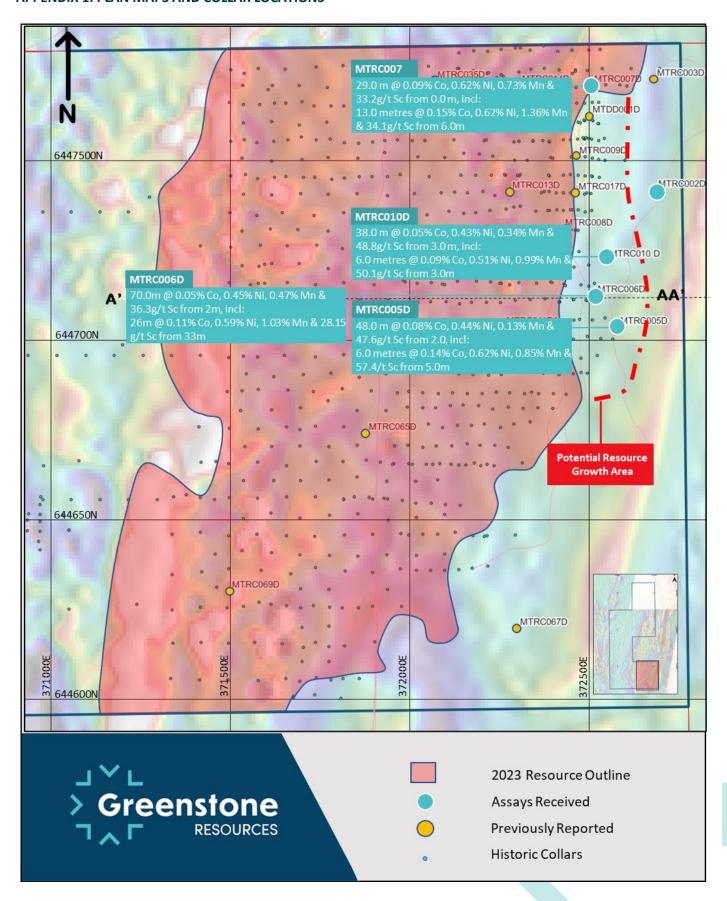
**E:** <u>chris.hansen@greenstoneresources.com.au</u>







## **APPENDIX 1: PLAN MAPS AND COLLAR LOCATIONS**





APPENDIX 2: MT THIRSTY NI-CO-SC-PGE SIGNIFICANT INTERCEPTS & COLLARS

Hole ID	Prospect	Northing	Easting	Elevation	Depth	Dip	Azi	From	То	Width	3E g/t	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu(%)	Ni (%)	Co (%)	Mn (%)	Sc (ppm	Туре	Reported
MTDD001	Middle (PGE)	372578	6447038	398	451	-70	270	182.00	200.00	18.00	0.29	0.01	0.05	0.23	0.054%	0.105%	0.010%	0.137%	24.05	DD	7/10/2022
	Lower (Ni)							242.00	254.50	12.50	0.03	0.00	0.02	0.02	0.013%	0.254%	0.020%	0.060%	48.84	DD	23/01/2023
MTRC002D	Upper (Ni-Co-Mn-Sc)	372516	6447126	388	399	-70	270	56.00	72.00	16.00					0.001%	0.101%	0.012%	0.127%	14.04	RC	29/5/2023
	Middle (PGE)							199.00	203.00	4.00	0.14	0.03	0.02	0.10	0.226%	0.121%	0.014%	0.148%	16.06	DD	23/01/2023
	Lower (Ni)												NSI - No	t Intercepte	d					DD	23/01/2023
MTRC003D	Upper (Ni-Co-Mn-Sc)	372261	6447039	392	321	-70	270	42.00	71.00	29.00					0.002%	0.109%	0.013%	0.126%	12.70	RC	29/5/2023
	Middle (PGE)							198.00	225.00	27.00	0.33	0.02	0.05	0.26	0.052%	0.117%	0.011%	0.126%	19.30	DD	7/10/2022
	Lower (Ni)												NSI - No	t Intercepte	d					DD	23/01/2023
MTRC005D	Upper (Ni-Co-Mn-Sc)	372269	6447229	392	373	-70	270	2.00	50.00	48.00					0.006%	0.438%	0.078%	0.663%	47.62	RC	29/5/2023
							Incl	5.00	11.00	6.00					0.008%	0.620%	0.118%	0.849%	57.42	RC	29/5/2023
	Middle (PGE)							292.00	298.50	6.50	0.12	0.01	0.02	0.09	0.016%	0.089%	0.010%	0.133%	21.55	DD	23/01/2023
	Lower (Ni)												NSI - No	t Intercepte						DD	23/01/2023
MTRC006D	Upper (Ni-Co-Mn-Sc)	372516	6447126	388	378	-70	270	3.00	73.00	70.00					0.004%	0.452%	0.054%	0.465%	36.29	RC	29/5/2023
							Incl	47.00	73.00	26.00					0.003%	0.592%	0.112%	1.026%	28.15	RC	29/5/2023
	Middle (PGE)							223.00	232.00	9.00	0.14	0.01	0.02	0.10	0.019%	0.094%	0.011%	0.188%	20.81	DD	23/01/2023
	Lower (Ni)							365.65	373.55	7.90	0.02	0.00	0.01	0.01	0.072%	0.156%	0.017%	0.082%	32.93	DD	23/01/2023
MTRC007D	Upper (Ni-Co-Mn-Sc)	372506	6447713	367	304	-70	270	0.00	29.00	29.00					0.00	0.623%	0.088%	0.727%	33.23	RC	29/5/2023
							Incl	6.00	19.00	13.00					0.00	0.767%	0.148%	1.356%	34.12	RC	29/5/2023
	M: III (DOE)							36.00	43.00	7.00	0.45	0.04	0.00	0.42	0.00	0.483%	0.040%	0.392%	23.01	RC	29/5/2023
	Middle (PGE)							167.00	176.00	9.00	0.15	0.01	0.03	0.12	0.017%	0.115%	0.012%	0.146%	18.92	DD	7/10/2022
	Lower (Ni)						:1	237.50	271.00	33.50	0.02	0.00	0.01	0.01	0.008%	0.264%	0.015%	0.121%	35.81	DD	23/01/2023
MTDCOORD	Linnar (Ni Ca Ma Ca)	372426	6447313	379	316	-70	<i>incl.</i> 270	238.00 1.00	249.00 34.00	11.00 33.00	0.03	0.00	0.01	0.02	0.011%	0.366% 0.415%	0.020% 0.046%	0.081% 0.396%	49.70	DD	23/01/2023 5/04/2023
MTRC008D	Upper (Ni-Co-Mn-Sc)	3/2420	0447313	3/9	310	-70	incl.	17.00	29.00	12.00	-	-	-	-	0.004%	0.415%	0.046%	0.396%	56.38 <i>43.03</i>	RC RC	5/04/2023
	Middle (PGE)						IIICI.	204.00	29.00	9.00	0.09	0.02	0.02	0.05	0.004%	0.486%	0.081%	0.673%	43.03 18.70	DD	23/01/2023
	Lower (Ni)							296.85	308.00	11.15	0.03	0.02	0.02	0.03	0.004%	0.032%	0.011%	0.020%	54.86	DD	23/01/2023
MTRC009D	Upper (Ni-Co-Mn-Sc)	372464	6447513	376	319	-70	270	0.00	24.00	24.00	-	-	0.02	-	0.006%	0.484%	0.056%	0.318%	40.42	RC	5/04/2023
WI KC009D	Opper (Mi-Co-Mili-Sc)	372404	0447313	370	319	-70	270	17.00	21.00	4.00	_	_	_	-	0.000%	0.484%	0.164%	0.857%	29.65	RC	5/04/2023
	Middle (PGE)							199.00	209.20	10.20	0.23	0.01	0.03	0.19	0.005%	0.088%	0.010%	0.133%	25.21	DD	7/10/2022
	Lower (Ni)							268.20	290.00	21.80	0.03	0.00	0.02	0.02	0.003%	0.281%	0.020%	0.095%	49.76	DD	23/01/2023
	LOWEI (IVI)						incl.	268.20	276.00	7.80	0.04	0.00	0.02	0.02	0.011%	0.344%	0.023%	0.047%	57.21	DD	23/01/2023
MTRC010D	Upper (Ni-Co-Mn-Sc)	372550	6447225	386	360	-70	270	3.00	41.00	38.00					0.005%	0.428%	0.046%	0.339%	48.86	RC	29/5/2023
	5 pp 61 (141 55 1411 50)	3, 2333	3223	555	-		2, 3	3.00	9.00	6.00					0.010%	0.513%	0.091%	0.985%	50.95	RC	29/5/2023
	Middle (PGE)							200.00	215.00	15.00	0.13	0.10	0.02	0.00	0.017%	0.095%	0.011%	0.133%	19.21	DD	5/04/2023

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Hole ID	Prospect	Northing	Easting	Elevation	Depth	Dip	Azi	From	То	Width	3E g/t	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu(%)	Ni (%)	Co (%)	Mn (%)	Sc (ppm	Type	Reported
											. 0/	10/ 1/	. (0)	. (0/ -/				¥ 1	The Control of the Co	1	
	Lower (Ni)							327.04	343.00	15.96	0.04	0.01	0.02	0.02	0.03%	0.33%	0.02%	0.02%	56.01	DD	5/04/2023
MTRC011DA	Upper (Ni-Co-Mn-Sc)	372261	6447039	392	394	-70	270	3.00	81.00	78.00	0.10	0.00	0.04	0.07	0.004%	0.503%	0.113%	1.382%	46.37	RC	23/01/2023
							Incl	45.00	60.00	15.00	0.07	0.00	0.03	0.05	0.003%	0.910%	0.449%	5.423%	40.90	RC	23/01/2023
	Middle (PGE)							182.00	194.00	12.00	0.17	0.02	0.03	0.12	0.010%	0.101%	0.011%	0.132%	20.38	DD	23/01/2023
	Lower (Ni)							361.00	383.00	22.00	0.02	0.00	0.01	0.01	0.001%	0.150%	0.009%	0.134%	19.19	DD	23/01/2023
MTRC012D	Upper (Ni-Co-Mn-Sc)	372269	6447229	392	355	-70	270	42.00	63.00	21.00	-	-	-	-	0.004%	0.588%	0.077%	0.515%	36.12	RC	5/04/2023
								50.00	59.00	9.00	-	-	-	-	0.004%	0.858%	0.058%	0.362%	33.92	RC	5/04/2023
	Middle (PGE)							247.00	250.00	3.00	0.10	0.00	0.01	0.03	0.011%	0.058%	0.009%	0.119%	28.17	DD	23/01/2023
	Lower (Ni)							313.20	333.00	19.80	0.03	0.00	0.02	0.02	0.012%	0.279%	0.019%	0.073%	49.70	DD	23/01/2023
							incl.	316.00	324.00	8.00	0.03	0.00	0.02	0.02	0.011%	0.381%	0.024%	0.067%	49.29	DD	23/01/2023
	Lower (Ni)							349.00	354.54	5.54	0.03	0.00	0.01	0.01	0.005%	0.307%	0.017%	0.096%	49.10	DD	23/01/2023
MTRC013D	Upper (Ni-Co-Mn-Sc)	372277	6447416	392	323	-70	270	10.00	69.00	59.00	-	-	-	-	0.007%	0.374%	0.047%	0.346%	45.33	RC	5/04/2023
							Incl	39.00	50.00	11.00	-	-	-	-	0.009%	0.454%	0.184%	1.145%	49.67	RC	5/04/2023
	Middle (PGE)							187.15	188.00	0.85	0.12	0.00	0.02	0.09	0.00%	0.10%	0.01%	0.13%	15.50	DD	5/04/2023
	Lower (Ni)												Assa	ys Pending						DD	
MTRC014D	Upper (Ni-Co-Mn-Sc)	372305	6447712	372	280	-70	270							ys Pending						RC	
	Middle (PGE)							186.00	200.00	14.00	0.18	0.01	0.04	0.13	0.028%	0.097%	0.011%	0.139%	20.92	DD	7/10/2022
	Lower (Ni)												NSI - No	ot Intercepte						DD	23/01/2023
MTRC017D	Upper (Ni-Co-Mn-Sc)	372462	6447413	376	295	-70	270	2.00	24.00	22.00	-	-	-	-	0.004%	0.391%	0.072%	0.497%	44.63	RC	5/04/2023
								16.00	22.00	6.00	-	-	-	-	0.003%	0.590%	0.156%	0.972%	26.08	RC	5/04/2023
	Middle (PGE)							209.50	220.00	10.50	0.11	0.00	0.03	0.08	0.008%	0.078%	0.010%	0.137%	24.45	DD	7/10/2022
	Lower (Ni)							281.80	294.60	12.80	0.03	0.00	0.02	0.02	0.011%	0.270%	0.021%	0.067%	53.92	DD	23/01/2023
MTRC035D	Upper (Ni-Co-Mn-Sc)	372069	6447724	375	261	-70	270	2.00	46.00	44.00	0.08	0.04	0.04	0.00	0.01%	0.47%	0.03%	0.16%	39.16	RC	5/04/2023
							Incl	33.00	43.00	10.00	0.05	0.03	0.02	0.00	0.00%	0.71%	0.09%	0.38%	23.04		5/04/2023
	Middle (PGE)							175.00	177.00	2.00	0.35	0.02	0.07	0.26	0.045%	0.111%	0.012%	0.138%	19.80	DD	7/10/2022
	Lower (Ni)								=====					ot Intercepte		0.450/	0.050/	2 222/	25.10	DD	23/01/2023
MTRC042D	Upper (Ni-Co-Mn-Sc)	371854	6447700	375	228	-70	270	0.00	50.00	50.00	0.08	0.05	0.03	0.00	0.00%	0.45%	0.05%	0.32%	36.19	RC	5/04/2023
							Incl	28.00	48.00	20.00	0.05	0.03	0.02	0.00	0.00%	0.55%	0.09%	0.57%	28.91	RC	5/04/2023
	Middle (PGE)							179.00	188.00	9.00	0.11	0.01	0.03	0.08	0.014%	0.093%	0.011%	0.140%	19.22	DD	7/10/2022
	Lower (Ni)												NSI - No	ot Intercepte						DD	23/01/2023
MTRC065D	Upper (Ni-Co-Mn-Sc)	371877	6446744	385	429	-70	270	5.00	50.00	45.00	0.18	0.00	0.06	0.12	0.005%	0.331%	0.033%	0.229%	35.94	RC	23/01/2023
							Incl	19.00	27.00	8.00	0.25	0.00	0.06	0.19	0.003%	0.542%	0.084%	0.429%	40.28	RC	23/01/2023
	Middle (PGE)							179.00	188.00	9.00	0.11	0.01	0.03	0.08	0.014%	0.093%	0.011%	0.140%	19.22	DD	23/01/2023
	Lower (Ni)												Assa	ys Pending						DD	
MTRC067D	Upper (Ni-Co-Mn-Sc)	372299	6446199	398	420	-70	270						NSI - No	ot Intercepte	d					RC	5/04/2023
	Middle (PGE)												NSI - No	ot Intercepte	d					DD	5/04/2023

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Hole ID	Prospect	Northing	Easting	Elevation	Depth	Dip	Azi	From	То	Width	3E g/t	Pd (g/t)	Pt (g/t)	Au (g/t)	Cu(%)	Ni (%)	Co (%)	Mn (%)	Sc (ppm	Туре	Reported
	Lower (Ni)												NSI - No	t Intercepte	d					DD	5/04/2023
MTRC069D	Upper (Ni-Co-Mn-Sc)	371497	6446303	365	302	-70	270	4.00	46.00	42.00	0.07	0.00	0.02	0.05	0.00%	0.19%	0.02%	0.12%	21.32	RC	5/04/2023
	Middle (PGE)							69.00	70.00	1.00	0.81	0.04	0.16	0.61	0.025%	0.106%	0.010%	0.123%	20.40	DD	5/04/2023
	Lower (Ni)												NSI - No	t Intercepte	d					DD	5/04/2023

Table 1: Significant intersections with and average 3E (Pd + Pt + Au; g/t) grade  $\geq$  0.1g/t

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#### **APPENDIX 3: RESOURCES & RESERVES**

The Mt Thirsty Joint Venture (MTJV) is located 16 kilometres North-Northwest of Norseman, Western Australia (50% Greenstone Resources, 50% Conico Limited).

The Project contains the Mt Thirsty cobalt-nickel oxide deposit with a JORC Resource of 66.2Mt at 0.06% cobalt, 0.43% nickel and 0.45% Manganese. In addition to the Co-Ni oxide deposit, the Project also hosts nickel sulphide mineralisation potential.

## Mt Thirsty Joint Venture Mineral Resources (50%)

				Grade		Co	ntained Me	etal
	Cut-off Grade	Dry Tonnes	Ni	Co	Mn	Ni	Co	Mn
	(NiEq%)	(Mt)	(%)	(%)	(%)	(kt)	(kt)	(kt)
Mt Thirsty Main (MTTM)								
Indicated	0.25	30.2	0.51	0.10	0.69	154.7	29.3	207.8
Inferred	0.25	31.9	0.35	0.03	0.24	110.4	9.3	76.6
Total	0.25	62.1	0.43	0.06	0.46	265.1	38.5	284.4
Mt Thirsty North (MTTN)								
Indicated	0.25	0.0	0.00	0.00	0.00	0.0	0.0	0.0
Inferred	0.25	4.2	0.43	0.05	0.29	17.9	2.0	11.8
Total	0.25	4.2	0.43	0.05	0.29	17.9	2.0	11.8
Total	0.25	66.2	0.43	0.06	0.45	283.0	40.5	296.2

Refer to ASX Announcement 26/4/2023 for full details of the Mineral Resource Estimate.

#### **Competent Persons for the Mt Thirsty Cobalt Nickel Project**

Project and Discipline	JORC Section	Competent Person	Employer	Professional Membership
Mt Thirsty Geology	Exploration Results	Glenn Poole	Greenstone Resources	MAusIMM
Mt Thirsty Resource Estimation	Mineral Resources	Richard Gaze	WSP Australia Pty Ltd	MAusIMM

The information in this announcement which relates to Exploration Results and geological interpretation at Mt Thirsty is based on information compiled by Mr Glenn Poole an employee of Greenstone Resources Limited who is a Member of the Australasian Institute of Mining and Metallurgy. Mr Poole consents to the inclusion in the announcement of the matters based on their information in the form and context in which it appears.

The Mineral Resource Statement for the Mt Thirsty Mineral Resource Estimate was prepared during 2023 and is reported according to the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the 'JORC Code') 2012 edition.

The information in this announcement which relates to Mineral Resources is based on information provided to and compiled by Richard Gaze, who is a full-time employee of WSP Australia Pty Ltd, and a Member of the Australasian Institute of Mining and Metallurgy (AusIMM). Richard Gaze has sufficient relevant experience regarding the style of mineralisation and type of deposits under consideration and to the activity for which he is undertaking to qualify as a Competent Person as defined in JORC 2012.

The Mineral Resources reported within this announcement utilises all drilling completed to 30 November 2018 using Ordinary Kriging interpolated block models. The Mineral Resource is reported above a 0.25% NiEq cut-off grade within an optimised pit shell to satisfy RPEEE.

The company is not aware of any new information or data that materially affects the information presented and that the material assumptions and technical parameters underpinning the estimates continue to apply and have not materially changed. The company confirms that the form and context in which the Competent Persons' findings are presented have not been materially modified from the original market announcements.





#### **DISCLAIMER**

The interpretations and conclusions reached in this announcement are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken based on interpretations or conclusions contained in this announcement will therefore carry an element of risk. This announcement contains forward-looking statements that involve several risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more of the risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. No obligation is assumed to update forward-looking statements if these beliefs, opinions, and estimates should change or to reflect other future developments.

## **REFERENCES TO PREVIOUS ANNOUNCEMENTS**

In relation to the details of the PFS announced on 20/02/2020, Greenstone confirms that all material assumptions underpinning the production target and forecast financial information from the production target, as reported on 20/02/2020, continue to apply and have not materially changed. A proportion of the production target uses inferred mineral resources. There is a low level of confidence associated with inferred mineral resources and there is no certainty that further exploration will result in the determination of indicated mineral resources or that the production target itself will be realised.

The mineral resource estimates in this announcement were reported by the Company in accordance with ASX Listing Rule 5.8 on 9/9/2019. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimates in the previous announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.

The ore reserve estimate in this announcement was reported by the Company in accordance with ASX Listing Rule 5.9 on 20/20/2020. The Company confirms it is not aware of any new information or data that materially affects the information included in the previous announcement and that all material assumptions and technical parameters underpinning the estimate in the previous announcement continue to apply and have not materially changed. The Company confirms that the form and context in which the Competent Person's findings are presented have not been materially modified from the original market announcement.







# THE FOLLOWING TABLES ARE PROVIDED TO ENSURE COMPLIANCE WITH THE JORC CODE (2012 EDITION) FOR THE REPORTING OF EXPLORATION RESULTS.

## MT THIRSTY PROJECT

# **SECTION 1 – SAMPLING TECHNIQUES AND DATA**

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	<ul> <li>Nature and quality of sampling (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling.</li> <li>Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used.</li> <li>Aspects of the determination of mineralisation that are Material to the Public Report.</li> <li>In cases where 'industry standard' work has been done this would be relatively simple (e.g. 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases, more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (e.g. submarine nodules) may warrant disclosure of detailed information.</li> </ul>	<ul> <li>Sampling was conducted using a Reverse Circulation (RC) and Diamond Core (DD) drilling rigs.</li> <li>For RC drilling, samples were collected at every 1m interval using a cyclone and cone splitter to obtain a ~2-3kg representative sub-sample for each 1m interval. The cyclone and splitter were cleaned regularly to minimize contamination.</li> <li>For DD drilling, samples were collected as half-core (NQ2) at geological intervals defined and mineralisation boundaries and is considered appropriate for this style of mineralisation.</li> <li>Diamond drilling was used to obtain ½ core samples of various lengths (minimum 0.2m), from which 1-2kg of material is collected for assaying.</li> <li>QAQC Standards and Blanks were collected/inserted at a rate of 1 in every 20m (maximum) through pre-determined mineralised zones.</li> <li>Sampling and QAQC procedures are carried out using Greenstone protocols as per industry best practice.</li> </ul>
Drilling techniques	Drill type (e.g. core, reverse circulation, openhole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, facesampling bit or other type, whether core is oriented and if so, by what method, etc).	<ul> <li>Reverse circulation (RC) drilling was carried out using a face sampling hammer with a 127mm (5") drill bit.</li> <li>DD drilling was NQ2 through the main zones of mineralisation. Core was oriented every 6m where possible using an electronic orientation tool.</li> </ul>
Drill sample recovery	<ul> <li>Method of recording and assessing core and chip sample recoveries and results assessed.</li> <li>Measures taken to maximise sample recovery and ensure representative nature of the samples.</li> <li>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.</li> </ul>	<ul> <li>Sample recoveries are visually estimated qualitatively on a metre basis and recorded in the database.</li> <li>Drilling contractors adjust their drilling approach to specific conditions to maximise sample recovery.</li> <li>Estimated moisture content and sample recovery is recorded for each sample.</li> <li>Core recovery was estimated using the drillers recorded depth marks against the length of the core recovered, this is verified and confirmed by Greenstone staff.</li> <li>No sample recovery issues have impacted on potential sample bias.</li> </ul>
Logging	<ul> <li>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.</li> <li>Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography.</li> <li>The total length and percentage of the relevant intersections logged.</li> </ul>	<ul> <li>All drillholes are logged in full.</li> <li>All drilled intervals are logged and recorded.</li> <li>Data was recorded for regolith, lithology, veining, fabric (structure), grain size, colour, sulphide presence, alteration, oxidation state, fractures, and RQD.</li> <li>Logging is both qualitative and quantitative in nature depending on the field being logged.</li> <li>Logging of diamond core was qualitative and diamond core was photographed.</li> <li>Diamond core is stored at the Company's core yard on-site.</li> </ul>





Criteria	JORC Code explanation	Commentary
Sub-sampling techniques and sample	<ul> <li>If core, whether cut or sawn and whether quarter, half or all core taken.</li> <li>If non-core, whether riffled, tube sampled,</li> </ul>	<ul> <li>Greenstone considers the data to be of an appropriate level of detail to support a resource estimation.</li> <li>All RC samples were passed through cyclone and cone splitter, and a 2-3kg split sample is collected for each 1m interval.</li> </ul>
preparation	<ul> <li>rotary split, etc and whether sampled wet or dry.</li> <li>For all sample types, the nature, quality and appropriateness of the sample preparation technique.</li> <li>Quality control procedures adopted for all subsampling stages to maximise representivity of samples.</li> <li>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.</li> <li>Whether sample sizes are appropriate to the grain size of the material being sampled.</li> </ul>	<ul> <li>1m split samples were collected for analysis from selected zones based on field logging</li> <li>Diamond core is cut in half along the orientation line. The right side of the core is collected for analysis.</li> <li>Sample preparation was conducted at ALS Global laboratories using a fully automated sample preparation system. Preparation commences with sorting and drying. Oversized samples are crushed to &lt;3mm and split down to 0.5-3kg using a riffle splitter. Samples are then pulverized and homogenized in LM5 Ring Mills and ground to ensure 85% passes &lt;75µm.</li> <li>The sample size is considered appropriate for this type and style of mineralisation.</li> </ul>
Quality of assay data and laboratory tests	<ul> <li>The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total.</li> <li>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.</li> <li>Nature of quality control procedures adopted (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.</li> </ul>	<ul> <li>Homogenised and pulverised samples are mixed with flux composed of PbO and SiO2 with variable amounts of borax, soda ash and other reagents. The flux and sample are mixed, then heated at high temperature (&gt;1,000°C) to decompose rock lattices and allow precious metals within the sample to be collected into a lead button. The button is placed in a porous cupel and heated again in an oxidising environment to convert lead to lead oxide that is absorbed into the cupel, leaving the precious metals behind as a doré bead or prill. The gold, platinum and palladium content of the prill is then determined through Inductively Coupled Plasma Mass Spectrometry (ICP-MS). The detection level for the Fire Assay/AAS technique is 0.001ppm for Palladium (Pd) and Gold (Au) , 0.0005 for Platinum (Pt).</li> <li>Rhodium (Rh) analysis is carried out in a similar manner to PGM by lead collection fire assay, with the additional step of gold inquarting during the fusion process and modified cupellation. Analysis is carried out using ICP-MS instrumentation.</li> <li>A four-acid digestion method which utilises a combination of nitric, perchloric, and hydrofluoric acid with a 48 element suite including Ag, Al, As, Ba, Be, Bi, Ca, Cd, Ce, Co, Cr, Cs, Cu, Fe, Ga, Ge, Hf, In, K, La, Li, Mg, Mn, Mo, Na, Nb, Ni, P, Pb, Rb, Re, S, Sb, Sc, Se, Sn, Sr, Ta, Te, Th, Ti, Tl, U, V, W, Y, Zn, Zr with ICP-MS finish.</li> <li>Laboratory QA/QC controls during the analysis process include duplicates for reproducibility, blank samples for contamination and standards for bias.</li> <li>The laboratories used have generally demonstrated analytical accuracy at an acceptable level within 95%</li> </ul>
Verification of sampling and assaying	<ul> <li>The verification of significant intersections by either independent or alternative company personnel.</li> <li>The use of twinned holes.</li> <li>Documentation of primary data, data entry</li> </ul>	<ul> <li>confidence limits.</li> <li>All drilling and significant intersections are verified and signed off by the Exploration Manager for Greenstone Resources who is also a Competent Person.</li> <li>No pre-determined twin holes were drilled during this</li> </ul>





Criteria	JORC Code explanation	Commentary
	procedures, data verification, data storage (physical and electronic) protocols.  • Discuss any adjustment to assay data.	<ul> <li>Geological logging was originally captured on formatted excel templates, then sent to the company's consultant database administrator (SampleData) utilising Datashed software for uploading into a database via a validation process. Sampling, collar, and laboratory assay data is captured electronically and also sent to SampleData. The official database is stored and backed up by SampleData, a copy of which is sent to Greenstone for geologists use. Uploaded data is reviewed and verified by the geologist responsible for the data collection.</li> <li>No adjustments or calibrations were made to any assay data reported.</li> </ul>
Location of data points	<ul> <li>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.</li> <li>Specification of the grid system used.</li> <li>Quality and adequacy of topographic control.</li> </ul>	<ul> <li>Drill hole collar locations are pegged out by supervising geologists using handheld GPS, accurate to +/-3m. This has been considered as sufficiently accurate for the purposes of drillhole accuracy.</li> <li>The drilling rig was sighted using a compass. Drill hole angle was set using an inclinometer placed on the drill mast prior to collaring the hole.</li> <li>Down-hole surveying was completed at nominal intervals using a Single-shot reflex tool, providing sufficiently accurate down hole accuracy</li> </ul>
Data spacing and distribution	<ul> <li>Data spacing for reporting of Exploration Results.</li> <li>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.</li> <li>Whether sample compositing has been applied.</li> </ul>	<ul> <li>Drillholes were located on 100m (N/S) or 200m (E/W) spaced traverses along strike from previous drillholes.</li> <li>No sample compositing has been applied to mineralised intervals.</li> </ul>
Orientation of data in relation to geological structure	<ul> <li>Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type.</li> <li>If the relationship between the drilling orientation and the orientation of key mineralised structures is considered to have introduced a sampling bias, this should be assessed and reported if material.</li> </ul>	<ul> <li>Drilling was designed perpendicular to the strike of the main mineralised structures targeted for this program. All reported intervals are however reported as downhole intervals only.</li> <li>No drilling orientation and/or sampling bias have been recognized in the data at this time.</li> </ul>
Sample security	The measures taken to ensure sample security.	The chain of custody of digital data is managed by the Company. Physical material was stored on site and, when necessary, delivered to the assay laboratory. Thereafter laboratory sample chain of custody has been maintained by ALS Global's Kalgoorlie Laboratory for transport to analysis laboratory in Perth
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	No audits or reviews have been conducted on sampling techniques and data at this stage.





# **SECTION 2 – REPORTING OF EXPLORATION RESULTS**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and land tenure status	<ul> <li>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.</li> <li>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.</li> </ul>	<ul> <li>The exploration results relate to the Mt Thirsty Project, located approximately 16km north west of Norseman, Western Australia. The tenements are owned 50:50 (Mt Thirsty Joint Venture, MTJV) by Conico Ltd (CNJ) (through its subsidiary Meteore Metals Pty Ltd) and Greenstone Resources Ltd (GSR). The project includes Retention Licence R63/4, Exploration Licences E63/1267, and E63/1790 and Prospecting Licence P63/2045. Mining Lease applications have been lodged over R63/4 and E63/1267 and a General-Purpose Lease application over E63/1790 and P63/2045. The mineral resource referred to in this announcement is located on R63/4.</li> <li>A 1.75% NSR royalty is payable to a third party on any production from R63/4. The tenements lie within the Ngadju native title claim (WC99/002), and agreements between the claimants and the tenement holders are designed to protect Aboriginal heritage sites and facilitate access. There are no historical or wilderness sites or national parks or known environmental settings that affect the Mt Thirsty Project although the project area is located within the Great Western Woodlands.</li> <li>The tenements are in good standing.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	• The Mt Thirsty area was explored for nickel sulphide mineralisation in the late sixties and early seventies by Anaconda, Union Miniere, CRA, WMC/CNGC and others. Although no significant sulphide discoveries were made during that time, limonitic nickel/cobalt mineralisation was encountered but not followed up. In the 1990's Resolute-Samantha discovered high grade cobalt mineralisation in the oxidised profile above an orthocumulate peridotite. In the late 2000's Norseman Mining began exploring the surrounding tenure for the PGE enrichment Potential with in the layered mafic sequence. Subsequently announced the discovery of significant PGE enrichment less than 200m north of the R63/4 tenement boundary in 2022. The target relating to the that discovery is the subject of this announcement.
Geology	Deposit type, geological setting and style of mineralisation.	<ul> <li>The Mt Thirsty project is located over sedimentary, mafic and ultramafic (peridotite) sequence located at the southern end of the Archaean Norseman - Wiluna greenstone belt.</li> <li>GSWA has this area mapped as part of the Mt Kirk sequence, with the target nickel-copper-PGE mineralisation related to layered intrusions and komatiite nickel sulphide mineralisation related to layered intrusions and komatiite nickel sulphide mineralisation</li> </ul>
Drill hole Information	<ul> <li>A summary of all information material to the understanding of the exploration results including a tabulation of the following information for all Material drill holes:         <ul> <li>easting and northing of the drill hole collar</li> <li>elevation or RL (Reduced Level – elevation</li> </ul> </li> </ul>	<ul> <li>Drill hole information for the drilling discussed in this report is listed in Table 1 and Table 2 in the context of this report.</li> <li>All material data has been periodically released to the ASX</li> </ul> ASX:GSR



Criteria	JORC Code explanation	Commentary
Data aggregation methods	above sea level in metres) of the drill hole collar  o dip and azimuth of the hole o down hole length and interception depth o 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.  In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g. cutting of high	<ul> <li>Reported intersections have been length weighted to provide the intersection width.</li> <li>Significant Intersections (Table 1) have been reported</li> </ul>
	grades) and cut-off grades are usually Material and should be stated.  • Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.  • The assumptions used for any reporting of metal equivalent values should be clearly stated.	<ul> <li>Significant intersections (Table 1) have been reported where the overall intersection of PGE 3E (Pt, Pd, Rh) + Au is greater than 0.5g/t combined, rounded to 2 decimal places.</li> <li>For significant intersections, a maximum of 1m of internal waste have been included in the calculation of intersection widths.</li> <li>No assays have been top-cut for the purpose of this report. A lower cut-off of 0.5g/t 3E has been used to identify significant results.</li> <li>In the reporting of Cu, Co and Ni values, these have been converted into percentage values, rounded to 2 decimal places</li> <li>All significant intersections have been reported.</li> <li>No metal equivalent values have been used for the reporting of these exploration results.</li> </ul>
Relationship between mineralisation widths and intercept lengths	<ul> <li>These relationships are particularly important in the reporting of Exploration Results.</li> <li>If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported.</li> <li>If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (e.g. 'down hole length, true width not known').</li> </ul>	<ul> <li>True widths, if/where reported, have been estimated manually on a hole by hole basis for intersections within known mineralised zones and based on the current knowledge of the mineralised structure.</li> <li>Both downhole width and estimated true width have been clearly specified in this report when used.</li> <li>Due to the limited and isolated orientation data, accurate reporting of strike and/or orientation is not possible at the time of reporting.</li> </ul>
Diagrams	<ul> <li>Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported. These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views.</li> </ul>	Appropriate plans and sections have been included in the body of this report.
Balanced reporting	<ul> <li>Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.</li> </ul>	<ul> <li>All results material and relevant to the subject of this announcement has been presented.</li> </ul>
Other substantive exploration data	<ul> <li>Other exploration data, if meaningful and material, should be reported including (but not limited to): geological observations; geophysical survey results; geochemical survey results; bulk samples – size and method of treatment; metallurgical test results; bulk density, groundwater, geotechnical and rock characteristics; potential deleterious or contaminating substances.</li> </ul>	<ul> <li>A detailed 40m line spaced aeromagnetic data has been used for interpretation of underlying geology. Data was collected by UTS Geophysics for Mt Thirsty Joint Venture in 2008. Line direction 090 with a platform height of 30m for a total of 3211 line-km.</li> </ul>
Further work	<ul> <li>The nature and scale of planned further work (e.g. tests for lateral extensions or depth extensions or large-scale step-out drilling).</li> </ul>	<ul> <li>Further work has been discussed in the context of phased drilling campaigns, based on the outcome of active drilling campaigns.</li> </ul>





Criteria	JORC Code explanation	Commentary
	<ul> <li>Diagrams clearly highlighting the areas of</li> </ul>	
	possible extensions, including the main	
	geological interpretations and future drilling	
	areas, provided this information is not	
	commercially sensitive.	

