

# **Broad zones of Heavy Mineral Sands discovered at Capel Project**

#### **HIGHLIGHTS**

- Infill and extension drilling testing historical wide-spaced drilling conducted by Iluka has intercepted broad and shallow zones of heavy mineral (HM) mineralisation over an interpreted trend of up to three (3) kilometres
- First batch of heavy mineral assays (26 holes) from Capel Mineral Sands Project received, Highlights Include<sup>1</sup>:
  - o 3.4% HM over 7m from 16m downhole including 2m at 7.9% HM (CAP023)
  - o 3.0% HM over 5m from 19m downhole (CAP011)
  - 2.9% HM over 6m from 3m downhole (CAP002)
  - o 13.1% HM over 1m from 19m downhole (CAP002)
- Mineralisation intercepted from surface in all holes assayed to date (Figure 1)
- Drilling program conducted with the goal of defining an ilmenite (titanium ore) dominated HM Mineral Resource
- The southwest of Western Australia is a well-known HM region with several large deposits currently being mined by global companies including Tronox (NYSE: TROX), Iluka (ASX: ILU) and Doral (Iwatani Corp TYO:8088)

Pinnacle Minerals Ltd (**PIM**:ASX) ("**Pinnacle**", the "**Company**") is pleased to announce that the extension and infill drilling testing historical, wide-spaced drilling conducted by Iluka has intercepted shallow and broad zones of HM mineralisation over an interpreted strike length of up to three (3) kilometres. The first batch of assays have been returned to the Company, with all holes intersecting HM mineralisation from surface. Notable intersections include 2.8% HM over 9m from 15m downhole (CAP023) with high grade intercepts of 13.1% HM over 1m (CAP002).

These assays on the western side of the project show that the drilling program successfully intersected the younger of two mineralised trends previously intersected by Iluka, validating the modelling conducted by the Company. The central and more prospective area of the project is yet to be assayed. Furthermore, assays of the older mineralised trend deflected by the basalt headland (intersected in CAP067) are yet to be returned. The full suite of assay results is expected with-in the coming weeks (*Figure 2*) and will be released to the market in full.

In addition to assaying the samples, Diamantina mineralogists will conduct sachet scanning of the HM sink material to analyse the valuable heavy mineral fraction (VHM%) and the mineral assemblage to guide further studies on the project.

### Pinnacle Minerals Managing Director, Nic Matich, commented:

"The initial assay results from this extensional and infill drilling campaign have born early fruit, with moderate grade strandline mineralisation intercepted over an interpreted trend of up to three kilometres. The grade and thickness of these initial assay results are a positive sign that the Capel Mineral Sands Project has the potential for a shallow Mineral Resource to be defined over a broad area."

44,867,271 Options

**Australian Registered Office** 

<sup>&</sup>lt;sup>1</sup> Intervals reported at 1.0% THM cutoff



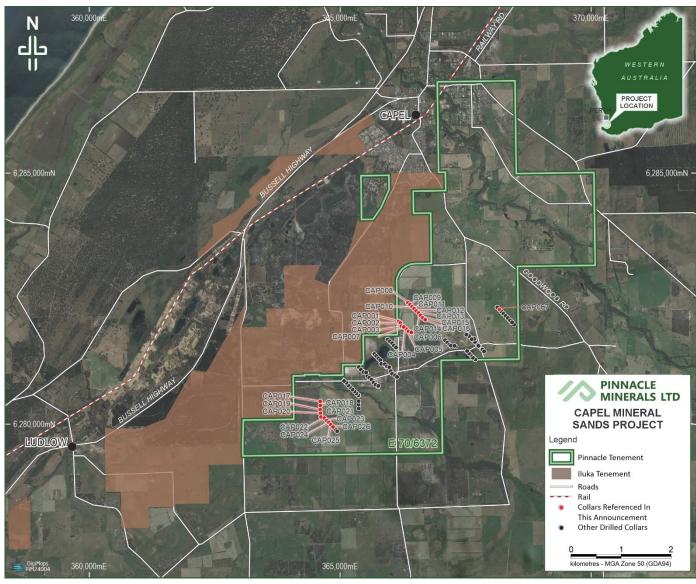


Figure 1: Capel Mineral Sands Project - Drill collars referenced in this announcement

### **Exploration Timeline 2024 (subject to change and pending exploration success):**

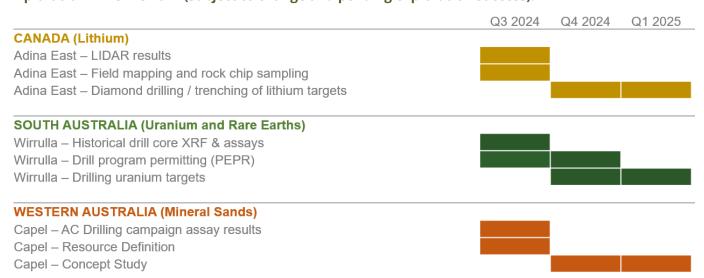






Figure 2: Capel samples undergoing float/sink analysis with T.B.E at Diamantina

This announcement has been authorised for release by the Board of Pinnacle Minerals Ltd.

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#### **About Pinnacle Minerals**

Pinnacle Minerals Ltd (ASX:PIM) is an ASX listed technology minerals company focused on delivering shareholder value via the systematic exploration and development of its portfolio of battery and technology metals projects in Canada, Western Australia and South Australia. Pinnacle aims to deliver exploration success via systematic and geologically rigorous techniques. The Company's focus is the "Adina East Project" in James Bay, Quebec which is proximal to the world class Adina Lithium Project (Winsome Resources: ASX:WR1) and adjacent to the Trieste Lithium Project (Loyal Lithium: ASX:LLI) and the Tilly Lithium Project (ASX:WR1). The Company's Australian exploration assets are prospective for Uranium, Rare Earth Elements and Heavy Mineral Sands.



#### **Forward Looking Statements**

This announcement contains 'forward-looking information' that is based on the Company's expectations, estimates and projections as of the date on which the statements were made. This forward-looking information includes, among other things, statements with respect to the Company's business strategy, plans, development, objectives, performance, outlook, growth, cash flow, projections, targets and expectations, mineral reserves and resources, results of exploration and related expenses. Generally, this forward-looking information can be identified by the use of forward-looking terminology such as 'outlook', 'anticipate', 'project', 'target', 'potential', 'likely', 'believe', 'estimate', 'expect', 'intend', 'may', 'would', 'could', 'should', 'scheduled', 'will', 'plan', 'forecast', 'evolve' and similar expressions. Persons reading this announcement are cautioned that such statements are only predictions, and that the Company's actual future results or performance may be materially different. Forward looking information is subject to known and unknown risks, uncertainties and other factors that may cause the Company's actual results, level of activity, performance, or achievements to be materially different from those expressed or implied by such forward-looking information.

#### **Competent person statement**

The information in this announcement that relates to Exploration Targets, Exploration Results, Mineral Resources or Ore Reserves is based on information compiled by Richard Stockwell, a Competent Person who is a Fellow of The Australian Institute of Geoscientists (AIG). Richard Stockwell is a director of Placer Consulting and has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and to the activity being undertaken to qualify as a Competent Person as defined in the 2012 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves'. Richard Stockwell consents to the inclusion in the presentation of the matters based on his information in the form and context in which it appears.

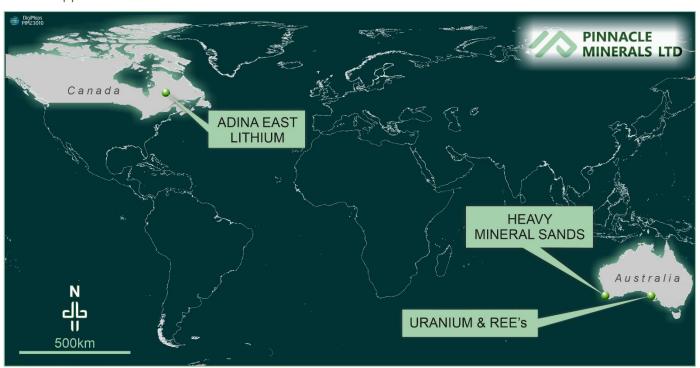


Figure 3: Pinnacle Minerals Projects' Location Map



**Appendix 1: Collar Summary** 

	Easting	Northing	RL	ЕОН		
Hole ID	(GDA94 Zone 50)	(GDA94 Zone 50)	(m)	(m)	Dip	AZI
CAP001	366163	6282046	-	21	-90	360
CAP002	366197	6282015	=	21	-90	360
CAP003	366219	6281952	-	21	-90	360
CAP004	366315	6281896	=	24	-90	360
CAP005	366360	6281845	-	21	-90	360
CAP006	366419	6281827	-	27	-90	360
CAP007	366266	6281936	=	24	-90	360
CAP008	366349	6282419	-	21	-90	360
CAP009	366392	6282380	-	24	-90	360
CAP010	366432	6282337	-	21	-90	360
CAP011	366474	6282299	-	27	-90	360
CAP012	366515	6282253	=	21	-90	360
CAP013	366560	6282213	-	22	-90	360
CAP014	366600	6282167	=	24	-90	360
CAP015	366641	6282116	=	27	-90	360
CAP016	366693	6282078	=	15	-90	360
CAP017	364602	6280454	=	22	-90	360
CAP018	364603	6280371	=	21	-90	360
CAP019	364601	6280290	=	21	-90	360
CAP020	364607	6280214	=	21	-90	360
CAP021	364618	6280143	-	21	-90	360
CAP022	364685	6280120	=	27	-90	360
CAP023	364730	6280070	-	30	-90	360
CAP024	364775	6280031	-	21	-90	360
CAP025	364813	6279991	=	21	-90	360
CAP026	364858	6279944	=	21	-90	360

Appendix 2: Intervals > 2m in length and over 1.5% THM mineralisation (unbroken)

Hole ID	From (m)	To (m)	Length	THM	Slimes	OS
CAP002	3	6	3	4.3%	35.6%	12.5%
CAP003	2	5	3	3.1%	23.1%	20.7%
CAP006	19	26	7	2.2%	15.4%	34.3%
CAP011	20	24	4	3.5%	6.4%	9.2%
CAP017	1	4	3	1.9%	38.0%	17.0%
CAP020	0	5	5	2.3%	30.5%	8.0%
CAP020	12	15	3	3.4%	4.4%	3.5%
CAP021	17	20	3	3.3%	2.0%	9.0%
CAP022	0	3	3	1.9%	23.0%	15.3%
CAP022	17	20	3	2.1%	15.7%	7.3%
CAP023	19	23	4	5.0%	26.1%	10.6%
CAP025	0	3	3	1.8%	18.8%	13.0%

Slimes < 53µm, Oversize (OS) > 1mm



**Appendix 3: Assay Summary (all holes received)** 

Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	os
CAP001	CMS00001	0	1	0.1%	1.7%	0.3%
CAP001	CMS00002	1	2	0.4%	1.7%	0.2%
CAP001	CMS00003	2	3	0.7%	8.4%	5.1%
CAP001	CMS00004	3	4	0.7%	29.1%	0.1%
CAP001	CMS00005	4	5	0.4%	41.2%	0.0%
CAP001	CMS00006	5	6	1.7%	65.1%	0.1%
CAP001	CMS00007	6	7	1.8%	17.8%	0.6%
CAP001	CMS00007	7	8	0.7%	49.7%	0.2%
CAP001	CMS00009	8	9	0.6%	50.5%	0.1%
CAP001	CMS00010	9	10	0.6%	49.1%	0.2%
CAP001	CMS00011	10	11	0.4%	32.1%	0.1%
CAP001	CMS00012	11	12	0.4%	29.3%	0.0%
CAP001	CMS00012	12	13	0.7%	19.3%	0.1%
CAP001	CMS00014	13	14	0.7%	8.3%	0.0%
CAP001	CMS00015	14	15	1.1%	10.1%	0.2%
CAP001	CMS00016	15	16	0.6%	7.5%	8.0%
CAP001	CMS00017	16	17	1.2%	9.8%	0.6%
CAP001	CMS00018	17	18	1.3%	8.8%	1.3%
CAP001	CMS00019	18	19	1.3%	7.1%	1.4%
CAP001	CMS00013	19	20	1.3%	4.0%	8.0%
CAP001	CMS00022	20	21	0.7%	10.4%	30.9%
CAP002	CMS00023	0	1	0.8%	14.0%	11.3%
CAP002	CMS00024	1	2	1.1%	38.1%	4.1%
CAP002	CMS00025	2	3	0.9%	37.6%	1.3%
CAP002	CMS00026	3	4	5.3%	31.7%	26.4%
CAP002	CMS00027	4	5	5.3%	28.2%	8.1%
CAP002	CMS00028	5	6	2.1%	46.9%	2.9%
CAP002	CMS00029	6	7	1.3%	49.0%	1.0%
CAP002	CMS00029	7	8	2.2%	45.6%	1.7%
CAP002	CMS00031	8	9	1.2%	48.7%	0.9%
CAP002	CMS00032	9	10	0.4%	29.9%	0.1%
CAP002	CMS00033	10	11	0.6%	19.8%	0.0%
CAP002	CMS00034	11	12	0.5%	15.3%	0.0%
CAP002	CMS00035	12	13	0.9%	8.6%	0.1%
CAP002	CMS00036	13	14	0.6%	8.3%	2.6%
CAP002	CMS00037	14	15	1.2%	7.9%	7.9%
CAP002	CMS00038	15	16	1.2%	7.1%	2.0%
CAP002	CMS00039	16	17	1.3%	5.4%	0.9%
CAP002	CMS00041	17	18	1.7%	5.1%	4.0%
CAP002	CMS00042	18	19	0.8%	2.8%	4.9%
CAP002	CMS00043	19	20	13.1%	31.8%	9.7%
CAP002	CMS00044	20	21	1.2%	24.0%	5.3%
CAP003	CMS00045	0	1	1.1%	18.3%	0.9%
CAP003	CMS00046	1	2	1.1%	13.4%	25.6%
CAP003	CMS00047	2	3	1.6%	24.8%	3.3%
CAP003	CMS00048	3	4	3.4%	39.1%	16.4%
CAP003	CMS00049	4	5	4.4%	5.5%	1.0%
CAP003	CMS00054	9	10	0.2%	19.3%	2.4%
CAP003	CMS00055	10	11	0.2%	14.8%	0.0%
CAP003	CMS00056	11	12	0.3%	17.8%	0.1%
CAP003	CMS00057	12	13	0.3%	11.1%	0.1%
CAP003	CMS00058	13	14	0.2%	11.3%	0.0%
CAP003	CMS00059	14	15	0.6%	10.8%	2.8%
CAP003	CMS00061	15	16	0.4%	6.2%	1.9%
CAP003	CMS00062	16	17	1.6%	5.8%	1.3%
CAP003	CMS00063	17	18	1.2%	3.9%	13.5%
CAP003	CMS00064	18	19	0.9%	2.5%	25.5%
CAP003	CMS00065	19	20	3.3%	32.4%	7.2%
CAP003	CMS00066	20	21	0.5%	19.8%	8.6%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	OS
Hole ID	Sample ID	From (m)	10 (m)	I HIVI	Silines	
CAP004	CMS00067	0	1	0.9%	5.1%	0.3%
CAP004	CMS00068	1	2	1.2%	17.7%	2.4%
CAP004	CMS00069	2	3	0.8%	33.0%	1.8%
CAP004	CMS00070	3	4	1.3%	34.9%	1.6%
CAP004	CMS00071	4	5	1.3%	54.5%	0.6%
CAP004	CMS00077	10	11	0.5%	37.1%	0.2%
CAP004	CMS00077	11	12	0.6%	21.1%	0.2%
CAP004	CMS00079	12	13	0.4%	32.0%	0.3%
CAP004	CMS00073	13	14	0.2%	6.2%	1.3%
CAP004	CMS00081	14	15	0.2%	10.1%	5.1%
CAP004	CMS00083	15	16	3.1%	6.3%	5.8%
CAP004	CMS00083	16	17	2.3%	6.5%	7.1%
CAP004	CMS00084	17	18	0.9%	4.5%	12.3%
CAP004	CMS00085	18	19	1.7%	8.5%	22.0%
CAP004 CAP004	CMS00087	19	20	1.3%	36.0%	3.7%
CAP004	CMS00087	20	21	0.5%	53.0%	3.8%
CAP004	CMS00089	21	22	0.5%	87.5%	0.8%
CAP004	CMS00089	22	23	0.6%	25.8%	0.6%
CAP004	CMS00090 CMS00091	23	24	0.7%		1.5%
		0			21.1% 5.5%	
CAPOOS	CMS00092	1	1	1.0%		0.2%
CAPOOS	CMS00093	•	2	1.5%	17.1%	13.6%
CAPO05	CMS00094	2	3	1.0%	49.0%	0.7%
CAP005	CMS00095	3	4	5.4%	20.1%	16.9%
CAP005	CMS00096	4	5	2.8%	21.7%	0.6%
CAP005	CMS00105	12	13	0.2%	7.5%	0.9%
CAP005	CMS00106	13	14	0.2%	6.4%	18.0%
CAP005	CMS00107	14	15	0.4%	4.6%	15.7%
CAP005	CMS00108	15	16	0.3%	3.4%	30.0%
CAP005	CMS00109	16	17	0.7%	2.3%	2.9%
CAP005	CMS00110	17	18	0.5%	3.7%	35.3%
CAP005	CMS00111	18	19	1.5%	3.6%	32.5%
CAP005	CMS00112	19	20	1.5%	25.2%	5.1%
CAP005	CMS00113	20	21	1.4%	33.9%	4.7%
CAP006	CMS00114	0	1	1.3%	11.0%	0.4%
CAP006	CMS00115	1	2	1.3%	14.2%	7.0%
CAP006	CMS00116	2	3	1.1%	39.3%	9.7%
CAP006	CMS00125	10	11	0.5%	29.9%	0.3%
CAP006	CMS00126	11	12	0.7%	28.9%	0.1%
CAP006	CMS00127	12	13	0.3%	18.4%	0.3%
CAP006	CMS00128	13	14	0.3%	7.1%	0.7%
CAP006	CMS00129	14	15	0.3%	8.1%	21.7%
CAP006	CMS00130	15	16	0.3%	4.2%	17.2%
CAP006	CMS00131	16	17	0.1%	90.2%	0.3%
CAP006	CMS00132	17	18	0.2%	1.5%	28.0%
CAP006	CMS00133	18	19	0.7%	1.4%	39.3%
CAP006	CMS00134	19	20	1.9%	13.9%	8.5%
CAP006	CMS00135	20	21	2.3%	12.9%	5.8%
CAP006	CMS00136	21	22	2.5%	13.7%	8.4%
CAP006	CMS00137	22	23	3.3%	10.3%	1.3%
CAP006	CMS00138	23	24	1.7%	34.1%	0.9%
CAP006	CMS00139	24	25	1.8%	10.4%	7.6%
CAP006	CMS00141	25	26	1.9%	12.8%	1.7%
CAP006	CMS00142	26	27	1.2%	10.5%	11.7%
CAP007	CMS00143	0	1	1.0%	8.2%	0.2%
CAP007	CMS00144	1	2	1.1%	12.4%	12.3%
CAP007	CMS00152	9	10	0.3%	22.6%	0.1%
CAP007	CMS00155	12	13	0.4%	12.0%	0.1%
CAP007	CMS00156	13	14	0.2%	9.0%	1.8%
CAP007	CMS00157	14	15	0.5%	13.0%	2.8%
CAP007	CMS00158	15	16	1.5%	5.7%	0.7%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	OS
CAP007	CMS00159	16	17	3.3%	4.0%	0.8%
CAP007	CMS00161	17	18	0.7%	2.0%	22.4%
CAP007	CMS00161	18	19	1.6%	2.4%	31.5%
CAP007	CMS00162	19	20	1.8%	5.5%	25.9%
CAP007	CMS00163	20	21	0.3%	4.9%	52.2%
CAP007	CMS00165	21	22	0.8%	10.4%	30.1%
CAP007	CMS00166	22	23	1.1%	8.7%	41.4%
CAP007	CMS00167	23	24	2.7%	19.0%	0.8%
CAP008	CMS00167	0	1	1.5%	9.8%	0.3%
CAP008	CMS00169	1	2	1.4%	18.0%	4.1%
CAP008	CMS00170	2	3	1.3%	29.5%	4.7%
CAP008	CMS00170	3	4	0.4%	68.3%	0.1%
CAP008	CMS00171	4	5	0.6%	76.2%	0.1%
CAP008	CMS00172	5	6	0.6%	33.6%	4.1%
CAP008	CMS00179	11	12	0.7%	45.1%	0.4%
CAP008	CMS00179	12	13	0.4%	6.7%	0.1%
CAP008	CMS00181	13	14	0.5%	3.6%	0.7%
CAP008	CMS00182	14	15	0.3%	3.5%	3.9%
CAP008	CMS00183 CMS00184	15	16	0.4%	5.3%	4.9%
CAP008	CMS00184 CMS00185	16	17	0.4%	4.8%	4.9% 1.3%
		17				
CAP008 CAP008	CMS00186 CMS00187	17	18 19	0.6%	2.0%	0.9% 7.8%
CAP008		19	20	0.8%	31.3%	13.3%
CAP008	CMS00188 CMS00189	20	21	0.8%	29.0%	11.6%
				+		
CAP009	CMS00190	0	2	1.3%	5.0%	0.4%
CAP009	CMS00191	1		1.3%	9.6%	4.2%
CAP009	CMS00192	2	3	1.3%	27.5%	2.3%
CAP009	CMS00193	3	4	1.3%	34.7%	1.2%
CAP009	CMS00194	4	5	3.2%	19.0%	0.3%
CAP009	CMS00195	5	6	1.5%	25.5%	1.1%
CAP009	CMS00202	11	12	0.6%	20.8%	0.2%
CAP009	CMS00203	12	13	0.3%	7.6%	0.2%
CAP009	CMS00204	13	14	0.3%	7.4%	1.2%
CAP009	CMS00205	14	15	0.5%	4.3%	3.5%
CAP009	CMS00206	15	16	0.2%	4.0%	20.4%
CAP009	CMS00207	16	17	0.9%	6.0%	1.7%
CAP009	CMS00208	17	18	0.5%	3.1%	0.4%
CAP009	CMS00209	18	19	0.5%	1.7%	3.4%
CAP009	CMS00210	19	20	1.1%	3.8%	13.4%
CAP009	CMS00211	20	21	0.9%	6.8%	12.6%
CAP009	CMS00212	21	22	0.9%	23.2%	12.6%
CAP009	CMS00213	22	23	0.7%	68.3%	0.1%
CAP009	CMS00214	23	24	0.2%	42.2%	4.4%
CAP010	CMS00215	0	1	1.5%	10.4%	0.2%
CAP010	CMS00216	1	2	1.5%	11.5%	1.6%
CAP010	CMS00217	2	3	1.0%	41.1%	1.7%
CAP010	CMS00218	3	4	0.9%	26.8%	0.1%
CAP010	CMS00219	4	5	1.8%	14.5%	0.3%
CAP010	CMS00221	5	6	0.8%	27.6%	2.0%
CAP010	CMS00227	11	12	0.4%	31.6%	0.3%
CAP010	CMS00228	12	13	0.3%	8.1%	0.3%
CAP010	CMS00229	13	14	0.5%	7.6%	0.2%
CAP010	CMS00230	14	15	0.4%	5.6%	4.4%
CAP010	CMS00231	15	16	0.8%	8.2%	1.6%
CAP010	CMS00232	16	17	0.9%	4.3%	0.2%
CAP010	CMS00233	17	18	0.5%	2.5%	0.7%
CAP010	CMS00234	18	19	0.6%	2.4%	7.3%
CAP010	CMS00235	19	20	1.7%	13.5%	6.9%
CAP010	CMS00236	20	21	0.7%	59.9%	1.1%
CAP011	CMS00237	0	1	1.5%	6.2%	0.3%
CAP011	CMS00238	1	2	1.0%	7.5%	21.2%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	OS
CAP011		, ,	• •	1.3%	31.2%	
	CMS00239	2	3			5.5%
CAP011 CAP011	CMS00241	<u> </u>	<u>4</u> 5	0.7%	20.6%	0.1%
	CMS00242			1.4%	37.6%	0.1%
CAP011	CMS00243	5	6	1.3%	26.9%	0.9%
CAP011	CMS00250	12	13	0.2%	14.7%	0.1%
CAP011	CMS00251	13	14	0.3%	10.8%	0.4%
CAP011	CMS00252	14	15	0.5%	7.5%	2.7%
CAP011	CMS00253	15	16	0.6%	6.9%	8.7%
CAP011	CMS00254	16	17	3.6%	7.0%	0.3%
CAP011	CMS00255	17	18	2.6%	4.8%	0.4%
CAP011	CMS00256	18	19	0.4%	2.0%	4.7%
CAP011	CMS00257	19	20	1.2%	9.7%	11.4%
CAP011	CMS00258	20	21	2.5%	10.1%	5.6%
CAP011	CMS00259	21	22	3.8%	9.8%	9.6%
CAP011	CMS00261	22	23	6.2%	3.3%	10.0%
CAP011	CMS00262	23	24	1.5%	2.4%	11.4%
CAP011	CMS00263	24	25	0.6%	9.1%	5.6%
CAP011	CMS00264	25	26	0.8%	11.4%	9.6%
CAP011	CMS00265	26	27	0.7%	16.6%	4.9%
CAP012	CMS00294	0	1	1.3%	8.1%	0.5%
CAP012	CMS00295	1	2	1.3%	14.9%	4.6%
CAP012	CMS00296	2	3	1.0%	33.9%	0.7%
CAP012	CMS00297	3	4	1.7%	24.9%	0.4%
CAP012 CAP012		4	5	3.4%	11.5%	1.0%
	CMS00298					
CAP012	CMS00307	12	13	0.2%	26.8%	0.1%
CAP012	CMS00308	13	14	0.5%	9.9%	0.1%
CAP012	CMS00309	14	15	0.3%	6.7%	4.6%
CAP012	CMS00310	15	16	0.4%	4.7%	11.2%
CAP012	CMS00311	16	17	3.1%	6.0%	1.7%
CAP012	CMS00312	17	18	1.2%	4.7%	7.2%
CAP012	CMS00313	18	19	0.7%	2.5%	21.1%
CAP012	CMS00314	19	20	2.1%	31.1%	4.0%
CAP012	CMS00315	20	21	0.5%	73.6%	0.2%
CAP013	CMS00316	0	1	1.2%	4.2%	0.2%
CAP013	CMS00317	1	2	0.9%	7.2%	11.0%
CAP013	CMS00318	2	3	1.0%	32.7%	0.4%
CAP013	CMS00319	3	4	0.6%	25.8%	0.1%
CAP013	CMS00321	4	5	1.9%	28.7%	0.4%
CAP013	CMS00322	5	6	1.6%	22.4%	0.4%
CAP013	CMS00331	14	15	0.2%	8.7%	2.5%
CAP013	CMS00332	15	16	0.2%	9.2%	7.4%
CAP013	CMS00333	16	17	1.1%	9.9%	2.5%
CAP013	CMS00334	17	18	3.1%	10.8%	2.3%
CAP013	CMS00335	18	19	1.0%	6.6%	10.5%
CAP013	CMS00335	19	20	1.0%	12.5%	15.2%
CAP013	CMS00337	20	21	1.2%	12.5%	10.8%
CAP013	CMS00337	21	22	0.9%	30.6%	5.0%
CAP013	CMS00338	0	1	0.7%	2.4%	0.2%
CAP014	CMS00339	1	2	0.5%	9.6%	3.4%
			+			
CAP014	CMS00342	2	3 4	1.4% 0.5%	32.8%	6.6%
CAP014	CMS00343				43.8%	0.6%
CAP014	CMS00344	4	5	0.6%	32.4%	0.7%
CAP014	CMS00352	12	13	0.3%	9.3%	0.1%
CAP014	CMS00353	13	14	0.2%	9.6%	0.1%
CAP014	CMS00354	14	15	0.2%	7.0%	1.3%
CAP014	CMS00355	15	16	0.2%	10.7%	6.1%
CAP014	CMS00356	16	17	0.1%	5.5%	18.2%
CAP014	CMS00357	17	18	0.4%	6.2%	8.7%
CAP014	CMS00358	18	19	0.2%	3.0%	14.8%
CAP014	CMS00359	19	20	0.6%	3.4%	22.0%
CAP014	CMS00361	20	21	1.0%	11.3%	16.8%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	OS
CAP014	CMS00362	• •	• •	1.5%	8.8%	10.4%
		21 22	22	+		
CAP014	CMS00363	23	23 24	0.8%	17.7%	3.4%
CAP014	CMS00364			0.6%	13.0%	3.4%
CAP015	CMS00365	0	1	0.9%	11.1%	1.4%
CAP015	CMS00366	1	2	1.6%	35.4%	14.8%
CAP015	CMS00367	2	3	1.3%	58.8%	9.7%
CAP015	CMS00368	3	4	1.1%	57.6%	0.9%
CAP015	CMS00376	11	12	0.3%	28.3%	0.1%
CAP015	CMS00377	12	13	0.3%	8.4%	0.0%
CAP015	CMS00378	13	14	0.4%	5.0%	0.1%
CAP015	CMS00379	14	15	0.2%	5.4%	8.5%
CAP015	CMS00381	15	16	0.1%	3.1%	22.1%
CAP015	CMS00382	16	17	0.3%	3.2%	16.5%
CAP015	CMS00383	17	18	0.2%	3.5%	21.1%
CAP015	CMS00384	18	19	0.2%	1.7%	36.1%
CAP015	CMS00385	19	20	0.4%	1.9%	30.6%
CAP015	CMS00386	20	21	1.4%	5.5%	13.4%
CAP015	CMS00387	21	22	2.1%	5.3%	9.9%
CAP015	CMS00388	22	23	2.4%	14.6%	10.3%
CAP015	CMS00389	23	24	0.4%	7.1%	17.1%
CAP015	CMS00390	24	25	0.6%	8.7%	11.1%
CAP015	CMS00390	25	26	0.8%	11.9%	5.4%
CAP015	CMS00391 CMS00392	26	27	2.1%	6.6%	18.9%
CAP016	CMS00393	0	1	1.3%	18.2%	0.1%
CAP016	CMS00394	1	2	1.1%	28.2%	7.1%
CAP016	CMS00395	2	3	1.6%	27.9%	13.4%
CAP016	CMS00396	3	4	1.1%	54.8%	1.4%
CAP016	CMS00405	11	12	0.8%	21.8%	0.3%
CAP016	CMS00406	12	13	0.5%	4.5%	0.3%
CAP016	CMS00407	13	14	0.4%	3.3%	6.2%
CAP016	CMS00408	14	15	0.3%	3.2%	12.6%
CAP017	CMS00409	0	1	1.3%	13.1%	0.5%
CAP017	CMS00410	1	2	2.1%	25.6%	27.6%
CAP017	CMS00411	2	3	1.7%	44.8%	8.7%
CAP017	CMS00412	3	4	2.0%	43.6%	14.6%
CAP017	CMS00413	4	5	0.6%	45.0%	0.7%
CAP017	CMS00414	5	6	0.7%	43.0%	0.9%
CAP017	CMS00415	6	7	0.4%	26.8%	0.0%
CAP017	CMS00416	7	8	0.3%	34.5%	0.1%
CAP017	CMS00417	8	9	0.2%	18.9%	0.1%
CAP017	CMS00418	9	10	0.4%	20.9%	0.1%
CAP017	CMS00419	10	11	0.4%	9.8%	0.1%
CAP017	CMS00421	11	12	0.4%	3.3%	2.4%
CAP017	CMS00422	12	13	0.6%	4.7%	5.7%
CAP017	CMS00423	13	14	1.1%	5.5%	4.8%
CAP017	CMS00424	14	15	1.2%	3.0%	10.5%
CAP017	CMS00425	15	16	0.2%	3.0%	4.6%
CAP017	CMS00425	16	17	1.3%	12.6%	18.9%
CAP017	CMS00426 CMS00427	17	18	1.6%	17.7%	2.3%
			1			
CAP017	CMS00428	18	19	1.6%	14.3%	9.7%
CAP017	CMS00429	19	20	1.0%	32.1%	1.2%
CAP017	CMS00430	20	21	1.0%	25.3%	2.0%
CAP017	CMS00431	21	22	1.4%	8.4%	16.3%
CAP018	CMS00432	0	1	1.4%	13.6%	0.7%
CAP018	CMS00433	1	2	1.1%	27.6%	28.3%
CAP018	CMS00434	2	3	2.4%	41.7%	20.9%
CAP018	CMS00435	3	4	1.4%	50.8%	1.9%
CAP018	CMS00436	4	5	0.8%	18.6%	1.9%
CAP018	CMS00437	5	6	1.2%	40.9%	0.7%
CAP018	CMS00438	6	7	0.7%	25.8%	0.1%
CAP018	CMS00439	7	8	0.6%	28.0%	0.1%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	OS
CAP018	CMS00440		9	2.7%	5.0%	0.9%
	1	8 9				
CAPO18	CMS00442	10	10	0.2%	35.7%	0.1%
CAP018	CMS00443		11	0.3%	20.5%	0.2%
CAP018	CMS00444	11	12	0.4%	17.4%	1.3%
CAP018	CMS00445	12	13	1.4%	6.2%	7.5%
CAP018	CMS00446	13	14	0.3%	2.1%	9.3%
CAP018	CMS00447	14	15	0.7%	2.4%	12.3%
CAP018	CMS00448	15	16	1.6%	3.6%	3.9%
CAP018	CMS00449	16	17	1.0%	7.1%	20.7%
CAP018	CMS00450	17	18	1.1%	17.5%	4.1%
CAP018	CMS00451	18	19	1.3%	10.5%	17.6%
CAP018	CMS00452	19	20	0.6%	10.6%	21.3%
CAP018	CMS00453	20	21	0.7%	14.0%	17.0%
CAP019	CMS00454	0	1	1.4%	8.3%	1.6%
CAP019	CMS00455	1	2	2.5%	33.1%	26.3%
CAP019	CMS00456	2	3	1.9%	53.1%	8.2%
CAP019	CMS00464	9	10	0.4%	26.5%	1.2%
CAP019	CMS00465	10	11	0.5%	17.8%	0.1%
CAP019	CMS00466	11	12	0.2%	6.7%	11.4%
CAP019	CMS00467	12	13	0.4%	4.5%	15.9%
CAP019	CMS00468	13	14	0.8%	3.2%	4.3%
CAP019	CMS00469	14	15	1.1%	4.0%	4.4%
CAP019	CMS00470	15	16	1.5%	2.5%	8.1%
CAP019	CMS00470	16	17	0.9%	2.4%	30.0%
		17				
CAP019	CMS00472		18	1.0%	19.4%	23.4%
CAP019	CMS00473	18	19	0.8%	8.5%	6.7%
CAP019	CMS00474	19	20	1.5%	18.2%	1.7%
CAP019	CMS00475	20	21	3.8%	33.4%	9.9%
CAP020	CMS00476	0	1	1.6%	13.1%	7.8%
CAP020	CMS00477	1	2	1.7%	27.3%	23.1%
CAP020	CMS00478	2	3	1.8%	50.2%	7.3%
CAP020	CMS00479	3	4	3.3%	29.9%	0.4%
CAP020	CMS00481	4	5	2.9%	31.9%	1.5%
CAP020	CMS00485	8	9	0.4%	21.6%	0.1%
CAP020	CMS00486	9	10	0.2%	12.5%	0.4%
CAP020	CMS00487	10	11	0.2%	4.7%	17.2%
CAP020	CMS00488	11	12	0.4%	3.3%	12.9%
CAP020	CMS00489	12	13	1.7%	1.3%	8.3%
CAP020	CMS00490	13	14	7.0%	6.9%	0.7%
CAP020	CMS00491	14	15	1.6%	5.0%	1.5%
CAP020	CMS00492	15	16	1.3%	5.2%	7.8%
CAP020	CMS00493	16	17	0.7%	23.1%	5.7%
CAP020	CMS00494	17	18	0.9%	14.1%	6.9%
CAP020	CMS00495	18	19	0.4%	4.0%	21.1%
CAP020	CMS00496	19	20	1.0%	13.7%	2.4%
CAP020	CMS00497	20	21	1.3%	14.0%	5.2%
CAP021	CMS00498	0	1	1.5%	11.0%	0.3%
CAP021	CMS00499	1	2	1.7%	19.8%	37.2%
CAP021	CMS00501	2	3	2.6%	46.6%	14.7%
CAP021	CMS00502	3	4	1.0%	53.0%	1.5%
CAP021	CMS00502	9	10	0.4%	31.2%	1.9%
CAP021	CMS00509	10	11	1.2%	20.1%	9.2%
CAP021	CMS00510	11	12	1.9%	5.2%	27.5%
CAP021	CMS00510	12	13	1.2%	2.3%	2.9%
CAP021	CMS00511	13	14	2.4%	2.5%	1.4%
CAP021 CAP021	CMS00512 CMS00513	14	15	1.9%	10.3%	1.1%
	1	15	1		+	
CAP021	CMS00514		16	1.5%	7.9%	3.9%
CAP021	CMS00515	16	17	0.8%	2.9%	18.5%
CAP021	CMS00516	17	18	2.5%	2.8%	10.7%
CAP021	CMS00517	18	19	4.7%	1.5%	10.2%
CAP021	CMS00518	19	20	2.8%	1.7%	6.1%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	os
CAP021	CMS00519	20	21	0.9%	2.6%	7.6%
CAP022	CMS00513	0	1	1.6%	11.4%	0.4%
CAP022	CMS00521	1	2	1.8%	16.4%	38.1%
CAP022	CMS00522	2	3	2.3%	41.2%	7.5%
CAP022	CMS00523	11	12	3.7%	3.6%	5.1%
CAP022	CMS00532	12	13	0.8%	1.0%	9.0%
CAP022	CMS00534	13	14	0.2%	0.8%	22.6%
CAP022 CAP022	CMS00534 CMS00535	14	15	0.2%	2.5%	24.8%
CAP022 CAP022	CMS00536	15	16	1.7%	1.4%	24.8%
	CMS00537	16	17	1.0%	2.4%	
CAP022 CAP022		17	18	2.1%	2.4%	30.1% 2.5%
	CMS00538					
CAP022	CMS00539 CMS00540	18	19	2.1%	12.3%	12.1%
CAP022		19	20	2.0%	14.1%	7.2%
CAP022	CMS00542	20	21	0.6%	12.5%	1.9%
CAP022	CMS00543	21	22	0.3%	4.8%	31.8%
CAP022	CMS00544	22	23	0.7%	5.2%	25.7%
CAP022	CMS00545	23	24	1.1%	12.2%	5.8%
CAP022	CMS00546	24	25	0.3%	21.7%	18.2%
CAP022	CMS00547	25	26	1.1%	66.6%	0.1%
CAP022	CMS00548	26	27	2.3%	77.6%	0.6%
CAP023	CMS00549	0	1	1.4%	13.0%	0.2%
CAP023	CMS00550	1	2	1.8%	23.2%	32.0%
CAP023	CMS00551	2	3	3.6%	46.9%	16.3%
CAP023	CMS00558	9	10	0.3%	11.0%	2.5%
CAP023	CMS00559	10	11	1.6%	6.0%	15.2%
CAP023	CMS00561	11	12	0.9%	4.0%	11.4%
CAP023	CMS00562	12	13	0.7%	2.5%	9.7%
CAP023	CMS00563	13	14	0.3%	1.4%	44.5%
CAP023	CMS00564	14	15	0.5%	2.6%	29.5%
CAP023	CMS00565	15	16	0.8%	2.7%	27.2%
CAP023	CMS00566	16	17	1.3%	10.7%	10.0%
CAP023	CMS00567	17	18	1.3%	16.5%	3.6%
CAP023	CMS00568	18	19	1.2%	8.9%	16.7%
CAP023	CMS00569	19	20	7.7%	20.9%	20.6%
CAP023	CMS00570	20	21	8.0%	28.7%	1.1%
CAP023	CMS00571	21	22	2.7%	13.8%	20.4%
CAP023	CMS00572	22	23	1.7%	40.8%	0.4%
CAP023	CMS00579	29	30	1.0%	18.8%	1.5%
CAP024	CMS00581	0	1	1.5%	12.4%	0.2%
CAP024	CMS00582	1	2	1.5%	23.0%	28.0%
CAP024	CMS00583	2	3	1.3%	41.6%	7.9%
CAP024	CMS00591	10	11	2.4%	13.0%	0.5%
CAP024	CMS00592	11	12	0.8%	3.9%	2.1%
CAP024	CMS00593	12	13	0.4%	2.3%	15.0%
CAP024	CMS00594	13	14	0.3%	1.4%	39.1%
CAP024	CMS00595	14	15	0.6%	2.2%	26.6%
CAP024	CMS00596	15	16	1.2%	4.7%	16.2%
CAP024	CMS00597	16	17	1.2%	17.4%	15.4%
CAP024	CMS00598	17	18	1.1%	30.5%	11.0%
CAP024	CMS00599	18	19	2.0%	17.3%	10.7%
CAP024	CMS00601	19	20	1.7%	30.4%	4.1%
CAP024	CMS00602	20	21	1.5%	61.4%	1.4%
CAP025	CMS00603	0	1	1.5%	8.0%	0.3%
CAP025	CMS00604	1	2	1.6%	18.7%	16.6%
CAP025	CMS00605	2	3	2.3%	29.7%	22.2%
CAP025	CMS00612	9	10	4.5%	10.0%	0.2%
CAP025	CMS00613	10	11	1.1%	6.3%	0.6%
CAP025	CMS00614	11	12	0.4%	3.5%	15.7%
CAP025	CMS00615	12	13	0.8%	5.6%	23.7%
CAP025	CMS00616	13	14	0.2%	1.7%	58.6%
CAP025	CMS00617	14	15	1.0%	6.8%	17.9%



Hole ID	Sample ID	From (m)	To (m)	THM	Slimes	OS
CAP025	CMS00618	15	16	1.1%	8.9%	17.9%
CAP025	CMS00619	16	17	1.0%	17.6%	16.2%
CAP025	CMS00621	17	18	0.4%	18.6%	11.3%
CAP026	CMS00625	0	1	1.2%	18.4%	0.4%
CAP026	CMS00626	1	2	0.8%	19.2%	44.3%
CAP026	CMS00627	2	3	1.4%	40.0%	9.9%
CAP026	CMS00628	3	4	1.5%	48.8%	5.2%
CAP026	CMS00629	4	5	1.1%	46.2%	2.6%
CAP026	CMS00630	5	6	1.7%	28.0%	5.7%
CAP026	CMS00631	6	7	1.5%	28.3%	0.7%
CAP026	CMS00635	10	11	2.8%	14.2%	0.3%
CAP026	CMS00636	11	12	1.3%	9.5%	0.3%
CAP026	CMS00637	12	13	0.8%	6.3%	0.5%
CAP026	CMS00638	13	14	0.6%	3.8%	8.5%
CAP026	CMS00639	14	15	0.5%	4.9%	6.1%
CAP026	CMS00641	15	16	1.1%	5.4%	4.0%
CAP026	CMS00642	16	17	1.3%	19.3%	9.1%
CAP026	CMS00643	17	18	0.7%	18.2%	2.9%
CAP026	CMS00644	18	19	1.0%	10.7%	9.9%
CAP026	CMS00645	19	20	2.0%	25.4%	8.1%
CAP026	CMS00646	20	21	3.9%	41.9%	1.2%

Slimes < 53µm, Oversize (OS) > 1mm



### **Appendix 4 JORC Tables**

### **Section 1 Sampling Techniques and Data**

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 1m 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 techniques, are by RC Aircore Drilling. A 25%, sample subsplit is collected at a 1m down-hole interval, using an on-board rotary splitter mounted beneath the rig cyclone. All samples are logged for HM estimate and most samples were submitted for analysis.</li> <li>Consistency in split sample weights is monitored via intermittent testing in the field and through recording of air-dried sample weights at the sample preparation stage.</li> <li>RCAC drilling is used to obtain the sample as described above.</li> <li>Samples were analysed by industry typical methods for heavy minerals at Diamantina laboratory. The samples were dried, de-slimed using wet sieving (material &lt;53 µm removed) and then had oversize (material +1mm) removed. About 100g of the remaining sand fraction was then subjected to float/sink analysis using TetraBromEthane (T.B.E with SG=2.92g/cm³ - 2.96g.cm³). The resulting heavy sinks were then dried and weighed and the HM content of the sample was calculated.</li> </ul>
Drilling techniques	Drill type (e.g., core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc.) and details (e.g., core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc.).	<ul> <li>All samples are generated by RCAC drilling utilising ~76 mm diameter (NQ) air-core drill tooling. Drill holes are oriented vertically and approximate a perpendicular intersection of the mineralisation.</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>Drilling utilises water injection to ensure fine material is retained and drilling progresses without blockage. There are no recorded intervals in the geology logs that indicate loss or contamination of samples. Sample weights also appear appropriate and representative of the intervals drilled.</li> <li>The configuration of drilling and nature of sediments encountered results in negligible sample loss.</li> <li>Sample representivity is maintained by the use of a rotary splitter</li> </ul>



Criteria	JORC Code explanation	Commentary
		attached to the drill rig. Sample weights are monitored to ensure optimal representivity. Drilling was conducted to industry standards with suitably trained and qualified drilling operators.  Typically, drill penetration is halted at the end of each sample interval to allow time for the sample to return to surface and be collected. Drilling proceeds once sample delivery ceases.  No relationship is believed to exist between grade and sample recovery. Sample size is well within the expected size range.
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>Qualitative digital logs of geological characteristics are collected.         Samples are panned in the field to determine dominant and secondary host materials characteristics and heavy mineral content.     </li> <li>Logging of RCAC samples is qualitative and includes description of sample colour, lithology, grainsize, sorting, induration type, hardness, estimated rock and estimated HM. A comments field is employed to allow further description or interpretation of materials/formation/sample quality.</li> <li>All drill holes are logged in full and all samples with observed HM (and designated for assay) are assayed.</li> </ul>
Sub-sampling techniques and sample preparation	<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, 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 sub-sampling 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>All samples are unconsolidated and comprise sand, silt, clay and rock fragments.</li> <li>Samples are taken at a 1m downhole interval using the on-board rotary splitter set at 25% of the splitter cycle, which delivers about 1.5kg of sample. Drill samples are dried and split for analysis.</li> <li>Sample preparation techniques and QA/QC protocols are consistent with industry standard practice and appropriate for the heavy mineral determination.</li> <li>Sample preparation is consistent with industry standard practice and is deemed to be appropriate for Heavy Mineral determination. The method processes the whole subsample.</li> <li>Quality control methods include</li> </ul>



Criteria	JORC Code explanation	Commentary
		<ul> <li>field duplicate sampling and insertion of HM standards. Where error or bias is detected lab or drilling practice is investigated and appropriate measures are taken to ensure sampling representivity.</li> <li>Suitably trained staff are employed for all roles.</li> <li>Sample weight is recorded and monitored for outliers or spurious results. When these occur, they are investigated and re-assayed where fault is detected.</li> <li>Field Duplicate and standard sample geostatistical analysis is employed to manage sample precision and analysis accuracy.</li> <li>Sample size analysis is completed as discussed above. Field duplicates are collected for precision analysis of the rotary splitting system on the rig.</li> <li>Given that the grain size of the material being sampled is sand and approximately 70 to 300 μm, an approximate sample size of 1.5 kg is more than adequate.</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>Laboratory analysis was completed by Diamantina Laboratories. The technique is supported by extensive QA/QC practices. The analysis is considered to be total.</li> <li>No Geophysical tools were utilised.</li> <li>To maintain QA/QC, Pinnacle apply a duplicate and standard assaying procedure with both standards and duplicates submitted to the laboratory. Duplicates and Standards are alternated every 20<sup>th</sup> sample.</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 procedures, data verification, data storage (physical and electronic) protocols.</li> <li>Discuss any adjustment to assay data.</li> </ul>	<ul> <li>All results are checked by the Competent Person</li> <li>Approximately 5% of holes were twinned</li> <li>Standard Certified Reference Material sample results are checked from each sample batch to ensure they are within tolerance (&lt;2SD) and that there is no bias or drift</li> <li>Field logging data are entered digitally in the field using ruggedized computer, with onboard validation capability. Data are verified when incorporated in</li> </ul>



Criteria	JORC Code explanation	Commentary
		the database.  No assay adjustments were conducted.
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 holes were set out by Pinnacle employees, using a GARMAN Montana 750i. This provides collar set out accuracy stated at +/-0.5m or better in the X/Y directions.</li> <li>A LIDAR dataset obtained from the Department of Water and Environment (DWER) will be utilised to determine the Z (elevation) value for and Mineral Resource calculation</li> <li>Drill holes locations are in MGA94, Zone 50.</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>Drill density was 60m (laterally)- 400m (longitudinally).</li> <li>Samples were taken every vertical meter.</li> <li>Intervals reported are averaged over length.</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>Sample orientation is vertical and approximately perpendicular to the dip and strike of the mineralization, which results in true thickness estimates. Drilling and sampling is carried out on a regular rectangular grid that is broadly aligned and consistent with the anisotropy of the mineralisation.</li> <li>No apparent bias is known to arise from the orientation of the drill holes with respect to the strike and dip of the units drilled.</li> </ul>
Sample security	The measures taken to ensure sample security.	Samples were delivered to     Diamantina by Capel Transport for     processing and analysis by     Diamantina Staff
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	<ul> <li>No independent audits or reviews of sampling techniques and data has been conducted.</li> <li>Internal reviews undertaken</li> </ul>



## **Section 2 Reporting of Exploration Results**

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

Criteria	JORC Code explanation	Commentary
Mineral tenement and 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 are coincident with the granted Exploration Lease E70/6372. This licence is wholly owned by Pinnacle Minerals Limited.</li> <li>Upon mining, there is a customary 5%, state government royalty payable.</li> <li>There are no known impediments to the security of tenure over the area containing the reported exploration results.</li> </ul>
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	<ul> <li>Prior exploration was completed by Iluka Resources Limited.</li> <li>Iluka defined mineralisation at wide spacing over the tenement but was deemed not of a sufficient size to follow up.</li> </ul>
Geology	Deposit type, geological setting and style of mineralisation.	Exploration results are indicative of potential beach placer and aeolian (dunal) detrital heavy mineral sand deposits.
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 above sea level in metres) of the drill hole collar</li> <li>dip and azimuth of the hole</li> <li>down hole length and interception depth</li> <li>hole length.</li> </ul> </li> <li>If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.</li> </ul>	<ul> <li>All significant drill results and drill hole collar locations have been identified in Appendix 1 and Appendix 2 of this report.</li> <li>No relevant material data has been excluded from this report.</li> </ul>
Data aggregation methods	<ul> <li>In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (e.g., cutting of high grades) and cut-off grades are usually Material and should be stated.</li> <li>Where aggregate intercepts incorporate short lengths of high-grade results and longer lengths of low-grade results, the procedure used for such aggregation should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values</li> </ul>	<ul> <li>Intercepts are reported whole-of-hole above the bottom cut.</li> <li>No metal equivalents were used for reporting of exploration results.</li> </ul>



Criteria	JORC Code explanation	Commentary
	should be clearly stated.	
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>All drill holes are vertical and perpendicular to the dip and strike of mineralisation and therefore all intercepts are approximately true thickness.</li> <li>Drilling indicates mineralisation is parallel with neighbouring deposits owned by Iluka Resources and parallel to the trend of paleo-beach successions.</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>	Figures and plans are displayed in the main text of the release.
Balanced reporting	Where comprehensive reporting of all Exploration Results is not practicable, representative reporting of both low and high grades and/or widths should be practiced to avoid misleading reporting of Exploration Results.	Reporting of results and.     Intercepts are disclosed in an unambiguous way.
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.	<ul> <li>Exploration and mining has occurred in the Southwest region of WA for decades and a familiarity and acceptance has grown with this. However, areas dominated by recent land purchase are likely to be somewhat reluctant or even refuse access for further work.</li> <li>Nature reserves and heritage sites are known in the region.</li> <li>Water and infrastructure supply is sufficient to support exploration and mining operations.</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> <li>Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive.</li> </ul>	<ul> <li>Further assays are pending and dependant on results aad consistency of mineralisation a JORC resource or exploration target will be determined.</li> <li>Refer to the main body of the release for further information regarding diagrams</li> </ul>