

Andromeda Metals Limited ABN: 75 061 503 375

#### Corporate details:

ASX Code: ADN

Cash (30 June 2020): \$3.00 million

Issued Capital:

1,538,718,676 ordinary shares 609,318,064 ADNOB options 96,500,000 unlisted options

#### **Directors:**

**Rhod Grivas** 

Non-Executive Chairman

James Marsh

**Managing Director** 

**Nick Harding** 

Executive Director and Company Secretary

Joe Ranford

Operations Director

Andrew Shearer

Non-Executive Director

#### Contact details:

69 King William Road, Unley, South Australia 5061

PO Box 1210 Unley BC SA 5061

Tel: +61 8 8271 0600 Fax: +61 8 8271 0033 admin@andromet.com.au

www.andromet.com.au



METALS

## **ASX Announcement**

15 July 2020

## New Major Market Opportunity for Andromeda with Mount Hope Project

#### Summary

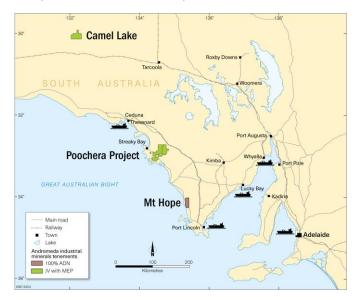
- Results from the initial aircore drilling program conducted at ADN's 100% owned Mount Hope Kaolin Project in South Australia have delivered significantly high bright white kaolin intersections (above 80 ISO Brightness) across the historic kaolin resource.
- The April 2020 drilling program, which comprised a total of 40 holes for 1,383 metres across the drill target area, has extended the deposit further to the south and remains open in that direction.
- A substantial portion of the deposit shows exceptionally low iron contaminant within the bright white kaolin with halloysite levels ideally suited to some high-value markets in specialist coatings and polymers, which opens up a new and potentially significant market opportunity for the Company.
- Mount Hope thus represents an excellent opportunity for market diversification and de-risking of the business in addition to adding value to the Company as a whole.
- Some areas of the Mount Hope deposit show high levels of halloysite (>20%) that is similar to the existing resource at ADN's Carey's Well deposit, part of the Poochera Joint Venture with Minotaur Exploration.
- The Carey's Well resource is well-sized to supply the market requirements for high-value ceramic applications, especially when combined with potentially significant additional halloysite-kaolin material from the Condooringie and Tomney prospects at Poochera.
- The development of the Carey's Well deposit remains the main focus for ADN with Mount Hope offering excellent potential for future growth opportunities for the Company.
- A new Mineral Resource Estimate compliant with the 2012 JORC Code for the Mount Hope deposit is currently being finalised and will be released shortly.

#### Discussion

Andromeda Metals Limited (ASX: ADN, Andromeda, the Company) is pleased to announce the results from the April 2020 aircore drilling undertaken at the Company's 100% owned Mount Hope Kaolin Project (EL 6286) which is

located approximately 80 kilometres northwest of Port Lincoln and 160 kilometres southeast of the Carey's Well Halloysite-Kaolin deposit in South Australia.

A total of 40 aircore holes for 1,383 metres were drilled across the historic 12.26Mt Mt Hope kaolin resource, estimated by Abaleen Minerals in 1973 (refer ADN ASX announcement dated 24 October 2018 titled "Exploration Licence Application for Mount Hope Halloysite Kaolin"). The 1973 mineral resource estimate does not meet the JORC 2012 Code requirements and investors are cautioned that the Company has not yet completed the work to verify the historical resource estimate.



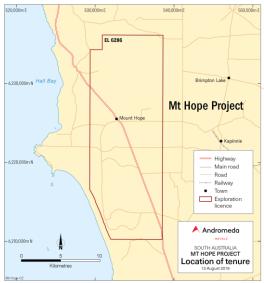


Figure 1 - ADN Halloysite-Kaolin interests

Figure 2 – Mount Hope tenement EL 6286

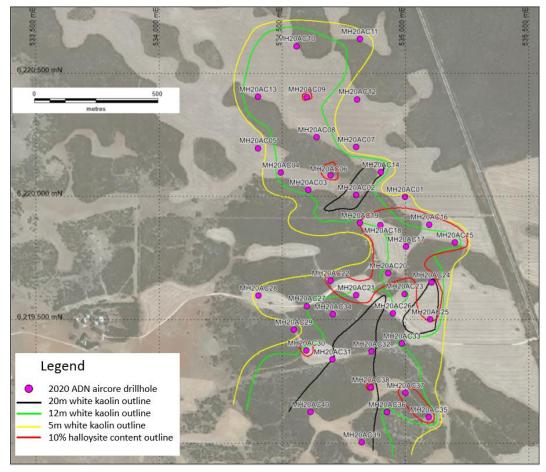


Figure 3 – Recent drilling showing white kaolin thickness contours and halloysite content outline (MGA 94 Zone 53)

Mineralisation encountered is at an average depth of 10 metres and has an average thickness of just under 15 metres. Significant intersections of greater than 20 metres in thickness of white kaolinised gneiss were intercepted to the south of Abaleen Minerals' 1973 resource.

Summary intercepts listed in Table 1 below and individual assays contained in Appendix 2 show that over 65% of the 159 samples collected have a high bright white reflectance value (greater than 80 ISO Brightness points), while 20% of samples showed an Ultra-Bright White (greater than 84 ISO B). Halloysite is present in 10% of the samples collected with a collection of plus 10% halloysite values clustered within the centre of the deposit.

Hole Id	From	То	Interval	Minus 45μm	Kaolinite	Halloysite	Reflectance	Al203	Fe2O3	TiO2
	(m)	(m)	(m)	(%)	(%)	(%)	(ISO B)	(%)	(%)	(%)
MH20AC001	7	17	10	42.5	89	0	81.2	35.4	0.40	0.77
MH20AC002	7	27	20	42.4	89	1	83.8	37.0	0.34	0.40
MH20AC003	7	19	12	37.0	85	0	83.4	34.6	0.33	0.53
MH20AC004	5	23	18	40.7	87	0	83.1	35.6	0.56	0.35
MH20AC006	8	24	16	33.3	71	7	83.8	33.7	0.37	0.61
MH20AC008	7	19	12	33.3	77	0	80.9	33.8	0.77	0.56
MH20AC009	7	24	17	40.8	81	3	83.0	36.1	0.41	0.39
MH20AC010	8	20	12	35.6	77	1	81.1	33.2	0.57	0.51
MH20AC011	8	18	10	34.0	79	0	82.4	33.8	0.76	0.51
MH20AC014	10	33	23	32.2	75	2	80.9	34.5	0.60	0.52
MH20AC015	6	24	18	36.5	70	9	80.6	34.3	0.64	0.70
MH20AC016	7	15	8	33.0	40	40	80.5	32.7	1.49	0.43
MH20AC017	7	23	16	44.5	91	0	83.1	36.0	0.26	0.69
MH20AC017	38	45	7	30.5	52	23	78.0	32.9	0.44	0.79
MH20AC018	8	23	15	34.6	74	3	82.6	34.3	0.47	0.45
MH20AC020	8	26	18	50.5	90	0	84.6	36.7	0.19	0.75
MH20AC021	10	24	14	41.8	82	5	84.1	36.0	0.35	0.54
MH20AC023	11	20	9	47.8	88	0	82.7	35.7	0.28	0.59
MH20AC024	9	28	19	44.8	74	13	82.1	35.4	0.40	0.72
Includes	19	28	9	40.5	54	28	79.0	34.5	0.59	0.75
MH20AC025	7	30	23	42.4	73	8	81.1	34.8	0.48	0.65
MH20AC026	8	19	11	44.9	91	0	85.0	36.1	0.24	0.67
MH20AC030	8	26	18	45.1	81	4	83.4	35.4	0.46	0.48
MH20AC031	13	27	14	45.7	86	0	82.6	36.6	0.28	0.50
MH20AC032	11	34	23	39.2	83	0	82.2	35.1	0.30	0.67
MH20AC035	10	26	16	46.8	78	9	80.4	34.9	0.51	0.65
MH20AC037	13	42	29	40.5	79	5	80.5	35.0	0.65	0.70
MH20AC038	9	30	21	45.1	88	0	83.7	36.2	0.24	0.72
MH20AC039	7	21	14	45.7	89	0	85.2	36.5	0.32	0.51
MH20AC040	7	48	41	45.1	86	0	81.4	35.5	0.91	0.41

Table 1 - Summary Intercepts of results

Andromeda's drilling has demonstrated that the kaolin mineralised zone is open to the south and the thickness and quality of the kaolin presents an exciting opportunity to be explored. The open holes extending the deposit to the south show impressive results with hole MH20AC0039's composite summary samples of 14m of Ultra-Bright White kaolin (from 7m) with an average ISO B value of 85.2 and low contaminant values of 0.32% Fe<sub>2</sub>O<sub>3</sub> and 0.51% TiO<sub>2</sub> and hole MH20AC040's composite summary samples of 41m of continuous bright white kaolin (from 7m) with an average ISO B value of 81.4.



Figure 4 – Chip samples from drillholes MH20AC039 (0-48m) and MH20AC040 (0-48m)

Drillhole collar and sample intervals are listed in Appendix 1, with all chemistry results shown in Appendix 2.

Following the receipt of these encouraging results, the Company is now preparing a new Mineral Resource Estimate for Mount Hope to be compliant with 2012 JORC Code standards with the results anticipated to be released in coming weeks.

#### **Coatings and Polymers Market Opportunity**

Some significant areas of the deposit show iron levels at a low level very rarely found anywhere in the world, which is a highly desirable property for coating and polymer applications where the iron causes colour and stability issues. These iron values found at Mount Hope are for unprocessed mineral (screened at 45 microns) and would be expected to be reduced even further using typical kaolin refining processes. The fact that these areas within the Mount Hope deposit also show minimal halloysite is actually an advantage in this case, as halloysite is not desirable for coatings applications.

Some areas of the deposit however show high levels of halloysite that is similar to the existing resource at ADN's Carey's Well deposit, part of the Poochera Joint Venture with Minotaur Exploration, which could be selectively mined to supply the ceramics industry.

Andromeda's Carey's Well JORC Resource is perfectly suited for the premium ceramic sector, and so adding an upgraded resource from Mount Hope that can be sold into a different, yet equally high value market will give the Company significant diversification and increased value.

According to Markets and Markets, the paints and coatings market is projected to grow from USD 154 billion in 2019 to USD 200 billion by 2024, at a CAGR of 5.4% over the forecast period. Asia-Pacific is the fastest-growing market because the developing countries of APAC, such as China, Japan, India, Indonesia, Malaysia, and the Philippines are focusing on the construction of new residential and commercial buildings, and this is expected to increase in the future. Premium grade kaolins for the coatings industry are currently sold at US\$500 – 600/t.

The global plastics market was valued at USD 568.7 billion in 2019. It is poised to expand at a revenue based CAGR of 3.5% from 2020 to 2027 as plastic consumption increases in the construction, automotive, electrical and electronics industries. Regulations to decrease gross vehicle weight to improve fuel efficiency and eventually reduce carbon emissions have promoted the use of plastics as a substitute to metals, including aluminium and steel for manufacturing of automotive components. Asia-Pacific was the largest geographic region in the plastics and polymers market in 2017, accounting for \$235 billion or 38.3% share in the market. China was the largest country in the market in 2017, accounting for \$109.0 billion or 17.8% share of the market. (Market data and pricing established by market research provided by First Test Minerals a world authority on kaolin).

Mount Hope thus represents an excellent opportunity for market diversification and de-risking of the business in addition to adding value to the Company as a whole. The Carey's Well resource is well-sized to supply the market requirements for high-value ceramic applications, especially when combined with potentially significant additional halloysite-kaolin material from the Condooringie and Tomney prospects at Poochera. The development of the Carey's Well deposit will continue as the main for the Company with Mount Hope offering excellent potential for future growth opportunities.

#### Contact:

**James Marsh** 

Managing Director Email: james.marsh@andromet.com.au **Peter Taylor** 

Investor Relations Ph: 0412 036 231

Email: peter@nwrcommunications.com.au

#### **Competent Persons Statement**

Information in this announcement has been assessed and compiled by Mr James Marsh, a Member of The Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Marsh an employee of the Andromeda Metals Limited has sufficient experience, which is relevant to metal recovery from the style of mineralisation and type of deposits under consideration and to the activity being undertaking to qualify as a Competent Persons under the 2012 Edition of the 'Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves'. This includes over 30 years of experience in kaolin processing and applications.

The data in this announcement that relates to the Exploration Results for the Mt Hope Halloysite-Kaolin Project is based on information evaluated by Mr Eric Whittaker who is a Member of the Australasian Institute of Mining and Metallurgy (MAusIMM). Mr Whittaker is the Chief Geologist of Andromeda Metals Limited and has sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify as a Competent Person as defined in the 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (the "JORC Code"). Mr Whittaker consents to inclusion in this document of the information in the form and context in which it appears.

#### 1. Cautionary statement:

The historical estimate of Mineral Resources is not reported in accordance with the JORC 2012 Code. A Competent Person has not done sufficient work to classify the estimate of Mineral Resources in accordance with the JORC 2012 Code. It is possible that following evaluation and/or further exploration work the currently reported historical estimate may materially change and hence will need to be reported afresh under and in accordance with the JORC 2012 Code. ADN's current drilling is being undertaken to validate the historical estimate and therefore is not to be regarded as reporting, adopting or endorsing the historical estimate

### APPENDIX 1 – MOUNT HOPE PROJECT 2020 AIRCORE DRILL COLLAR AND SAMPLE INFORMATION

Hole ID	Easting	Northing	Collar RL	Hole	Hole	Final	Sampled	Sampled	Sampled	Sampled	Sampled	Sampled	Interval
				inclination	azimuth	depth	Start	End depth	Start depth	End depth	Start depth	End depth	sampled
	(MGA94)	(MGA94)	(m)	(°)	(°)	(m)	denth (m)	(m)	(m)	(m)	(m)	(m)	(m)
MH20AC01	534997	6219998	84.0	-90	0	47	7	17	29	33			14
MH20AC02	534799	6220005	88.0	-90	0	31.9	7	27					20
MH20AC03	534604	6220025	91.0	-90	0	33	7	19					12
MH20AC04	534494	6220095	91.0	-90	0	36.0	5	23					18
MH20AC05	534400	6220194	91.0	-90	0	32	8	10					2
MH20AC06	534695	6220085	90.0	-90	0	26.0	8	24					16
MH20AC07	534798	6220200	86.0	-90	0	28	Hole not sa	mpled					0
MH20AC08	534639	6220239	89.0	-90	0	24.0	7	19					12
MH20AC09	534599	6220402	88.0	-90	0	27	7	24					17
MH20AC10	534557	6220608	89.0	-90	0	22.0	8	20					12
MH20AC11	534815	6220638	83.0	-90	0	24	8	21					13
MH20AC12	534802	6220393	85.0	-90	0	28.0	8	10	13	15			4
MH20AC13	534401	6220403	93.0	-90	0	45	6	9	15	17	40	45	10
MH20AC14	534900	6220097	84.0	-90	0	34.0	6	33					27
MH20AC15	535199	6219812	84.0	-90	0	30	6	24					18
MH20AC16	535096	6219885	84.0	-90	0	18.0	7	15					8
MH20AC17	535001	6219795	87.0	-90	0	48	7	23	34	45			27
MH20AC18	534897	6219882	88.0	-90	0	28.0	8	23					15
MH20AC19	534815	6219891	90.0	-90	0	27	8	19					11
MH20AC20	534929	6219687	89.0	-90	0	48.0	8	26	39	47			26
MH20AC21	534799	6219598	93.0	-90	0	25	10	24					14
MH20AC22	534695	6219657	99.0	-90	0	28.0	19	25					6
MH20AC23	534996	6219603	87.0	-90	0	34	8	20					12
MH20AC24	535105	6219649	85.0	-90	0	30.0	6	28					22
MH20AC25	535100	6219500	85.0	-90	0	32	5	30					25
MH20AC26	534949	6219525	88.0	-90	0	48.0	8	21	39	45			19
MH20AC27	534599	6219554	99.0	-90	0	35	13	25					12
MH20AC28	534402	6219597	90.0	-90	0	48.0	7	14					7
MH20AC29	534546	6219459	100.0	-90	0	17	Hole not sa	mpled					0
MH20AC30	534597	6219374	92.0	-90	0	48.0	8	26					18
MH20AC31	534703	6219337	90.0	-90	0	39	8	27					19
MH20AC32	534862	6219370	90.0	-90	0	48.0	11	34	40	48			31
MH20AC33	534984	6219402	88.0	-90	0	31	11	19					8
MH20AC34	534704	6219521	109.0	-90	0	18.0	Hole not sa	mpled					0
MH20AC35	535094	6219104	82.0	-90	0	39	10	26					16
MH20AC36	534923	6219125	83.0	-90	0	34.0	8	14					6
MH20AC37	534999	6219202	86.0	-90	0	48	13	42					29
MH20AC38	534858	6219224	84.0	-90	0	48.0	9	43					34
MH20AC39	534822	6219002	78.0	-90	0	48	7	21	26	28	30	43	29
MH20AC40	534614	6219124	84.0	-90	0	48.0	7	48					41

### APPENDIX 2 – MOUNT HOPE PROJECT 2020 AIRCORE DRILL CHEMISTRY RESULTS

Hole Id	Fro m	То	Interval	Minus 45µm	Kaolinit e	Halloysite	Reflectance	Al203	Fe2O3	TiO2
	(m)	(m)	(m)	(%)	(%)	(%)	(ISO B)	(%)	(%)	(%)
MH20AC001	7	12	5	40.0	89	0	79.7	35.2	0.41	0.81
MH20AC001	12	17	5	44.9	89	0	82.6	35.6	0.39	0.73
MH20AC001	29	33	4	36.3	83	0	76.4	34.3	0.50	0.86
MH20AC002	7	9	2	35.2	92	0	81.8	36.6	0.41	0.39
MH20AC002	9	14	5	43.3	92	0	84.2	37.8	0.20	0.38
MH20AC002	14	19	5	48.1	92	0	84.9	37.5	0.23	0.41
MH20AC002	19	24	5	43.9	90	0	84.4	37.1	0.37	0.45
MH20AC002	24	27	3	33.8	75	5	81.5	34.8	0.64	0.32
MH20AC003	7	10	3	37.4	83	0	81.5	32.5	0.47	0.51
MH20AC003	10	15	5	32.6	86	0	83.2	34.9	0.30	0.56
MH20AC003	15	19	4	42.3	85	0	85.1	35.8	0.27	0.52
MH20AC004	5	8	3	33.3	79	0	79.9	30.4	0.37	0.48
MH20AC004	8	13	5	42.0	89	0	84.5	36.9	0.43	0.24
MH20AC004	13	18	5	40.1	89	0	83.0	36.5	0.80	0.40
MH20AC004	18	23	5	44.3	88	0	83.6	36.6	0.57	0.34
MH20AC005	8	10	2	22.7	74	3	73.9	34.8	0.40	0.88
MH20AC006	8	11	3	38.9	84	0	84.3	34.4	0.41	0.83
MH20AC006	11	14	3	34.7	77	0	85.9	34.0	0.30	0.39
MH20AC006	14	19	5	36.8	74	6	84.2	34.4	0.30	0.59
MH20AC006	19	24	5	25.7	56	14	81.8	32.3	0.46	0.63
MH20AC008	7	9	2	30.0	76	0	79.7	32.9	0.61	0.36
MH20AC008	9	14	5	36.9	81	0	82.0	35.2	0.64	0.65
MH20AC008	14	19	5	31.1	74	0	80.3	32.7	0.97	0.55
MH20AC009	7	12	5	42.0	88	0	84.2	36.5	0.44	0.48
MH20AC009	12	17	5	43.2	83	3	84.1	36.6	0.37	0.30
MH20AC009	17	22	5	39.9	78	4	81.3	35.9	0.40	0.36
MH20AC009	22	24	2	33.9	65	10	81.3	34.1	0.50	0.43
									0.49	0.43
MH20AC010 MH20AC010	8	12	4	33.7	80 76	0	82.3	32.7		0.41
	12	16	4	35.5			81.5	32.8	0.56 0.66	0.41
MH20AC010	16	20	4	37.6	76	2	79.6	34.1		
MH20AC011	8	13	5	35.6	80	0	82.3	33.4	0.87	0.47
MH20AC011	13	18	5	32.3	78	0	82.5	34.2		
MH20AC011	18	21	3	23.0	49	4	79.5	28.0	0.53 1.74	0.51 1.47
MH20AC012	8	10	2	34.4	70	1	66.3	32.0		
MH20AC012	13	15	2	30.5	76	9	80.5	35.4	0.71	0.88
MH20AC013	6	9	3	25.4	63	0	68.6	32.0	0.77	1.72
MH20AC013	15	17	2	30.3	69	5	69.6	34.4	0.53	1.34
MH20AC013	40	45	5	33.5	82	0	78.5	36.1	0.76	0.57
MH20AC014	6	10	4	36.3	87	0	76.0	34.8	0.61	0.62
MH20AC014	10	15	5	45.0	88	0	83.6	37.0	0.46	0.43
MH20AC014	15	20	5	34.6	83	0	79.4	35.6	0.70	0.58
MH20AC014	20	24	4	29.9	74	2	80.8	34.6	0.76	0.45
MH20AC014	24	28	4	26.2	73	2	80.4	33.7	0.64	0.48
MH20AC014	28	33	5	23.7	55	8	80.1	31.4	0.46	0.64
MH20AC015	6	8	2	24.5	79	0	80.6	31.6	0.51	0.79
MH20AC015	8	10	2	34.0	80	0	83.6	35.0	0.41	0.58

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Hole Id	Fro m	То	Interval	Minus 45µm	Kaolinit e	Halloysit e	Reflectance	Al2O3	Fe2O3	TiO2
	(m)	(m)	(m)	(%)	(%)	(%)	(ISO B)	(%)	(%)	(%)
MH20AC015	10	14	4	43.3	84	0	80.8	35.7	0.53	0.82
MH20AC015	14	19	5	36.2	70	5	80.4	34.0	0.69	0.54
MH20AC015	19	24	5	37.1	52	26	79.6	34.3	0.83	0.77
MH20AC016	7	12	5	32.5	32	48	81.1	32.5	1.26	0.41
MH20AC016	12	15	3	33.9	54	26	79.5	33.1	1.86	0.47
MH20AC017	7	10	3	34.9	89	0	76.5	34.8	0.51	0.72
MH20AC017	10	14	4	41.2	90	0	83.3	35.9	0.24	0.63
MH20AC017	14	19	5	48.7	91	0	85.7	36.5	0.17	0.71
MH20AC017	19	23	4	49.8	92	0	84.5	36.4	0.21	0.71
MH20AC017	34	38	4	40.3	80	1	74.5	33.8	0.43	0.81
MH20AC017	38	41	3	32.7	67	14	77.7	34.0	0.53	0.66
MH20AC017	41	45	4	28.9	41	29	78.2	32.0	0.37	0.88
MH20AC018	8	13	5	29.9	75	0	79.4	33.4	0.47	0.46
MH20AC018	13	18	5	37.8	80	0	84.0	34.9	0.40	0.54
MH20AC018	18	23	5	36.0	68	10	84.5	34.6	0.53	0.36
MH20AC019	8	11	3	39.5	91	0	74.6	33.7	1.03	1.14
MH20AC019	11	15	4	47.4	94	0	79.5	35.3	0.79	1.24
MH20AC019	15	19	4	47.3	84	8	79.3	34.1	0.80	1.36
MH20AC020	8	13	5	51.2	91	0	84.7	36.9	0.23	0.78
	_					0			0.23	0.78
MH20AC020	13	18	5	45.2	87		84.9	36.4		
MH20AC020	18	23	5	50.3	91	0	84.4	36.5	0.14	0.76 0.69
MH20AC020	23	26	3	58.5	91	0	84.6	36.9		
MH20AC020	40	43	3	42.1	84	0	79.5	35.4	0.21	0.78 0.85
MH20AC020	43	47	4	36.3	65	12	78.2	33.4		
MH20AC021	10	12	2	32.9	84	0	78.8	33.9	0.46	0.39
MH20AC021	12	17	5	44.1	88	0	84.8	36.5		
MH20AC021	17	21	4	41.5	88	0	85.9	36.8	0.19	0.61
MH20AC021	21	24	3	44.3	61	23	83.9	35.5	0.60	0.56
MH20AC022	19	21	2	37.6	75	0	70.5	35.5	0.63	1.58
MH20AC022	21	25	4	40.5	62	24	80.3	36.0	0.59	0.94
MH20AC023	8	11	3	29.2	86	0	78.4	32.4	0.50	0.52
MH20AC023	11	15	4	50.9	90	0	83.9	35.6	0.21	0.70
MH20AC023	15	18	3	46.2	88	0	82.2	36.1	0.27	0.61
MH20AC023	18	20	2	43.8	85	0	81.0	35.2	0.44	0.35
MH20AC024	6	9	3	29.9	90	0	76.3	33.8	0.43	0.32
MH20AC024	9	14	5	49.4	92	0	85.0	36.3	0.23	0.65
MH20AC024	14	19	5	48.1	91	0	84.7	36.2	0.23	0.72
MH20AC024	19	24	5	38.9	50	34	80.4	35.0	0.49	0.78
MH20AC024	24	28	4	42.5	60	21	77.4	33.9	0.71	0.72
MH20AC025	5	7	2	30.4	82	0	73.3	31.5	1.10	0.94
MH20AC025	7	12	5	43.0	79	0	79.4	33.4	0.66	0.60
MH20AC025	12	17	5	55.1	88	0	78.5	36.0	0.43	0.56
MH20AC025	17	21	4	48.9	88	0	83.9	36.7	0.24	0.68
MH20AC025	21	25	4	36.4	67	9	82.7	34.4	0.37	0.73
MH20AC025	25	30	5	28.5	43	30	82.0	33.7	0.64	0.68
MH20AC026	8	11	3	30.2	91	0	81.5	34.8	0.39	0.74
MH20AC026	11	15	4	53.0	92	0	86.8	36.8	0.17	0.61

Hole Id	Fro	То	Inter	Minus	Kaolinit	Halloysit	Reflectanc	Al2O3	Fe2O3	TiO2
	m (m)	(m)	val (m)	45μm (%)	e (%)	e (%)	e (ISO B)	(%)	(%)	(%)
MH20AC026	` '	` '	` '	, ,		0		` '		0.68
	15	19	4	47.7	90	_	85.8	36.3	0.21	3.14
MH20AC026	19	21	2	49.7	91	0	74.4	36.3		
MH20AC026	39	41	2	42.0	80	0	76.8	33.3	0.59	0.70 0.73
MH20AC026	41	45	4	39.5	69	7	75.5	33.5		
MH20AC027	13	17	4	40.7	87	0	81.1	34.8	1.02	0.38
MH20AC027	17	21	4	40.2	83	0	80.5	34.0	1.12	0.56
MH20AC027	21	25	4	46.2	81	3	81.6	34.0	1.33	0.55
MH20AC028	7	10	3	29.4	92	0	78.5	34.0	0.24	1.44
MH20AC028	10	14	4	43.3	94	0	82.8	36.6	0.17	1.07
MH20AC030	8	12	4	38.9	81	0	83.8	35.2	0.60	0.34
MH20AC030	12	16	4	42.4	91	0	84.1	34.7	0.46	0.43
MH20AC030	16	20	4	53.8	74	7	85.8	36.3	0.17	0.47
MH20AC030	20	22	2	46.7	64	25	80.2	36.4	0.31	0.44
MH20AC030	22	26	4	44.6	85	0	81.4	35.1	0.69	0.69
MH20AC031	8	13	5	26.9	77	0	70.2	35.3	0.39	1.75
MH20AC031	13	18	5	42.6	84	0	83.0	36.5	0.23	0.52
MH20AC031	18	23	5	48.2	87	0	81.2	36.4	0.27	0.53
MH20AC031	23	27	4	46.4	88	0	83.8	37.1	0.34	0.45
MH20AC032	11	16	5	37.6	88	0	83.1	34.9	0.24	0.61
MH20AC032	16	21	5	35.4	79	0	83.8	34.8	0.31	0.73
MH20AC032	21	26	5	39.0	80	0	79.2	34.3	0.34	0.68
MH20AC032	26	31	5	42.6	84	0	84.4	35.8	0.26	0.65
MH20AC032	31	34	3	42.7	86	0	79.9	35.8	0.37	0.65
MH20AC032	40	44	4	36.7	73	0	82.2	33.5	0.36	0.73
MH20AC032	44	48	4	39.6	76	0	81.5	34.0	0.34	0.87
MH20AC033	11	16	5	44.5	81	0	80.3	35.4	0.94	0.72
MH20AC033	16	19	3	33.6	76	0	81.6	34.6	0.77	0.63
MH20AC035	10	14	4	49.0	85	0	80.5	33.5	0.49	0.61
MH20AC035	14	19	5	50.6	89	0	80.5	35.8	0.41	0.70
MH20AC035	19	23	4	45.9	71	16	80.5	35.4	0.51	0.67
	23								0.51	0.61
MH20AC035		26	3	38.5	59	24	80.3	34.6		
MH20AC035	31	34	3	33.3	56	17	74.9	32.3	0.51 1.00	0.88 1.81
MH20AC036	8	11	3	77.8	93	0	75.0	35.0		
MH20AC036	11	14	3	64.9	87	6	69.9	34.5	1.30	1.61
MH20AC037	13	18	5	49.8	86	0	80.7	34.9	0.81	0.72 0.75
MH20AC037	18	23	5	48.0	83	4	79.5	35.1		
MH20AC037	23	28	5	37.5	81	5	81.4	35.6	0.79	0.70
MH20AC037	28	30	2	46.4	72	13	75.8	36.1	0.56	0.22
MH20AC037	30	35	5	36.3	71	11	80.9	35.1	0.54	0.65
MH20AC037	35	39	4	30.3	75	4	81.2	34.0	0.40	0.83
MH20AC037	39	42	3	34.0	82	0	82.1	34.6	0.29	0.83
MH20AC038	9	13	4	43.7	88	0	84.2	36.2	0.23	0.65
MH20AC038	13	18	5	45.3	88	0	84.9	36.1	0.20	0.73
MH20AC038	18	23	5	46.0	88	0	84.9	36.6	0.19	0.74
MH20AC038	23	27	4	47.8	89	0	83.8	36.5	0.23	0.74
MH20AC038	27	30	3	41.7	85	0	79.0	35.6	0.43	0.72
MH20AC038	30	33	3	40.0	81	0	65.8	34.1	0.81	0.69

Hole Id	From	То	Interval	Minus 45μm	Kaolinite	Halloysite	Reflectance	Al203	Fe2O3	TiO2
	(m)	(m)	(m)	(%)	(%)	(%)	(ISO B)	(%)	(%)	(%)
MH20AC038	33	38	5	42.2	82	0	77.9	34.6	0.36	0.78
MH20AC038	38	43	5	32.7	67	10	78.9	34.0	0.43	0.32
MH20AC039	7	10	3	46.6	86	0	86.4	35.8	0.39	0.36
MH20AC039	10	14	4	45.8	91	0	85.8	37.1	0.30	0.58
MH20AC039	14	18	4	46.3	91	0	85.7	37.0	0.24	0.48
MH20AC039	18	21	3	44.0	87	0	82.7	35.9	0.36	0.61
MH20AC039	26	28	2	40.0	83	0	78.6	35.0	0.61	0.69
MH20AC039	30	35	5	38.9	82	0	81.4	34.9	0.30	0.79
MH20AC039	35	40	5	28.1	75	0	77.5	34.1	0.50	0.93
MH20AC039	40	43	3	19.0	59	0	76.1	31.2	0.49	1.14
MH20AC040	7	12	5	42.0	88	0	80.6	36.0	0.97	0.43
MH20AC040	12	17	5	41.4	86	0	81.4	35.8	0.97	0.39
MH20AC040	17	22	5	44.4	85	0	80.5	35.0	1.06	0.46
MH20AC040	22	27	5	49.0	85	0	81.1	34.6	0.94	0.42
MH20AC040	27	32	5	46.8	86	0	81.5	35.0	0.92	0.44
MH20AC040	32	37	5	46.5	87	0	83.0	35.9	0.73	0.30
MH20AC040	37	42	5	47.6	86	0	81.5	35.5	0.84	0.51
MH20AC040	42	43	1	44.9	86	0	80.7	35.5	1.00	0.55
MH20AC040	43	48	5	43.5	87	0	81.9	36.3	0.87	0.32

# **JORC Code, 2012 Edition – Table 1 Mt Hope Kaolin Deposit**

### **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 consists of Aircore drilling to produce chip samples representing 1m of drilled material. Samples are composited to between 1 and 5m via riffle splitting to logged kaolinised gneiss intervals. Sample processing includes wet sieving to the -45micron fraction. Analysis of this fine -45micron fraction includes measuring reflectance, XRF analysis for element composition and XRD analysis for mineral species abundance including Halloysite testing which was completed at CSIRO.</li> <li>Aircore drilling of vertical holes to industry standard overseen by Andromeda Metals ("ADN") generating 1m chip samples. A total of 40 holes for 1,382.7m completed in May 2020. Drilling penetrated beyond the kaolin to partially decomposed gneiss parent. Maximum drilling depth is 48m.</li> <li>Samples composited based on logged kaolinised gneiss intervals. Composite intervals range from 1-5m.</li> <li>Sample compositing was carried out at a processing facility at Cummins, South Australia. Samples were then transferred to a commercial laboratory, Bureau Veritas, in Adelaide for processing.</li> <li>Kaolin is a white, weathered clay product easily distinguished in drilling. The mineralisation forms a flat lying blanket atop partially decomposed gneiss. Cover material comprises alluvial clays and sands and calcrete. The kaolin is capped by a silicified zone generally logged as 1m thick.</li> </ul>
Drilling techniques	<ul> <li>Drill type (e.g. core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (e.g. core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).</li> </ul>	<ul> <li>Drilling completed by McLeod Drilling using an MD1 Almet drill rig. The sampled metres were completed with 77mm diameter aircore drilling technique.</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>All metre bags that were sampled had their weights recorded before splitting and compositing for assay purposes. With few exceptions, samples recovered were dry with good recoveries. The depth of penetration of the drill bit was noted and the downhole interval recorded for each aircore sample.</li> <li>Sample recovery is expected to have minimal negative impact on samples collected.</li> <li>There was no obvious evidence of bias in the samples.</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 drill samples were logged by an experienced geologist on-site at the time of drilling. Observations on lithology, colour, degree of weathering, moisture, mineralisation and alteration for sampled material were recorded.</li> <li>All relevant intersections were logged.</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 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> <li>Preparation of minus 2 micron fraction for analysis</li> </ul>	<ul> <li>Riffle split sample compositing consisted of contiguous 1m drill samples up to 5m in total length, based on drill logs and visual estimation of whiteness of material. Sample composites were prepared with the aim of including kaolinised gneiss of similar quality within each composite, although in some cases narrow bands of discoloured kaolinised gneiss were included in the composite to determine if poorer quality could be carried within the interval. Each metre bag drill sample was weighed before splitting.</li> <li>Sample riffle splitting took place in a processing shed at Cummins in sterile conditions. The samples were run through a 3 tier splitter to compile composite samples of between 2 and 4kg in weight.</li> <li>Samples were processed by laboratory Bureau Veritas. Sample weights are recorded before any sampling or drying. Samples are dried at low temperature (60C) to avoid destruction of halloysite. The dried sample is then pushed through a 5.6mm screen prior to splitting.</li> <li>A small rotary splitter is used to split an 800g sample for sizing.</li> <li>The 800g split is then wet sieved at 180μm and 45μm. The +180 and +45μm fractions are filtered and dried with standard papers then photographed. The -45μm fraction is filtered and dried with 2micron paper.</li> </ul>

		<ul> <li>A small portion of the -45μm material is split for XRF analysis and 4x100gm reserves are retained by Andromeda.</li> <li>At CSIRO, Division of Land and Water, Urbrae, South Australia testing was conducted on selected -45μm samples by the method below.</li> <li>The dried -45μm and -2μm sample set was analysed for quantitative elemental and mineralogical testing (including kaolinite:halloysite ratio estimation) by XRD. A 2 gram subsample was micronised, slurried, spray dried and a spherical agglomerated sample prepared for XRD. Quantitative analysis of the XRD data was performed by CSIRO using SIROQUANT and Halloysite:Kaolinite proportions determined using profile fitting by TOPAS, calibrated by SEM point counting of a suite of 20 standards.</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>Drill sample analysis is undertaken by Bureau Veritas Minerals Pty Ltd, Wingfield. NATA accreditation number: 626 site number 1519, ISO/IEC 17025:2005.</li> <li>No geophysical tools were used to estimate mineral or element percentages. Andromeda utilises hand-held XRFs to aid geological interpretation.</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>Simon Tear, a consulting geologist from H&amp;S Consultants, completed a one-day site visit at Andromeda's Carey Well deposit whilst drilling was in progress; this included discussion on the initial sample processing. The same drilling and sampling methods as well as sample preparation and analyses that are used at Carey's Well were also used for the Mt Hope drilling program.</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>All drill collar locations had survey pick up done by GNSS (Global Navigation Satellite System). Collar surveys were completed by licensed surveyor Steven Townsend of P.A. Dansie &amp; Associates using a Leica 1200 RTK (Real Time Kinematic) System with horizontal accuracy of +/- 20mm and vertical accuracy of +/- 20mm.</li> <li>Grid projection is MGA94 Zone 53.</li> </ul>

		<ul> <li>No downhole surveys have been completed – all holes are vertical and &lt;50m deep</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>	Sample splitting took place in the Cummins shed in sterile conditions.  The samples were run through a 7:1 3 tier splitter to compile composite samples of between 2 and 4kg in weight.
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>Vertical drilling generally achieved a very high angle of intercept with the flat-lying, stratabound mineralisation.</li> <li>Drilling orientations are considered appropriate with no obvious bias.</li> </ul>
Sample security	The measures taken to ensure sample security.	<ul> <li>Drill samples were collected by Andromeda personnel and delivered to the Cummins shed. After the samples were riffle split and composited, they were collected by Eyre Peninsular Freight Service from Cummins who then transported the samples to Bureau Veritas in Adelaide. Once Bureau Veritas had split to a subset sample splits were collected by ADN staff and delivered to CSIRO for XRD testing.</li> </ul>
Audits or reviews	<ul> <li>The results of any audits or reviews of sampling techniques and data.</li> </ul>	<ul> <li>No external audits or reviews of modelling techniques and data have been 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</li> </ul>	<ul> <li>The Mt Hope Kaolin Project (Exploration Licence) is located on EL5814.</li> <li>There are no non-government royalties due.</li> <li>The underlying land title is freehold that extinguishes Native Title.</li> <li>There are no known historical sites within the Carey's Well/Poochera</li> </ul>
	settings.	area which preclude exploration or mineral development.

Criteria	JORC Code explanation	Commentary
	<ul> <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 tenement is secure and compliant with Government of South Australia Department for Energy and Mining requirements at the date of this report.</li> </ul>
Exploration done by other parties	<ul> <li>Acknowledgment and appraisal of exploration by other parties.</li> </ul>	<ul> <li>The general area that is the subject of this report has been explored for kaolinitic products in the past by Abaleen Resources, Loch Shiel and South Australian Kaolin and has been reviewed by AND.</li> <li>The area has also been explored by CRA, Stockdale Prospecting, Lynch Mining and Monax Mining for other commodities.</li> </ul>
Geology	<ul> <li>Deposit type, geological setting and style of mineralisation.</li> </ul>	<ul> <li>Kaolin deposits, such as Mt Hope were developed in situ by lateritic weathering of the Archaen Sleaford Complex gneiss.</li> <li>The resultant kaolin deposit at Mt Hope is a sub-horizontal zone of kaolinised gneiss resting with a fairly sharp contact on unweathered gneiss. The kaolinised zone is overlain by loosely consolidated Tertiary and Quaternary sediments.</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 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>A listing of the drill hole information material to the understanding of the exploration results is provided in the body and appendices of this announcement.</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</li> </ul>	<ul> <li>Samples are composited based on geological logging, no data aggregation has been undertaken.</li> <li>Maximum or minimum grade truncations have not been applied.</li> <li>No metal equivalent values have been quoted.</li> </ul>

Criteria	JORC Code explanation	Commentary
	<ul> <li>should be stated and some typical examples of such aggregations should be shown in detail.</li> <li>The assumptions used for any reporting of metal equivalent values should be clearly stated.</li> </ul>	
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>Drill hole angle relative to mineralisation has been almost perpendicular, with vertical drillholes through flat horizontal mineralisation related to the regolith. Generally, the stratabound intercepts are close to true width.</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>	<ul> <li>Appropriate maps and tabulations are presented in the body of the announcement. Sections not required as kaolinsed gneiss is a consistent flat lying regolith unit across the prospects with varying thickness as shown in the plan views</li> </ul>
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>	Comprehensive results are reported.
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>	All material results are reported in this release.
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>Andromeda is currently working on a resource estimate to determine the scale and nature of the Mt Hope deposit.</li> </ul>