

ASX: VMM MARKET ANNOUNCEMENT

Thick Intercepts of High-Grade Kaolinite Confirmed at Poochera

ASX Release: 28 November 2022

Highlights

- Laboratory analysis of selected aircore drill material from the newly discovered Philips Kaolin Deposit confirms presence of high grade kaolinite at Poochera
- ➤ Thirteen selected intervals from three dispersed drillholes were examined and the average for the minus 45 micron fraction was 92% kaolinite and a brightness of 89 (L*D65). The minus 45 micron fraction averaged 45% of the raw material.
- Discovery marks the first confirmation of kaolinite mineralisation within the newly discovered Philips Kaolin Deposit, north from Karcultaby in the central part of the Poochera Project tenement (EL6733)
- ▶ Drilling to date has identified thick zones of kaolin >30m in multiple drill holes; sampling has returned over 38 metres of mostly >90% kaolinite (<45um fraction) for drillhole VM22-022.</p>
- ▶ The Company continues to plan for Stage 2 drilling at Poochera which is expected to comprise of 2,000 metres early in 2023.

Viridis Mining and Minerals Limited (**ASX: VMM**) ("**Viridis**" or the "**Company**") is pleased to provide an update to the market on initial laboratory results from the maiden aircore drilling program at the Poochera Project located on the Eyre Peninsula in South Australia (see ASX announcement 31 October 2022).

The Poochera Project comprises one 100% owned exploration licence (EL6733), which covers an area of 329km² in the Eyre Peninsula of South Australia.

Viridis completed a 55-hole drill program at Poochera for a total of 1,686m in October 2022, with composite samples sent to Bureau Veritas (Adelaide) and other specialised laboratories (see ASX announcement 31 October 2022).





Figure 1. Location of Philips Kaolin Deposit

Figure 2. Drillhole locations. Drillholes sampled shown in yellow

An initial batch of 13 samples was sent to the James Hutton Institute in Scotland, a well-respected and globally recognised institution offering high-quality mineral analysis for kaolinite and halloysite identification and qualification. The current testing was on selected samples collected at five or ten metre spacing over three separated drillholes. The three drillholes sampled extend over a distance of four kilometres in total apart. These were subsampled by spearing while drilling was still progressing to enable faster availably of results.

After standard wet sieving to minus 45 micron the kaolin clay was subjected to quantitative mineral analyses by X-ray powder diffraction (XRPD) patterns with normalised full pattern reference intensity ratio (RIR) method used. The James Hutton Institute also used a Minolta CM2600d Colour Spectrophotometer for the objective quantification of colour by measuring spectral reflectance under standard illuminant D65 (average daylight conditions).

The percentage of material <45µm ranged from about 21 to just over 60%. XRPD analysis showed that the fine fraction of all thirteen samples is dominated by kaolinite with excellent 76.7 to 97.8 wt.%. The depth interval between samples was approximately five metres for drillhole VM22-008 and VM22-017 and 10 metres for drillhole VM22-022. Drillhole VM22-008 showed the best average values with 95% kaolinite within the 55% minus 45 micron fraction. This was from three 1m (plus one duplicate) and one 2m sample over a total of 14 metres. Drillhole VM22-022 had the best colour brightness and very similar kaolinite content over an impressive 39 metres.

The occurrence of halloysite is often restricted to certain depths or areas within a kaolin deposit. While the current samples did not contain any detectable halloysite this does not preclude the occurrence within other portions of the large Philips Kaolin Deposit. The three drill holes sampled are over a distance of four kilometres in total apart (see Figure 2) and only selected samples collected at five or ten metre spacing. All the kaolin bearing samples are now in Adelaide and systematic testing will be conducted.



		Depth	Depth	Interval	Fraction	L*		Mineral concentration % within minus 45 micron fraction						
Sample	Drillhole	from m	to m	metre	<45um %	(D65)	Kaolinite	Quartz	Plagioclase	K-feldspar	Calcite	Halite	Muscovite	Mica
VK-002	VM22- 008	34	35	1	63.0	89.64	97.8	1.3	0.2	0	0.1	0.4	0	0.2
VK-005	VM22- 008	39	41	2	50.3	86.75	97.4	2.4	0.1	0	0	0.1	0	0
VK-008	VM22- 008	44	45	1	49.0	88.02	97.2	2.2	0.2	0	0	0.4	0	0
VK-018	VM22- 008	44	45	1	50.9	89.45	96.8	2.3	0.2	0	0.1	0.6	0	0
VK-011	VM22- 008	48	49	1	60.5	82.73	86.1	2.9	0.1	0.1	8.6	0.3	0.8	1.1
VK-019	VM22- 017	14	15	1	53.9	92.99	97.5	2	0	0	0	0.5	0	0
VK-020	VM22- 017	19	20	1	39.8	88.66	90.6	3.3	0	5.5	0.1	0.4	0	0.1
VK-021	VM22- 017	24	25	1	21.4	86.17	76.7	4.4	0.2	12.5	0.2	0.6	4.6	0.8
VK-022	VM22- 022	12	13	1	29.5	92.48	95.6	1.7	0.5	0.7	0.1	0.9	0	0.5
VK-023	VM22- 022	20	21	1	48.9	91.09	95.4	3.3	0.3	0.1	0.1	0.6	0	0.2
VK-024	VM22- 022	30	31	1	45.6	90.34	94.9	4	0	0	0	1.1	0	0
VK-025	VM22- 022	40	41	1	28.3	89.33	86.1	5.4	0.4	6.6	0	1.4	0	0.1
VK-026	VM22- 022	50	51	1	40.8	91.14	87.6	4.1	0	7.4	0	0.9	0	0

Table 1. Philips Kaolin Deposit laboratory analysis results. Green shading shows field duplicate sample results.

Commenting on the sampling program results, VMM's Executive Chairman Mr Agha Shahzad Pervez said: "We are extremely pleased to report the discovery of high grade-kaolinite from the maiden drill program at the Poochera Project, which aligns with the Company's strategy to define high value mineral products for large-scale applications."

This announcement has been authorised for release by the Board.

Contacts

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About Viridis Mining and Minerals

Viridis Mining and Minerals Limited is a resource exploration and development company with assets in Canada and Australia. The Company's Projects comprise of:

- The South Kitikmeot Project, which the Company considers to be prospective for gold;
- The Boddington West Project, which the Company considers to be prospective for gold;
- The Bindoon Project, which the Company considers to be prospective for nickel, copper and platinum group elements; and
- The Poochera and Smoky Projects, which the Company considers to be prospective for kaolin-halloysite.



Competent Persons Statements

The information in this document that relates to the Smoky and Poochera projects has been prepared with information compiled by Steven Cooper, FAusIMM. Mr Steven Cooper is the principle of Orogenic Exploration Pty Ltd appointed by the Company. Mr Steven Cooper has sufficient experience which 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'. Mr Steven Cooper consents to the inclusion in the announcement of the matters based on his information in the form and context in which it appears.

Forward Looking Statements

This announcement 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', '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.

Drillhole	Easting	Northing	Elevation	Azimuth	Dip	Total Depth	Number of samples
VM22-008	495350	6380742	118	0	-90	63	4 (plus one repeat)
VM22-017	498003	6382803	141	0	-90	32	3
VM22-022	497673	6381202	136	0	-90	60	5

Table 2. Collar details on the three drillholes sampled.





Figure 3. Chip Tray VM22-008. One metre samples tested marked with green.

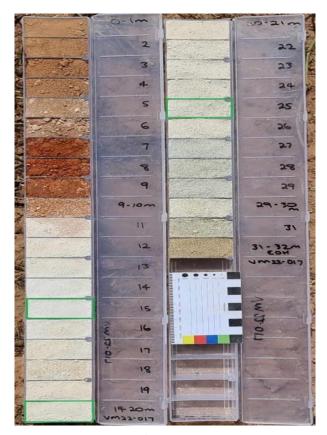


Figure 4. Chip Tray VM22-017





Figure 5. Chip Tray VM22-022



Figure 6. Onsite spearing of sample for lab analysis





Figure 7. Drill site VM22-008 during drilling



Figure 8. Rehabilitated and cleaned drill site VM22-008 three hours after drill rig had vacated.



JORC Code, 2012 Edition – Table 1 report template

Section 1 Sampling Techniques and Data

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

Criteria	JORC Code explanation	Commentary
Sampling techniques	 Nature and quality of sampling (eg cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as down hole gamma sondes, or handheld XRF instruments, etc). These examples should not be taken as limiting the broad meaning of sampling. Include reference to measures taken to ensure sample representivity and the appropriate calibration of any measurement tools or systems used. Aspects of the determination of mineralisation that are Material to the Public Report. In cases where 'industry standard' work has been done this would be relatively simple (eg 'reverse circulation drilling was used to obtain 1 m samples from which 3 kg was pulverised to produce a 30 g charge for fire assay'). In other cases more explanation may be required, such as where there is coarse gold that has inherent sampling problems. Unusual commodities or mineralisation types (eg submarine nodules) may warrant disclosure of detailed information. 	 All samples were collected from the aircore blade drilling, through a cyclone directly into plastic bags below at one metre intervals. Selected initial sampling based on visual identification of kaolin clay preparation was carried in the field by spearing. This was completed by laying the bag on its side and recovering an entire cross cutting representative sample through the entire thickness of each one meter interval. An appropriate diameter PVC tube was used to spear approximately 200g into numbered small plastic bags, which were sent for kaolinite and halloysite analyses. The sample sizes are considered appropriate for the material being sampled The Competent Person has reviewed referenced publicly sourced information through the report and considers that sampling was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.
Drilling techniques	Drill type (eg core, reverse circulation, open-hole hammer, rotary air blast, auger, Bangka, sonic, etc) and details (eg core diameter, triple or standard tube, depth of diamond tails, face-sampling bit or other type, whether core is oriented and if so, by what method, etc).	 McLeod Drilling used a Reverse Circulation Aircore drill rig mounted on a 6-wheel drive Toyota Landcruiser. Aircore drilling uses an 76mm aircore bit with 3 tungsten carbide blades and is a form of reverse circulation (RC) drilling where the sample is collected at the face and returned inside the inner tune. The drill cuttings are removed by the injection of compressed air into the hole via the annular area between the inner tube and the drill rod. Aircore drill rods are 3 metre NQ rods. All aircore drill holes were between 14m and 63m in length. The Competent Person has inspected the drilling program and considers that drilling techniques was commensurate with industry standards current at the time of drilling and is appropriate for the indication of the presence of mineralisation.
Drill sample recovery	 Method of recording and assessing core and chip sample recoveries and results assessed. 	 All initial one metre interval samples will be weighted to check consistency.

Criteria	JORC Code explanation	Commentary
	 Measures taken to maximise sample recovery and ensure representative nature of the samples. 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. 	 All efforts were made to ensure the sample was representative. No relationship is believed to exist between sample recovery and grade, but no work has been completed to confirm this.
Logging	 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. Whether logging is qualitative or quantitative in nature. Core (or costean, channel, etc) photography. The total length and percentage of the relevant intersections logged. 	 All samples were geologically logged to include details such as colour, grain size, rock type etc which is naturally qualitative in nature. All samples have quantitative magnetic susceptibility and pXRF measurements taken to support the geological logging. Representative chip tray samples of all intervals were collected and photographed. All initial drill samples were one metre vertical intervals.
Sub-sampling techniques and sample preparation	 If core, whether cut or sawn and whether quarter, half or all core taken. If non-core, whether riffled, tube sampled, rotary split, etc and whether sampled wet or dry. For all sample types, the nature, quality and appropriateness of the sample preparation technique. Quality control procedures adopted for all sub-sampling stages to maximise representivity of samples. 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. Whether sample sizes are appropriate to the grain size of the material being sampled. 	 All drill chip samples were collected through a cyclone into plastic bags at 1 metre intervals during drilling, and then sub-sampled into ~200g samples within numbered plastic bags, which have been sent for analyses. A full profile of each one metre bag contents was subsampled by spearing to ensure representivity. All samples were moist soft non-sticky clay characteristic of kaolin. Samples were initially selected based on visual examination of the drillhole samples with the aim of including kaolinised saprolite of similar quality within each composite. If spear samples are composited then they shall consist of contiguous one metre drill samples up to a maximum of 3 meter in total length. Sample sizes are appropriate to the clay grain size of the material being sampled. All samples will be weighted.
Quality of assay data and laboratory tests	 The nature, quality and appropriateness of the assaying and laboratory procedures used and whether the technique is considered partial or total. 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. Nature of quality control procedures adopted (eg standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (ie lack of bias) and precision have been established. 	 Thirteen (including one duplicate) selected drill samples were submitted to the James Hutton Institute in Aberdeen, Scotland. The James Hutton Institute measured by advanced XRD methods the kaolinite and halloysite content of the kaolin samples. All results are based on the minus 45 micron wet screened fraction. Bulk quantitative analysis samples are wet ground for 12 minutes (in ethanol or water) in a McCrone mill and spray dried to produce random powder specimens. X-ray powder diffraction (XRPD) patterns are typically recorded over a range of 65°20 or more using either Cu or Co radiation, the actual range being instrument dependent is given on the scans. Quantitative analysis is made by a normalised full pattern

Criteria	JORC Code explanation	Commentary
		reference intensity ratio (RIR) method (Omotoso et al., (2006) and Butler & Hillier (2021). Unless stated otherwise, expanded uncertainty using a coverage factor of 2, i.e. 95% confidence, is given by ±X^0.35, where X = concentration in wt.%., e.g. 30 wt.% ±3.3 • A Minolta CM2600d Colour Spectrophotometer measured spectral reflectance over wavelengths in the range 360-740nm under standard illuminant D65 (average daylight conditions). Ceramic Colour Standard II (CCSII) tiles and a white colour standard tile from Ceram are measured under the same conditions before each set of analysis to ensure correct calibration. The tiles are calibrated by Ceram and a certificate from the UKAS accredited calibration laboratory No. 0013 is provided for each tile. • Two samples VK-008 and VK-018 were blind field duplicates of the same 44-45m interval from drillhole VM22-0008. Reported laboratory values were all within acceptable variance.
Verification of sampling and assaying	 The verification of significant intersections by either independent or alternative company personnel. The use of twinned holes. Documentation of primary data, data entry procedures, data verification, data storage (physical and electronic) protocols. Discuss any adjustment to assay data. 	 There was no use of twinned holes. Data is exploratory in nature and is compiled into in-house relational database. Original laboratory supplied pdf reports and spreadsheets will be retained.
Location of data points	 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. Specification of the grid system used. Quality and adequacy of topographic control. 	 The location of drill hole collar was undertaken using a hand-held Garmin multi-band GPS in averaging mode which has an accuracy of +/- 1m using UTM WSG94 Zone 53S. The quality and adequacy are appropriate for this level of exploration.
Data spacing and distribution	 Data spacing for reporting of Exploration Results. 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. Whether sample compositing has been applied. 	 The drilling was completed with an approximate 400 metre regular pattern and the collar location for the drilling is defined by access for the drill rig, geological parameters, and land surface. Data spacing and distribution are not sufficient to establish the degree of geological and grade continuity or for resource reporting. The data spacing only provides guide for future drill planning. Sample compositing if it has been applied is to a maximum of three metres.
Orientation of data in relation to	 Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. 	 It is believed that the drilling has intersected the geology at right angles; however, it is unknown whether the drill holes have interested the mineralisation in a perpendicular manner. The mineralised horizon is

Criteria	JORC Code explanation	Commentary
geological structure	 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. 	obscured by a veneer of transported material.It is believed no bias has been introduced due to drilling orientation.
Sample security	The measures taken to ensure sample security.	 All samples have been in the custody of VMM geological consultant since drilling. Sealed samples are transported to Adelaide within consultant vehicles and stored in a secured private property in Smithfield with no access from the public. Representative chip tray samples of all intervals were collected and photographed. Both the chip trays and photographs are stored securely. Best practices were undertaken at the time. Any residual sample material (pulps) will be stored securely
Audits or reviews	The results of any audits or reviews of sampling techniques and data.	None undertaken.

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	 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. 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. 	 Drilling was completed within Exploration Licences 6733, held 100% by Dig Ore Pty Ltd (a wholly owned subsidiary of VMM). Drilling details presented are all from EL6733. The tenement is in good standing with no known impediments.
Exploration done by other parties	Acknowledgment and appraisal of exploration by other parties.	 Relevant previous exploration has been undertaken by BHP Minerals Pty Ltd and Iluka Resources Ltd, both for mineral sands only in the area west from Cungena. This historical drilling was restricted to along roads and provides additional limited stratigraphic information. Newcrest drilled a number of holes over magnetic targets for base metal mineralisation exploration in 1997 within the current EL6733 area. The drill logs mention kaolin clay was present above basement. No sampling of the kaolin by Newcrest was undertaken.

Criteria	JORC Code explanation	Commentary
Geology	Deposit type, geological setting and style of mineralisation.	 The tenements are within the Gawler Craton, South Australia. VMM is exploring for kaolin and halloysite deposits and also possible associated ion adsorption clay (IAC) REE mineralisation. This release refers to kaolin related to lateritic weathering processes on basement rock of the Gawler Craton, in particular the Palaeoproterozoic Moody Suite granitic and the Sleaford and St Peter Suite granitic gneiss.
Drill hole Information	 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: easting and northing of the drill hole collar elevation or RL (Reduced Level – elevation above sea level in metres) of the drill hole collar dip and azimuth of the hole down hole length and interception depth hole length. If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case. 	 VMM completed a 55 drillhole program in October 2022 on the western Eyre Peninsula. Based on visual and pXRF data selected push tube samples from three drillholes has been dispatched to the laboratory. See main body of report for detailed drillhole information, All holes were vertical; all samples are one metre drill intervals composited to a maximum of three meters depending on appearance. Collar details on all 55 drillholes are provided in VMM ASX release dated 31 October 2022. The current James Hutton Institute samples were from drillholes: VM22-098 495350mE, 6380742mN, 63m total depth VM22-017 498003mE, 6382803mN, 32m total depth VM22-022 497673mE, 6381202mN, 60m total depth WSG84 zone 53S datum.
Data aggregation methods	 In reporting Exploration Results, weighting averaging techniques, maximum and/or minimum grade truncations (eg cutting of high grades) and cut-off grades are usually Material and should be stated. 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. 	If aggregated results are presented (results over more than one metre) then they are downhole sample length weighted averages with no lower or upper limit cut-off applied.
Relationship between mineralisation widths and	 These relationships are particularly important in the reporting of Exploration Results. If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. If it is not known and only the down hole lengths are reported, there should be a clear statement to this effect (eg 'down hole length, true 	 All holes are believed to intersect the mineralisation at 90 degrees and therefore represent true widths All intercepts reported are down hole lengths

Criteria	JORC Code explanation	Commentary
intercept lengths	width not known').	
Diagrams	 Appropriate maps and sections (with scales) and tabulations of intercepts should be included for any significant discovery being reported These should include, but not be limited to a plan view of drill hole collar locations and appropriate sectional views. 	See main body of report.
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. 	 All other relevant data has been reported. The reporting is considered to be balanced. Where data has been excluded, it is not considered material.
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. 	 The target areas have been the subject of no previous direct kaolin exploration. The reported visual results of kaolin clay are the first received from the drilling program sample examination. The drillhole selection was not systematic as other drillholes were not completed at the time. All relevant exploration data has been included in this report
Further work	 The nature and scale of planned further work (eg tests for lateral extensions or depth extensions or large-scale step-out drilling). Diagrams clearly highlighting the areas of possible extensions, including the main geological interpretations and future drilling areas, provided this information is not commercially sensitive. 	 Further examination of drill hole samples is progressing. To speed the receipt of results samples will be sent to separate laboratories. Further exploration drilling is required.