Mineral Exploration
High Purity Alumina

ACN: 123 993 233

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Halloysite identified on Eyre Peninsula HPA Project

Highlights

- Halloysite reported at both Kelly Tank and Bunora prospects, within Archer's Eyre Peninsula High Purity Alumina Project (EPHPA Project).
- Recent fieldwork confirms the presence of High Purity Alumina (HPA) outside of the area of the Exploration Target.
- Mineralisation outcrops and is easily accessed.
- Archer has submitted samples taken during recent site visit for analysis, with results expected in the coming weeks.

Archer Exploration Limited ("Archer", "Company") is pleased to provide this update on the Company's 100% owned Eyre Peninsula High Purity Alumina Project ("EPHPA Project") located 12km south of Kimba, South Australia. The EPHPA Project area is approximately 150km south-east of Andromeda Metals Ltd (ASX:ADN) Poochera Project and is within proximity to existing power, water, road, rail and other critical infrastructure.

A review of historical reports for the EPHPA Project by Pechiney (Australia) Exploration Pty Ltd ("Pechiney") identified the presence of halloysite in composite sampling work undertaken at both Bunora and Kelly Tank. Halloysite is a naturally occurring kaolin mineral that forms as a hollow tubular structure. Halloysite is special due to its tubular structure and has traditionally been used in the manufacture of porcelain, fine china and bone china. The tubular structure of halloysite allows it to be filled with a variety of active ingredients that can benefit from slow-release, these include: personal care products, pharmaceuticals, pesticides and cosmetics. Halloysite has also been used as a petroleum cracking catalyst.

In addition to the confirmation of the presence of halloysite, a recent site visit by Archer confirmed the presence of outcropping kaolin outside of the area of the Kelly Tank and Bunora Exploration Target. The presence of halloysite and kaolin in areas previously not identified by the Company gives the Company confidence in the potential of the EPHPA. Samples were collected and have been submitted for analysis with results expected in the coming weeks.

Commenting on the EPHPA Project, Archer Executive Chairman Greg English said, "The confirmation of the presence of halloysite at both Kelly Tank and Bunora confirms our view on the prospectivity of the EPHPA Project."

"The presence of widespread kaolin outside of the area of the Kelly Tank and Bunora Exploration target provides us with multiple new targets for testing. We appear to be only scratching the surface with the EPHPA Project with the area of the outcropping mineralisation much larger than originally thought." said Mr English.

Photo 1: Looking North from the main road toward a council pit and stockpiles of white kaolin

Background

Archer has previously announced an Exploration Target of 55Mt – 130Mt at a grade of 33 – 36% Al_2O_3 (-53 µm size fraction) at Kelly Tank and Bunora (ASX announcement 19 August 2019). The Exploration Target only includes the Kelly Tank and Bunora kaolin prospects (Fig. 1) and does not include other known kaolin occurrences within Archer's Eyre Peninsula tenement area. Investors should be aware that the potential quantity and grade of the Exploration Target is conceptual in nature, there has been insufficient exploration to estimate a Mineral Resource and it is uncertain if further exploration will result in the estimation of a Mineral Resource.

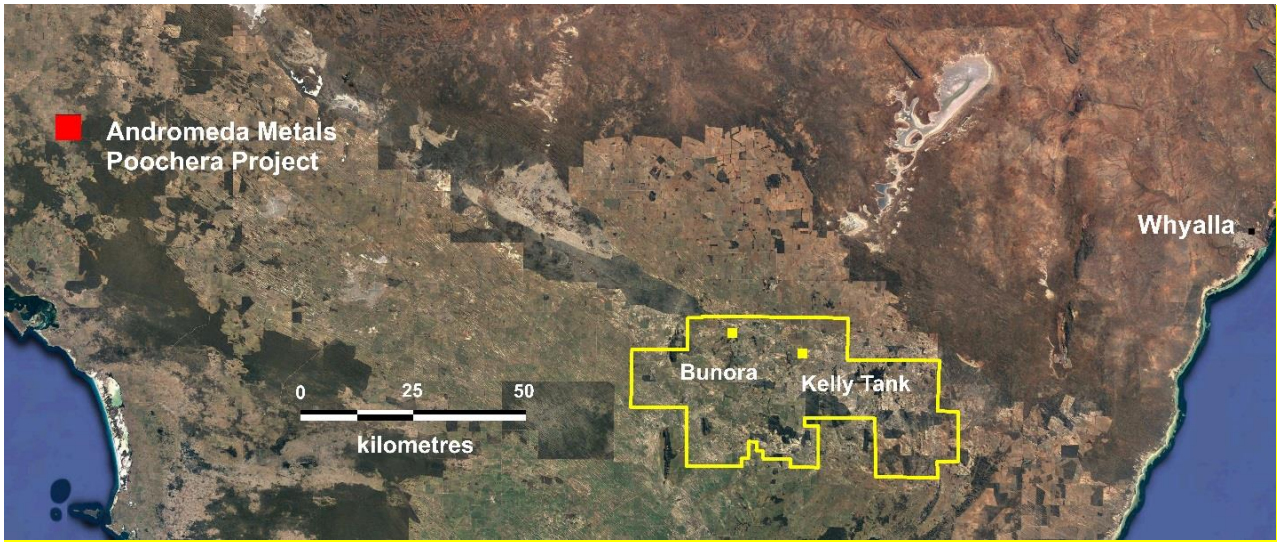

Fig. 1. EPHPA Project location map.

The EPHPA Project is ideally situated close to existing rail, power, gas and other significant infrastructure which will aide further exploration and possible project development. The EPHPA Project area is approximately 150km south-east of Andromeda Metals Ltd (ASX:ADN) Poochera Project and approximately 150km by road from the Whyalla port.

Recent exploration

On a recent site visit the Company observed the presence of outcropping kaolin and collected some rock chip samples from the EPHPA Project area. These samples have been submitted for analysis with the results expected in the coming weeks.

The photos below, taken by Archer during the recent site visit, show the presence of kaolin within council borrow pits, road cuttings, dams and within paddocks. The kaolin appears to be more widespread than originally thought and the Company intends to explore the area once all landowner consents and government approvals are in place.

Fig. 2. Google Earth image showing outcropping kaolin (white colour) and Pechiney historic exploration trench T3 within the Kelly Tank Project area.

Kelly Tank

Two samples were collected from the Kelly Tank area, one from the council borrow pit and the other from a nearby dam. These locations are close to trench (T3) (Fig. 2), which was excavated by Pechiney in the early 1970s to collect a bulk sample. It was at T3 where Halloysite was reported by Pechiney in a bulk sample. The samples taken by the Company are only bulk samples from the surface and drilling is required to determine the depth, grade and nature of the kaolin mineralisation.

Additional kaolin clays can be observed in paddocks under crop to the south of the Kelly Tank prospect (Photo 4). This area lies outside of the area of the Kelly Tank Exploration Target and provides support for additional kaolin and halloysite targets in this area.

Photo 2. Council borrow pit (looking south)

Photo 3. Inside council borrow pit (looking north)

Bunora

At Bunora, one sample was taken adjacent to the roadside (Photo 5) in which exposed kaolin can be seen extending along the road. This location is south of the area of the Bunora Exploration Target and provides support that additional kaolin and potentially halloysite can be discovered in this area.

Next Steps

The results of this work are expected within a couple of weeks, Scanning Electron Microscopy is being undertaken to determine the morphology of the kaolin, ie the presence of Halloysite. As landowners are contacted and access granted (the area is still under crop) steps will be taken to assess the kaolin potential in the district with a view to drill testing the Prospects.

Photo 4. Kaolin in paddocks, south of Kelly Tank.

Photo 5. Photo looking West along Barna – Bunora Road

For further information, please contact:

General Enquiries

Mr Greg English
Executive Chairman

Dr Mohammad Choucair
Chief Executive Officer

Tel: +61 8 8272 3288

For more information about Archer's activities, please visit our:

Website
https://archerx.com.au/

Twitter:
https://twitter.com/archerxau?lang=en

YouTube:
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Competent Person Statement

The information in this announcement that relates to Exploration Results is based on information compiled by Mr Wade Bollenhagen, a Competent Person who is a Member of the Australasian Institute of Mining and Metallurgy and is a full-time employee of Archer Exploration Limited.

Mr Bollenhagen 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". Mr. Bollenhagen consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

JORC Code, 2012 Edition – Table 1 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 (e.g. cut channels, random chips, or specific specialised industry standard measurement tools appropriate to the minerals under investigation, such as downhole 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 (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.	• Samples were large (5kg) grab samples taken at individual locations • Due to the grab nature they are not representative of the kaolin prospects, but do provide an indication only of the material being sampled.
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.).	• No drilling being reported.
Drill Sample Recovery	• Method of recording and assessing core and chip sample recoveries and results assessed. • 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.	• No drilling being reported.

Criteria	JORC Code Explanation	Commentary
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.	• No drilling being reported.
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.	• No drilling being reported..
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 (e.g. standards, blanks, duplicates, external laboratory checks) and whether acceptable levels of accuracy (i.e. lack of bias) and precision have been established.	• No drilling being reported. • Considerable work was undertaken during 1969 to 1972 by Penchiney on the kaolin it discovered • Particle size distribution and powder XRF was undertaken for mineralogy on drill and trench samples collected in 1969. • Sept 1970, Amdel test work on the brightness of the 53 µm fractions of trench material determined a range of 86% to 96%. • Nov-1971 to April_1972 Amdel work included size fractions and testing of size fractions of industrial clay use and by-product potential, these tests were directed at the 2 µm fraction. • No modern day work has been completed on the prospects.

Criteria	JORC Code Explanation	Commentary
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.	• No drilling being reported. • No verification of historical work has been undertaken by Archer. • In 1993, the SA government undertook a review of the kaolin deposits on the Eyre peninsula, Report Book 93/57, where this historical work is summarised.
Location of Data Points	• Accuracy and quality of surveys used to locate drillholes (collar and downhole surveys), trenches, mine workings and other locations used in Mineral Resource estimation. • Specification of the grid system used. • Quality and adequacy of topographic control.	• No drilling being reported.
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.	• No drilling being reported.
Orientation of Data in Relation to Geological Structure	• Whether the orientation of sampling achieves unbiased sampling of possible structures and the extent to which this is known, considering the deposit type. • 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.	• No drilling being reported. • The types of rocks that have been weathered to produce the kaolin cover very large aerial extents, far beyond the areas deemed exploration targets. • Faults and other fracture type systems can enhance local weathering, ie deepen the system, it is unknown what influence if any these have played in the kaolin development,
Sample Security	• The measures taken to ensure sample security.	• No drilling being reported.

Criteria	JORC Code Explanation	Commentary
Audits or Reviews	• The results of any audits or reviews of sampling techniques and data.	• No audits undertaken. • One review by the SA government in 1993 and summarised in Report book 93/57.

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.	• Tenement status confirmed on SARIG • All work being reported is from EL 5815 and ELA 2019/102, Archer Energy & Resources Pty Ltd (a subsidiary of AXE) owns the tenement. • The granted tenement is in good standing with no known impositions. • It is unknown if the ELA will be granted, however no reason can be seen for it not to be.
Exploration Done by Other Parties	• Acknowledgment and appraisal of exploration by other parties.	• Pechiney (1968 - 1971) and CSR (1971 – 1973). • WMC (CRA) mid 1980's, exploring for base metals. • Other explorers have held exploration licences over the ground up till the current date. Exploration has been for precious metals
Geology	• Deposit type, geological setting and style of mineralisation.	• Deep weathering of the Cleve Uplands, south of Kimba on northern Eyre Peninsula, has resulted in widespread kaolinisation of early Proterozoic Hutchinson Group schist and Lincoln Complex.

Criteria	JORC Code Explanation	Commentary
Drillhole 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 – Downhole length and interception depth – Hole length • If the exclusion of this information is justified on the basis that the information is not Material and this exclusion does not detract from the understanding of the report, the Competent Person should clearly explain why this is the case.	• No drilling being reported.
Data Aggregation Methods	• 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. • 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.	• No drilling being reported.
Relationship Between Mineralisation Widths and Intercept Lengths	• These relationships are particularly important in the reporting of Exploration Results. • If the geometry of the mineralisation with respect to the drill hole angle is known, its nature should be reported. • If it is not known and only the downhole lengths are reported, there should be a clear statement to this effect (e.g. 'downhole length, true width not known').	• No drilling being reported.
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.	• No drilling being reported.
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.	• The reporting is considered to be balanced.

Criteria	JORC Code Explanation	Commentary
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.	• None to report at this stage of the review.
Further Work	• The nature and scale of planned further work (e.g. 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.	• Exploration work is required to confirm the historical work and advance the projects towards a more certain nature, which will hopefully lead to a confidence level where resources can be estimated.