Quarterly Report

For the quarter ending 31 March 2023

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A-Cap Energy (ASX: ACB) is a minerals exploration and development company focused on the development of “new energy” projects including the company’s flagship Letlhakane Uranium Project in Botswana, host to one of the world’s top 10 uranium deposits.

Highlights

- Metallurgical and Beneficiation testwork sampling drill program completed at Letlhakane.
- Beneficiation, mineralogy, and hyperspectral mineral classifier studies continuing.
- Updated mineral resource estimate underway for the Wilconi Nickel – Cobalt Project, Western Australia.
- Numerous studies being conducted to advance the Wilconi Nickel – Cobalt Project Pre-Feasibility Study.

Letlhakane Uranium Project

Botswana, Africa

Located in Botswana, the Letlhakane Uranium Project, is host to one of the world's largest undeveloped uranium deposits. The project has a total JORC resource of 365.7 million pounds (822.1Mt @ 202ppm U_3O_8 using a 100ppm cut-off grade).[1]

Metallurgical & Beneficiation test work sampling drill program completed at Letlhakane Project

A PQ diamond core drill program designed to recover fresh samples for beneficiation and metallurgical test work commenced on 15 January 2023 and was completed on 15 March 2023[2]. A total of 24 drill holes of PQ triple tube were completed for 1,406.25m (Figure 1). Samples from Gorgon South, Kraken, and Serule West were selected as representative of likely Run Of Mine (ROM) ore using criteria which:

- includes the most dominant ore types in the Resource Model (dominantly primary ore)
- is spatially representative of optimised pits from 2015 Feasibility Study
- includes material which was scheduled early in the mining plan from the same 2015 Study.

Best intersections include:

- GODD0092 - 4.1m @ 252 ppm U_3O_8 [30.1m]
- GODD0093 – 8.0m @ 448 ppm U_3O_8 [45.3m], including 1.1m @ 1,942 ppm U_3O_8
- GODD0094 – 7.2m @ 224 ppm U_3O_8 [38.7], including 0.9m @ 739 ppm U_3O_8
- GODD0097 – 7.4m @ 192 ppm U_3O_8 [43.5m]
- GODD0099 – 6.3m @ 227 ppm U_3O_8 [28.0m]
- MOKD0114 – 10.6m @ 182 ppm U_3O_8 [9.0m]
- MOKD0115 – 4.3m @ 393 ppm U_3O_8 [22.3m], including 0.8m @ 742 ppm U_3O_8
- MOKD0117 – 5.0m @ 282 ppm U_3O_8 [24.5m], including 0.8m @ 735 ppm U_3O_8
- MOKD0120 – 6.8m @ 371 ppm U_3O_8 [38.8m], including 1.4m @ 708 ppm U_3O_8
- SEDD0028 – 4.8m @ 270 ppm U_3O_8 [47.5m]
- SEDD0029 – 16.1m @ 276 ppm U_3O_8 [36.5m], including 1.0m @ 954 ppm U_3O_8
- SEDD0031 – 8.0m @ 358 ppm U_3O_8 [55.0m], including 0.8m @ 2,260 ppm U_3O_8
- SEDD0033 – 7.9m @ 487 ppm U_3O_8 [31.8m], including 2.4m @ 1,167 ppm U_3O_8

Drilling generated >2,500 kg of mineralised material grading 277 ppm U3O8 (with ~1,200 kg grading 470 ppm U3O8). The application for an Export Permit to ship the sample to Australia is being prepared.

Beneficiation Studies

To increase Letlhakane's profitability, A-Cap has engaged technical partners with world-leading expertise in uranium ore sorting and processing that specialise in increasing the ore feed grade to the mill as well as removing acid consuming gangue utilising advances in sorting technology. The ore material collected in recent drilling will be sent to mineral processing leaders Nagrom in Perth for sample preparation before being sent to magnetic separation company Steinert Australia for sorting/beneficiation

[1] *Refer to Resource Statement and disclaimer on page 10.*
[2] *Refer to ASX release dated 28th March 2023*

testwork utilising radiometric, XRT, and hyperspectral sensors as well as beneficiation techniques by gravity separation using spiral and dense media separation. Steinert have been highly successful upgrading uranium ore with sorting programs for other clients in recent years3, using radiometric information to pre-classify the ore into product and waste for their program development.

Once they have a “pre-classified” ore and waste fraction, they process these fractions through a sorter with multiple sensors and record all the information from the sensors available on this sorter (colour, laser, induction and XRT). Subsequently they use proprietary software to detect variations in sensor data between the ore and waste fractions either in: density, colour or any of the other sensors in combination. There are over 200 parameters recorded and they use multiple sensor combinations to find the best potential sorting algorithm to sort the specific ore.

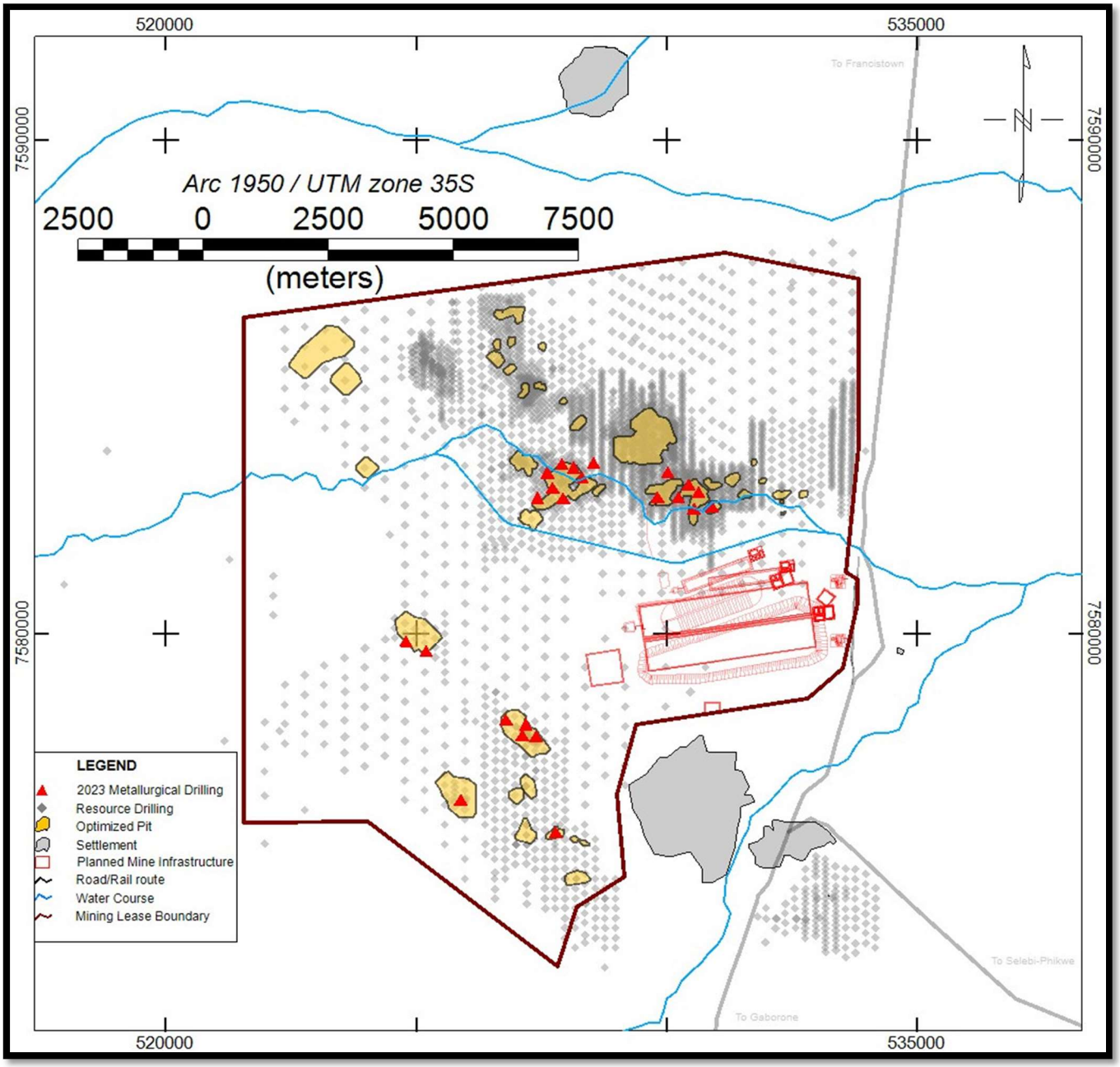

Figure 1 Drillhole locations.

[3] Refer Lotus Resources (ASX:LOT) ASX Release 5 July 2021 *Ore sorting testwork exceeds expectations*

In conjunction with the drill program work progressed on several other studies:-

Hyperspectral Scanning (PlotLogic):

All the PQ drill core form the current drilling (24 holes) was scanned using a portable hyperspectral scanner supplied by PlotLogic (Figure 2). Core was marked up to reflect area of interest included: ore zones, zones of interstitial waste and areas that appeared geologically or mineralogically significant. The same process has begun for legacy core and this work will continue into April.

Quantitative XRD analysis (Bureau Veritas):

Quantitative XRD work was completed at Bureau Veritas laboratories in Adelaide on historic RC samples to help identify acid consuming gangue minerals in Letlhakane ore. Results confirmed that calcite group minerals and albite group minerals, where they are found, are consuming acid. These results will be supplemented by a large multi-element characterisation program (scanning up to 10,000 RC samples by portable XRF) to help build a Geomet model of the deposit.

Figure 2 Hyperspectral Scanner scanning PQ at A-Cap core facility in Gijwane.

Wilconi-Nickel Cobalt Project

Western Australia, Australia

The Wilconi Project hosts a JORC total mineral resource of 660,000 tonnes of nickel and 46,400t of cobalt and is being developed to serve the escalating global electric vehicle (EV) market.

Update to Wilconi Mineral Resource Estimate

During the quarter, A-Cap contracted SnowdenOptiro (Perth) to complete an update of the nickel and cobalt resources based on results of the recently completed drill programme (Refer to ASX release dated 23 November 2023). The drill programme was designed to infill previous drilling, reducing the drill spacing to 50m x 50m centres in the higher grade, near surface portions of the resource. The closer space drilling improved the confidence in the continuity and grade of the resource and will allow conversion of inferred and indicated resources to indicated and measured categories.

Wilconi Pre-Feasibility Study

Numerous studies are being conducted to gather information for a Pre-Feasibility Study (PFS) at Wilconi, including geotechnical studies, ore, soil, waste and tailings characterisation studies and additional metallurgical testwork.

Nickel Technologies (Canada) have been contracted to conduct metallurgical testwork on selected ore samples obtained from the recently completed large diameter (PQ) diamond drilling. Nickel Technologies have developed a novel “carbon neutral” method to selectively leach lateritic nickel ores using CO_2. The method results in precipitation of nickel and cobalt concentrates as sulfides while sequestering CO_2 as stable iron and magnesium carbonates.

During the quarter scanning of all available diamond drill core from the Wilconi project was completed using an “OreSense” hyperspectral scanner provided by Plotlogic (Brisbane). The scanner collects a wide range of spectral data from the cores. This data is analysed using proprietary software that uses artificial intelligence (AI) to learn how to distinguish between ore and waste. Acap is conducting this study to determine how the Wilconi ores could be beneficiated prior to processing. The results from a small dataset have been encouraging with the “OreSense” scanner being able to separate ore from waste with a high level of confidence. Plotlogic has been notified to complete the analysis of the entire drill core dataset to refine the parameters for ore and waste definition.

Peter O’Bryan & Associates (Perth) have been contracted to conduct a geotechnical study of drill cores to enable the stability of pit walls and slope angles of constructed landforms to be determined. A geotechnical engineer visited the Wilconi site to select suitable cores for engineering testwork. Results of this study are expected in May.

WSPGolder (Perth) are currently completing a study on the nature of the soil and waste over the Wilconi resource and surrounding area. The aim of the study is to:

- geochemically characterise the waste rock and soil
- assess the risks that stockpiling this material may pose to the environment, and
- suggest management and monitoring strategies for any identified risks.

Other PFS work that has been completed includes:

- Animal Plant Mineral Pty Ltd (APM) completed a fauna and flora study over the entire resource area in December 2021.
- Peter O'Bryan & Associates supervised preliminary engineering and geotechnical testwork on selected core samples.
- Establishment of water monitoring wells across the Wilconi resource area.
- Metallurgical studies completed by Simulus Laboratories (Perth) March 2020 and October 2022.

On-going PFS work and additional studies include:

- Update of the mineral resource estimate by SnowdenOptiro.
- Metallurgical testwork by Nickel Technologies.
- Hydrogeological studies including baseline surface and ground water modelling.
- Subterranean fauna studies.
- Cultural heritage surveys.
- Soil, waste rock and tailings characterisation studies.
- Design and geotechnical assessment of constructed landforms including waste.dumps, open cuts and tailings storage facilities.

Corporate

Directors:

Jiandong He
Andrew Tunks
Zhenwei Li
Michael Liu
Paul Ingram
Jijing Niu
Mark Syropoulo

Capital Structure as at 20 April 2023.

ACB - 1,232,435,060 – Fully Paid Ordinary Shares
ACBAC – 8,000,000 Options Expiring 31 Oct 24 10 cents
ACBAB – 22,000,000 Options Expiring 31 Oct 21 11 cents
ACBAQ – 1,250,000 Options Expiring 30 Jun 22 11.5 cents
ACBAS – 24,000,000 Options expiring 31 Oct 24 11 cents
ACBAT - 30,000,000 Performance Rights

Market Capitalisation at 20 April 2023 – $61.6 million (last quarter $99.8 million)

Shareholder Information

2,596 shareholders with Top 20 holding 83.12% (Last quarter end 82.91%)

Payment of fees, salary and superannuation to directors for December 2022 Quarter:

Director fees of $100k and Consulting fees of $79k. (As per App 5B Para 6.1.)
(Refer to note at end of App5b)

Details of Expenditure incurred during Quarter

Details of expenditure during the quarter are shown below and in the Appendix 5B released this day.

This update has been authorised on behalf of A-Cap Energy Limited by the Board.

Disclaimers

Competent Person Statement

Information in this report relating to Wilconi Mineral Resources is based on information compiled by Dr Andrew Richmond, a full-time employee of Martlet Consultants Pty Ltd. Dr Richmond is a Member of the AusIMM (#111459) and a Fellow of the AIG (#4840). Dr Richmond has sufficient experience that is 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 under the 2012 Edition of the Australasian Code for reporting of Exploration Results, Mineral Resources and Ore Reserves. Dr Richmond consents to the inclusion of the data related to Mineral Resources in the form and context in which it appears.

Information in this report relating to Exploration drill results, is based on information compiled by Mr Harry Mustard, a full-time employee of A-Cap Energy Limited and a member of AusIMM. Mr Mustard has sufficient experience that is 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 under the 2012 Edition of the Australasian Code for reporting of Exploration Results Mineral Resources and Ore Reserves. Mr Mustard consents to the inclusion of the data in the form and context in which it appears.

Information in this report relating to cobalt, nickel and associated metals of the Wiluna Cobalt Nickel Project (Wilconi Project), is based on information compiled by Mr Paul Ingram, a director of A-Cap Energy Limited and a Member of AusIMM. Mr Ingram has sufficient experience that is relevant to the style of mineralisation and type of deposit under consideration and the activity he is undertaking to qualify as a Competent Person under the 2012 Edition of the Australasian Code for reporting Exploration Results Mineral Resources and Ore Reserves. Mr Ingram consents to the inclusion of the data in the form and context in which it appears.

Information in this report relating to Uranium Exploration results, is based on information compiled by Mr Peter Sheehan and employee of A-Cap Energy Limited and a member of AusIMM. Mr Sheehan has sufficient experience that is 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 under the 2012 Edition of the Australasian Code for reporting of Exploration Results Mineral Resources and Ore Reserves. Mr Sheehan consents to the inclusion of the data in the form and context in which it appears.

Cautionary Note Regarding Forward-Looking Statements

This quarterly report contains forward looking statements which involve a number of risks and uncertainties. These forward-looking statements are expressed in good faith and believed to have a reasonable basis. These statements reflect current expectations, intentions or strategies regarding the future and assumptions based on currently available information. Should one or more risks or uncertainties materialise, or should underlying assumptions prove incorrect, actual results may vary from the expectations, intentions and strategies described in this announcement. The forward-looking statements are made as at the date of this announcement and the Company disclaims any intent or obligation to update publicly such forward looking statements, whether as the result of new information, future events or results or otherwise.

Tenement Information

Held as at the end of the March 2023 Quarter

Tenement Id	Location	Project	Status	Interest at Start of Quarter	Interest at End of Quarter
E53/2076	Wiluna	Wilconi	Granted	55%	55%
E53/1645	Wiluna	Wilconi	Granted	55%	55%
E53/1791	Wiluna	Wilconi	Granted	55%	55%
E53/1794	Wiluna	Wilconi	Granted	55%	55%
E53/1803	Wiluna	Wilconi	Application	55%	55%
E53/1852	Wiluna	Wilconi	Granted	55%	55%
E53/1853	Wiluna	Wilconi	Granted	55%	55%
E53/1864	Wiluna	Wilconi	Application	55%	55%
E53/1908	Wiluna	Wilconi	Granted	55%	55%
E53/1912	Wiluna	Wilconi	Granted	55%	55%
E53/2048	Wiluna	Wilconi	Application	55%	55%
E53/2050	Wiluna	Wilconi	Application	55%	55%
E53/2053	Wiluna	Wilconi	Application	55%	55%
E53/2054	Wiluna	Wilconi	Application	55%	55%
M53/0024	Wiluna	Wilconi	Granted	55%	55%
M53/0026	Wiluna	Wilconi	Granted	55%	55%
M53/0034	Wiluna	Wilconi	Granted	55%	55%
M53/0041	Wiluna	Wilconi	Granted	55%	55%
M53/0049	Wiluna	Wilconi	Granted	55%	55%
M53/0052	Wiluna	Wilconi	Granted	55%	55%
M53/0071	Wiluna	Wilconi	Granted	55%	55%
M53/0092	Wiluna	Wilconi	Granted	55%	55%
M53/0131	Wiluna	Wilconi	Granted	55%	55%
M53/0139	Wiluna	Wilconi	Granted	55%	55%
M53/0188	Wiluna	Wilconi	Granted	55%	55%
M53/1098	Wiluna	Wilconi	Granted	55%	55%
ML2016/16L	Serule	Letlhakane	Granted	100%	100%

Resource Statement

Letlhakane Uranium Project

JORC 2012 Resource Estimate

	Total Indicated			Total Inferred			Global Total		
Cut-off	**Mt**	**Grade U_3O_8 (ppm)**	**Contained U_3O_8 (Mlbs)**	**Mt**	**Grade U_3O_8 (ppm)**	**Contained U_3O_8 (Mlbs)**	**Lbs U_3O_8 (000)**	**Grade U_3O_8 (ppm)**	**Contained U_3O_8 (Mlbs)**
100	197.1	197	85.5	625	203	280.1	822.1	202	365.7
200	59.2	323	42.2	209.7	321	148.1	268.9	321	190.4
300	22.2	463	22.7	81.6	446	80.3	103.8	450	103.1

The 2015 global resource estimate using LUC best reflects the mining methodology envisaged, taking into account the surface miners' selective mining capability, combined with the proposed grade control methodology.

A drill spacing study comparison completed by Perth-based resource specialists Optiro on the Kraken deposit confirmed that at a starting drill spacing of 200m by 200m, the change of contained metal is within +/-10% when drilled down to 100m by 50m drill spacing. The current criteria for inferred resources is nominally greater than 100m by 100m drill spacing. A-Cap has confidence that the deposit will retain its mineralisation continuity when it is further drilled out.

A-Cap continues to assess the LUC resource in terms of mining optimisations. Optimisations of the LUC resource model has been completed to assess the different mining techniques and also to determine the optimal areas for conversion from inferred to indicated resources. The mine scheduling and optimisation work going forward will be undertaken internally, which will allow for considerable savings in external resource modelling and optimisation costs going forward. Furthermore, in-house optimisation and scheduling capabilities will allow the complex nature of the Project to be examined in more detail and continuously.

Wilconi Nickel-Cobalt Project

JORC 2012 Resource Estimate

Rounding may cause minor inconsistencies

Category	Cut-Off (Ni %)	Mt	Ni %	Co %	Ni Metal (t)	Co Metal (t)
Indicated	0.5	29	0.80	0.063	230,000	17,900
Inferred	0.5	62	0.70	0.046	430,000	28,500
Total	**0.5**	**90**	**0.73**	**0.051**	**660,000**	**46,400**

Cut-Off (Ni %)	Mt	Ni %	Co %	Ni Metal (t)	Co Metal (t)
0.5	90	0.73	0.051	660,000	46,400
0.6	70	0.78	0.055	540,000	38,200
0.7	44	0.86	0.061	380,000	27,100
0.8	25	0.94	0.069	240,000	17,400
0.9	13	1.02	0.078	130,000	10,300

Company Profile

A-Cap Energy is an Australian resources company focused on the development of critical minerals serving the world's path to carbon net zero. Amid renewed global focus on nuclear energy, the company's flagship Letlhakane Uranium Project in Botswana hosts one of the world's top 10 undeveloped uranium resources – 365.7 million pounds of contained U_3O_8 (100ppm U_3O_8 cut-off).

A-Cap's Wilconi Project, which represents the company's first nickel-cobalt laterite project interest, is being advanced in response to the significant growth expectation in the supply of battery materials to the OEM automotive and battery industries. The company aims to establish key strategic and commercial relationships to take advantage of material processing and refinery technologies according to the highest Environmental, Social and Governance (ESG) standards.