

ASX: ADC

ACN 654 049 699

CAPITAL STRUCTURE

Share Price: A\$0.075*
Cash: A\$5.5 M*
Debt: Nil
Ordinary Shares: 72.3M
Market Cap: A\$5.5M*
Enterprise Value: A\$0.0M*
Options: 47.7M
*as of 23 Oct 2023

BOARD OF DIRECTORS & MANAGEMENT

Andrew Shearer Non-Executive Chair

Mark Saxon
Executive Director

Tom Davidson Chief Executive Officer

Richard Boyce Non-Executive Director

Ivan FairhallNon-Executive Director

COMPANY SECRETARY
Tamara Barr

CONTACT

Level 6, 111 Collins St Melbourne VIC 3000

+61 03 8548 7880

info@acdcmetals.com.au www.acdcmetals.com.au

Quarterly Activities Report and Appendix 5B 30 September 2023

Key Highlights:

- All assays received and reported for Goschen Central and Watchem Projects.
- High-grade heavy mineral (HM) intervals reported from the Watchem Project.
 - 45m @ 2.01% HM from 0m, including 4.5m @ 4.69% HM from 13.5m in 23WAC046.
 - 42m@ 1.77% HM from 4.5m including 3.0m @ 4.2% HM from 39m in 23WAC017.
 - 16.5m @ 3.38% HM from 30m including 4.5m @ 6.91% HM from 36m in 23WAC014
- Release of maiden REE results from Goschen Central showing up to 3.1% total rare earth oxide (TREO).
- Further high-grade heavy mineral sand (HMS) assays from Goschen Central Project
 - 19.5m @ 2.44% HM from 22.50m including 3.0m @ 7.18% HM from 31.50m in 23AC133
 - 25.5m @ 1.93% HM from 16.50m, including 1.5m @ 6.82% HM from 16.5m and 3.0m @ 3.29% HM from 31.5m in 23AC126
 - 21.0m @ 3.21% HM from 24.0m, including 9.0m @ 5.41% HM from 30.0m in 23AC129
- High proportion of magnetic rare earth elements reported for Goschen Central.
- Engagement of Mineral Technologies to complete scoping study for heavy mineral sand project at Goschen Central.
- Initiation of Scoping study for rare earth processing plant (REPP) project.
- Maiden mineral resource estimate due in coming weeks.
- Over \$5.5M cash to remain in a strong position.

ACDC Metals Limited (ASX: **ADC**) (**ACDC Metals** or the **Company**) is pleased to provide the Quarterly Activities Report for the September 2023 Quarter. This quarter saw ACDC Metals achieve significant progress on its portfolio of heavy mineral sand (**HMS**) and rare earth element (**REE**) projects in western Victoria, alongside as the Company's REE process technology. Of note, ACDC Metals advanced towards resource estimation at Goschen Central, while studies were commenced to enable evaluation of the various project components. Several project milestones were achieved, setting the foundation for a pivotal subsequent quarter, in which we are looking forward to releasing the maiden resource for the Goschen Central Project and also the scoping study for not only Goschen Central but also the REPP.

ACDC Metals CEO Tom Davidson commented: "The September quarter saw a large amount of work completed that reinforces the Company's vision to grow as a significant participant in both mineral sand production and rare earth element processing. The Board was very pleased to see such positive results delivered from both Goschen Central and Watchem in terms of grades but also importantly, in the commercially important assemblages of the high value heavy minerals and REEs. Now, with the commencement of studies for both the mineral sand operation and the rare earth processing plant, we will learn more about the economic potential of these projects."



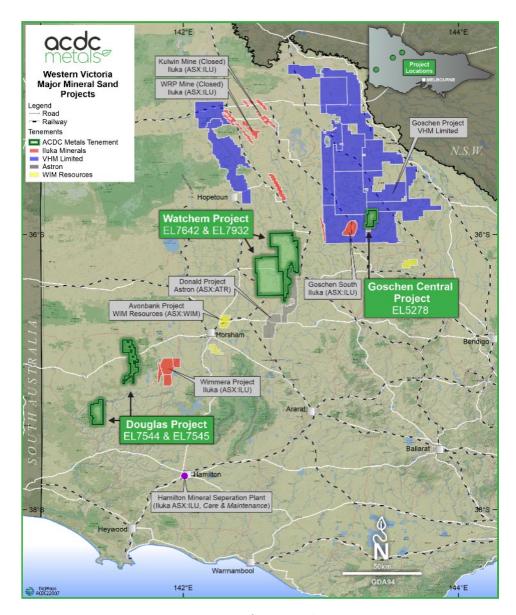


Figure 1 - Overview of ACDC Metals tenements

OPERATIONS

In Q3 CY2023 ACDC Metals progressed the development of the Goschen Central project, with all assays and mineralogy received from laboratories and released to the market. All data from the Goschen central Project has been provided to the independent geologists (Snowden Optiro Ltd) to complete the maiden JORC resource estimate.

This quarter also saw the commencement of Scoping Studies for the both the Goschen Central minerals sand project, and the rare earth element processing plant (**REPP**) project. All consultants have been engaged, have progressed well, and are targeting an end of calendar year completion.

Additionally, with the FY24 budget approved by the ACDC Metals board, preparation for further drill programs have commenced that with the intent of starting in CY2024. The newly acquired tenements at

Watchem North will be the focus of discovery stage drilling, whilst additional in-paddock drilling at Goschen Central will extend our understanding of a high grade zone.

Rare Earth Processing Plant - Scoping Study Update

ACDC Metals are working to update an existing Scoping Study completed by technology partner Medallion Resources that was based on a North American setting for a processing plant. The updated study will reflect a southeastern Australian operating environment, that will adhere to environmental measures and reflect updated capital and operating estimates. In addition, JBS&G who are expert advisors and environmental consultants, have been engaged to complete a localisation study with the intent of identifying strategic locations that can provide infrastructure needs and meet transport requirements.

Recent drilling at Goschen Central obtained 3 tonnes of mineralised material that will be sent to processing consultants Mineral Technologies (MT) in Carrara, Queensland for mineral separation optimisation. In addition to zircon and titania products, MT will produce a large monazite sample to support testwork of the REPP right through to pre-feasibility stage. Sources of third-party monazite are being sought to complement ACDC Metals' strategy to be a hub processing facility.

The Scoping Study update commenced in Q3 2023 and is targeting Q4 completion.

Goschen Central Project - Scoping Study

In Q3 ACDC Metals commenced a Scoping Study for the Goschen Central project with the intent to allow techno-economic evaluations of the project to be conducted. The study will incorporate the maiden JORC resource estimate and recent metallurgical characterisation testwork. The project design basis is to deliver a marketable heavy mineral concentrate (containing zircon and titania) along with monazite and xenotime concentrates for market.

To deliver the study MT have been engaged and will utilise their extensive experience in the region and recent projects completed.

The study will also incorporate mine optimisation and planning as well as environmental planning and identifying the pathway to permitting.

The study is targeting a Q4 completion.

High Grade Intervals at Watchem Project:

During the quarter, ACDC Metals reported impressive drilling results from the Watchem project, situated in the Murray Basin of western Victoria, Australia. The outcome of drilling informed the planning and potential of the Watchem project.

The drill program consisting of 78 aircore drill holes spanning across the tenement, reported high-grade intervals with intervals greater than 8% Total Heavy Minerals (**THM**).

Significant intercepts include:

45m @ 2.01% THM from 0m, including 4.5m @ 4.69% from 13.5m in 23WAC046.

- 42m@ 1.77% THM from 4.5m including 3m @ 4.2% from 39m in 23WAC017.
- 16.5M @ 3.38% THM from 30m including 4.5m @ 6.91% from 36m in 23WAC014.
- 19.5m @ 2.79% THM from 31.5m including 1.5m @ 8.05% from 33m in 23WAC006.
- 19.5m @ 2.58% THM from 31.5m including 7.5m @ 3.58% from 36m in 23WAC005.
- 19.5m @ 2.39% THM from 28.5m including 9m @ 3.20% from 31.5m in 23WAC004.

These results are significant and indicate the potential of the Watchem Project for a heavy mineral sand discovery.

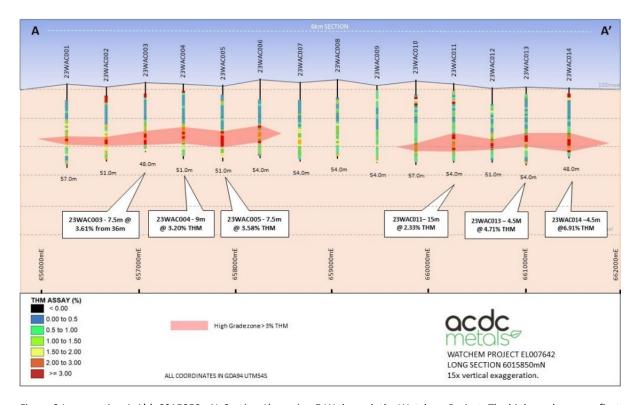


Figure 2 Long section A-A' (~6015850mN, Section 1) running E-W through the Watchem Project. The high grade zone reflects ancient shorelines that ACDC believes extend over.

Acquisition of new tenements.

Based on the results achieved at the Watchem Project the geological team believes the potential for discovery extends north of EL7642. Therefore, ACDC Metals Operations Ltd entered into a Joint Venture with a private vendor of additional exploration licences in the Murray Basin, where it has been agreed that a total of \$111,140.46 in staged cash payments will be made over a four-year period at agreed milestones.

Tenements acquired via this Joint Venture include EL007987 and EL007985, which adjoin EL007642 (Watchem Project) to the north, along with exploration licence applications EL007907 and EL007908 which surround the ACDC Metals Douglas project (EL007544). Previous exploration drilling has discovered heavy mineral sand mineralisation on all of the newly acquired tenements.

Maiden REE Results Demonstrate High Value Magnet Metals at Goschen Central

During the quarter, ACDC Metals released maiden rare earth element (**REE**) assay results from the Goschen Central project, demonstrating significant values.

Heavy mineral concentrates from drilling at Goschen Central returned an attractive and high-value distribution of REEs. Eight composite samples taken from an expansive 8.5 x 4 km area and a 10-15m thick zone demonstrated widespread and consistent mineralization.

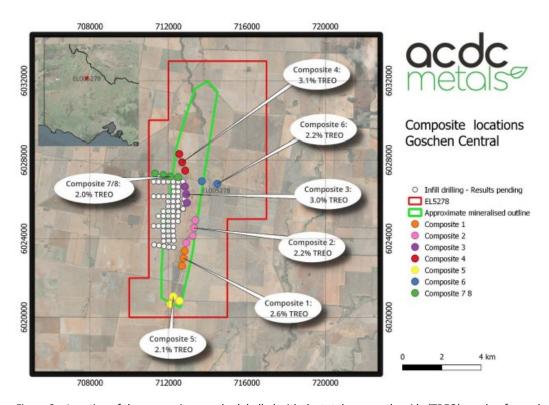


Figure 3 – Location of the composite samples labelled with the total rare earth oxide (TREO) number for each composite

The assays demonstrated a relatively high contribution of magnetic rare earth elements, being neodymium, praseodymium, terbium and dysprosium. These metals make an important contribution to project economics, given their strong demand growth for the energy transition.

Medallion Partnership

Subsequent to the third quarter Medallion Resources (TSXV: MDL) announced the termination of their licence with Purdue Research Foundation to exclusively use LAD Chromatography.

ACDC Metals informs shareholders that the agreement with MDL for exclusive access to the Medallion Monazite Process (MMP) remains in place and unchanged. ACDC Metals is continuing to develop the monazite project utilising this technology and with the support of MDL.

The recent changes for MDL have minimal impact on ACDC's strategy to develop and integrated supply chain for rare earths. The ACDC Metals prospectus referenced a collaboration or intent to work together on integrating the LAD Chromatography technology to the ACDC Metals strategy. At the time of the

prospectus the LAD project development was not at a point for allowing a formal agreement to be in place. ACDC Metals will continue to evaluate LAD, along with competing rare earth separation technologies, to result in the highest return and lowest ESG footprint downstream value adding pathway.

Future Outlook

Building upon the successful drill program and results received and released, ACDC Metals will focus on development of its two key projects. During Q4 the exploration team will plan the next phase of drilling, where further infill will be completed to build upon the resource and enable updates in CY24. Additionally, the new tenements acquired at Watchem North will be tested with a discovery program.

The next quarter will deliver the maiden JORC resource for the Goschen Central, and our studies for both a mineral sands operation and a rare earth processing plant will take shape and allow technoeconomic evaluations to be conducted.

Forward Looking Program

- Delivery of JORC Resource at Goschen Central Project (EL5278)
- Progress scoping study of Mineral sand plant (MSP) at Goschen central
- Progress scoping study of Rare earth processing plant (REPP)
- Planning of next phase of drilling at Watchem North (EL7685 & 7687) and Goschen (EL5278)

Corporate Activity

During the quarter ACDC Metals attended several conference and presentation events including the TechKnow conference on August 3rd and Minerals Week in Canberra from the 4th to 6th September.

ACDC Metals Technical Presentation

The Company presented this most recent Technical Presentation: TechKnow Investor Presentation

https://wcsecure.weblink.com.au/pdf/ADC/02693750.pdf

ACDC Corporate Presentation

Corporate Presentation: Powering the Future with Innovative Mine-to-Market Solutions

https://wcsecure.weblink.com.au/pdf/ADC/02720966.pdf

Cash

The Company closed the quarter with \$5.58M in cash, details are provided in the Appendix 5B report.

ASX Compliance

In accordance with ASX Listing Rule 5.3.1, details of the Company's exploration activities for the quarter, including any material developments or material changes in those activities and a summary of the expenditure incurred on those activities is detailed in the preceding sections and in Table A below.

With respect to Listing Rule 5.3.2, the Company confirms that there was no mine production or mine development activities for the quarter.

In accordance with Listing Rule 5.3.3, the Company provides the following information in relation to its mining tenements in Table B. No mining tenements were acquired or disposed of during the quarter.

Table A – Comparison of Actual Expenditure Versus Estimated Expenditure

For the purposes of Listing rule 5.3.4, the Company provides that following comparison in Table A of actual expenditure during the quarter against the use of funds following the issue of securities pursuant to the Prospectus, together with an explanation of any material variances.

Use of Funds	Estimate for the first 2 years after ASX admission	Actual use Q1, Q2 & Q3 2023 Quarter	Balance Remaining
Exploration at Goschen Central Project	1,605,000	631,152	973,848
Exploration at Douglas Project	1,355,000	295,953	1,059,047
Exploration at Watchem Project	1,185,000	432,900	752,100
Medallion Monazite testing	1,450,000	210,923	1,239,077
Project Consideration (Goschen Central Project)	32,602	32,602	0
Project Consideration (Douglas Project)	16,372	16,372	0
Acquisition Costs (Watchem Project)	50,000	50,000	0
Expenses of the Offer	1,075,000	768,197	306,803
Administration & Working Capital	1,231,026	772,095	458,931
Total	8,000,000	3,210,194	4,789,806

In accordance with Listing Rule 5.3.5, the Company confirms payments totalling \$119,000 were made to Directors for employment costs as well as to associates and related parties of the Company, for services rendered up to 30 September 2023.

Deferred Consideration Shares

In relation to the acquisition of the Watchem tenements which was completed on 15 September 2022:

- 1. The number of Deferred Consideration Shares pending issue (on issue) is 600,000.
- 2. The terms of and conditions for the issue of Deferred Consideration Shares are summarised below:
 - The announcement of a JORC compliant Inferred Mineral Resource on the Watchem Tenements of at least 60Mt at 4% HM within 5 years from the date of settlement of the acquisition.
- 3. During the quarter no Deferred Consideration shares were issued or cancelled.
- 4. There were no further milestones met during the quarter.

Table B – Tenements

Tenement	Registered Holder	Beneficial Interest	Location	Status
EL5278	ACDC Metals Operations Ltd	80%	South Towaninny, VIC	Granted
	Providence Gold & Minerals Pty Ltd	20%		
EL7642	Fish Hawk Resources Ltd*	100%	Watchem, VIC	Granted
EL7932	Fish Hawk Resources Ltd*	100%	Watchem, VIC	Granted
EL7544	ACDC Metals Operations Ltd	80%	Miga Lake, VIC	Granted
	Oro Plata Pty Ltd	20%		
EL7545	ACDC Metals Operations Ltd	80%	Harrow, VIC	Granted
	Oro Plata Pty Ltd	20%		
EL7685	Oro Plata Pty Ltd	100%	North Watchem, VIC	Transfer in progress**
EL7687	Oro Plata Pty Ltd	100%	North Watchem, VIC	Transfer in progress**
EL7907	Oro Plata Pty Ltd		Miga Lake, VIC	Yet to be granted***
EL7908	Oro Plata Pty Ltd		Harrow, VIC	Yet to be granted***

^{*}Subsidiary 100% owned by ACDC Metals Ltd.

^{**}A transfer has been lodged to Earth Resources Regulation (ERR) for an 80% Beneficial interest to ACDC Metals Operations Ltd.

^{***}EL to be granted to Oro Plata Pty Ltd at 12 months, at which point the transfer process will commence with ACDC Metals Operations Ltd.

During the September 2023 Quarter the following ASX Announcements were made:

06-Jul-23	ACDC Metals Advances Rare Earth Metals Strategy
28-Jul-23	ACDC Investor Roadshow Presentation July 2023
31-Jul-23	Quarterly Appendix 5B Cash Flow Report
31-Jul-23	Quarterly Activities Report
03-Aug-23	TechKnow Investor Presentation August 2023
11-Aug-23	Notice of Release of Escrow Securities
15-Aug-23	ACDC Hits High Grade Intervals at Watchem Project
18-Aug-23	Application for quotation of securities - ADC
28-Aug-23	REE Results Show High Value at Goschen Central
18-Sep-23	Notification regarding unquoted securities - ADC
26-Sep-23	Full Year Statutory Accounts
26-Sep-23	Appendix 4G and Corporate Governance Statement
26-Sep-23	Details of Upcoming AGM
27-Sep-23	Studies Start on HM Sands and Rare Earth Projects

This announcement has been authorised for release by the Board.

About ACDC Metals

ACDC Metals is a heavy mineral sand and rare earth element explorer and developer focussed on projects in the Murray Basin of western Victoria, Australia. ACDC Metals also holds the exclusive licence for Eastern Australia for the 'Medallion Monazite Process', a well advanced process technology to efficiently extract rare earth elements from monazite, developed by TSX listed Medallion Resources (TSX:MDL). Goschen Central is the ACDC Metals' flagship project, a maiden mineral resource is due for release in Q3 2023.

We refer shareholders and interested parties to the website <u>www.acdcmetals.com.au</u> where they can access the most recent corporate presentation, video interviews and other information.

For Further Information:

Tom Davidson

Chief Executive Officer

Tom.davidson@acdcmetals.com.au
+61 (0) 499 256 645

Peter Taylor

Media & Investor Relations

peter@nwrcommunications.com.au
+61 (0) 412 036 231