



# QEM Newsletter #3

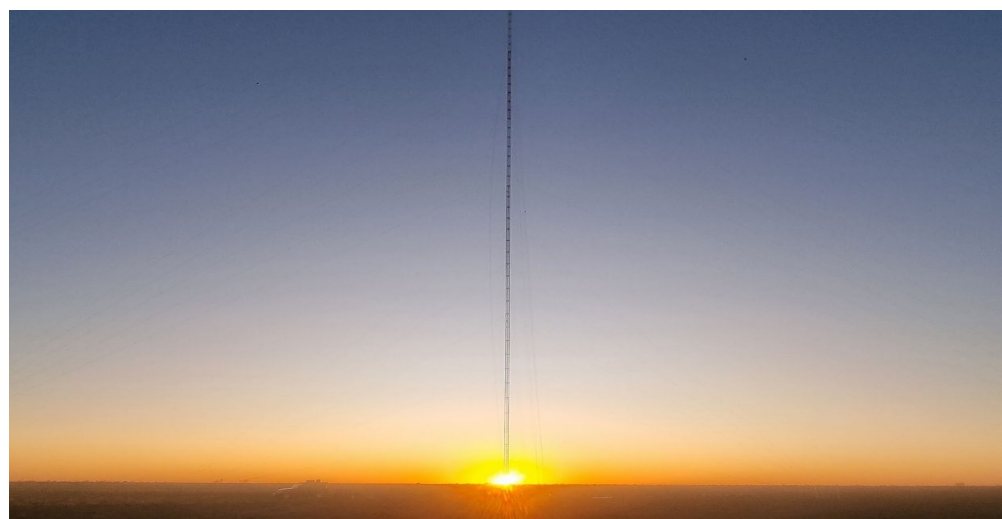
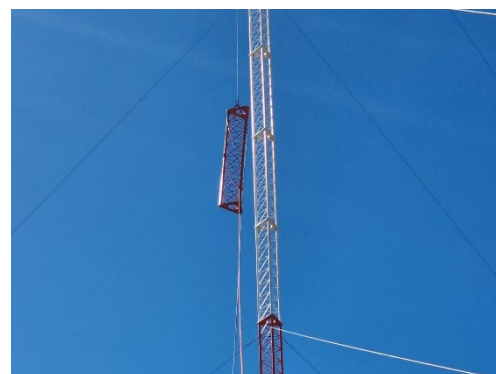
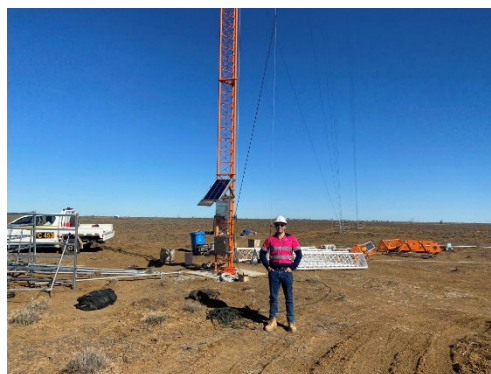
## Julia Creek Vanadium Project

The purpose of this Newsletter is to provide stakeholders with an update on the Julia Creek Project). QEM Limited (QEM) is an ASX-listed company developing the Project, located in one of the world's richest critical minerals regions, on Wunumara Aboriginal Lands, six kilometres (km) south-east of Julia Creek in the McKinlay Shire, North West Queensland. The Project holds a globally significant vanadium resource and significant hydrocarbon resources, and it will deliver and utilise innovative and sustainable energy solutions.

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## Meteorological Mast UPDATE



QEM is pleased to announce that our 160m tall Meteorological Mast was commissioned this morning in Julia Creek.

The Fulcrum3D Meteorological Mast (Met Mast) is a 160m tall steel lattice tower designed to accurately record wind speeds and wind conditions for a given area. The mast is fitted with several specialised meteorological instruments which will constantly record and share live data to ensure the on-site conditions are factored into the Projects design parameters.

The Met Mast installation began on June 20th with the concrete foundations and anchor blocks being poured on-site. The erection of the mast commenced on the July 4th and took approximately 14 days to complete due to high wind speeds.

The data captured by the meteorological mast will provide QEM with enough recorded data to complete the bankable/definitive feasibility study for the renewables project and assist in reducing the Project's uncertainties.

QEM intends to share the data gained from the Met Mast, Sodar and Solar Monitoring station with the Bureau of Meteorology, McKinlay Shire Council and the Julia Creek Aerodrome.

QEM would like to thank Fulcrum3D, Australian Wind Construction, Towerforce and all the local contractors and fabricators that assisted in the process.

## SODAR

The Fulcrum3D Sodar is a fully integrated user friendly wind monitoring system and is delivered complete with its own trailer, solar power supply and communications. The portable monitoring system measures wind speed, direction and inflow angle up to 200m above ground level. The Sodar system will be used for low-cost site prospecting as QEM looks to investigate available wind resources and confirm turbine suitability.

The Sodar was delivered and installed on-site on May 17.

So far, the QEM is very pleased with the recorded data as it shows higher than expected wind speeds in the region.



## SOLAR

The Fulcrum3D Solar monitoring system is a solar resource monitoring set up that has been designed to operate in the remote and harsh environments common at solar power station sites. The portable, stand-alone monitoring system aims to provide the highest quality solar data in addition to monitoring the performance of the operating power stations. Fulcrum3D's solar system will be used for QEM's site prospecting for a proposed solar farm.

The solar monitoring station was delivered and installed on-site on May 17. QEM is now able to view this data remotely in real time to evaluate site conditions.



# DRONE SURVEY UPDATE

QEM engaged National Drones to conduct an aerial drone survey across the entirety of QEM's tenements.

The purpose of this survey was to baseline the current environmental condition of the tenement along with using the topographic data to conduct a flood modelling study.

National Drones have completed thousands of surveys and inspections since their inception in 2015 and have worked with some of Australia's largest companies across the resources, agricultural and environmental sectors.

The survey was conducted over seven days, with the team from National Drones using the Julia Creek Aerodrome as their take-off and landing base. The drone was a fixed wing Silverstone petrol UAV that flew approximately 300m above ground level during the survey.

National Drones also conducted a small presentation for the students at the Julia Creek State School on Monday the 20th June and gave all students a free online drone course.



# ENVIRONMENTAL UPDATE



Epic Environmental is progressing through the planning stage of an EIS, undertaking extensive baseline studies across the Julia Creek Project area. In order to understand impacts to environmental values, it is important to understand the baseline, or existing state of the environment.

## Ecology Baseline

In March 2022 Epic completed baseline ecology field surveys at the Project site to generate a baseline list of species. The field surveys involved trapping for small mammals, reptiles, bird surveys, vegetation studies and targeted searches for the Julia Creek Dunnart. No Julia Creek Dunnart were found during the survey. Understanding the habitat values of the Project site is important to inform what impact the Project may have on habitat connectivity and fragmentation, species populations and biodiversity in general.

## Groundwater and Surface Water Baseline

Groundwater monitoring wells are planned to be installed across the Project site in August 2022, so that the groundwater baseline environment can be further understood to. Monitoring will be limited to the relatively shallow water table aquifers and not anticipated to include the much deeper Great Artesian Basin aquifer. Once installed, the groundwater wells will be sampled monthly to obtain a baseline dataset of physiochemical parameters. Opportunistic surface water samples will also be undertaken during the monitoring events.

# DRILLING UPDATE

QEM is currently planning an extended drilling campaign to commence in August this year.

This campaign will target resource exploration, ground water monitoring and geotechnical results across the tenement. QEM has engaged Measured Group who will be coordinating these activities. During this campaign, the QEM team and our consultants including Measured Group, Epic Environmental and GHD will be in Julia Creek.

