Some gold sunshine after the rain

An unusually wet year continued through the winter for Alkane Resources Ltd. (ASX: ALK | OTCQX: ANLKY) ("Alkane"), including a freak December storm where 108mm of rain fell on their Tomingley Gold Operations within 24 hours. Even with two-thirds of that falling in the space of a single hour, the bypass water drains and pit protection measures held strong and prevented any damage. While the resulting underperformance on quarterly production can be chalked up to an 'act-of-god', gold poured for the quarter still represented A$20.9m in revenue, and recent high-grade drill results, a renewed focus on mining performance and advancements to the A$1bn Dubbo Project mean there is plenty to look forward to.

The Tomingley site is still running smoothly; production costs are within expected ranges and Alkane are pinning their focus on managing a tight schedule across their three active pits, Caloma, Caloma Two and Wyoming One. To extend the mineralisation zone, a drill program recently tested targets below the Wyoming One pit and at the Caloma pit; the drill cores measured roughly 2-5g/t across both mines, plenty enough to support an underground mining operation. Some individual samples returned grades as high as 20g/t, and a high-grade ore from Caloma Two should be available for processing shortly; which means that Alkane shouldn't struggle to hit their revised FY2017 production schedule of 53,000-58,000oz.

The famed Dubbo Project remains ready for construction, with the mineral deposit and surrounding land wholly owned. All state and federal approvals are in place, and efforts to secure the financing for the project are being accelerated. The announcement of the memorandum of understanding with Siemens Ltd. showed the significance of the project to one of the major western rare-earth players, and a potential opportunity to secure future revenue for Dubbo. The company plans to construct the modular plant design in two stages, each of 500ktpa, or half capacity. The second stage will be built after the first stage is successfully commissioned and market price has been achieved for the zirconium, hafnium, niobium, yttrium and rare earth product range.

A key product for Dubbo will be its hafnium reserves. Demand for hafnium continued to outstrip supply throughout 2016, which is closely related to increasing demand for hafnium-free zirconium metal for the nuclear industry. Chinese zirconium companies are starting to produce hafnium free zirconium for their own nuclear industry, and although this will increase hafnium supply, the quantities involved are only a few tonnes, and will most likely be consumed entirely within China. The principal market for hafnium is for hafnium metal used in superalloys. These superalloys are essential for industrial gas turbines and jet engines, but there are numerous additional research and development activities taking place which could create significant demand if hafnium availability can be increased from new sources such as the Dubbo Project.

Located at Toongi, 25 kilometres south of Dubbo in central-west New South Wales, the Dubbo Project is being developed by Australian Zirconia Limited (AZL), a wholly owned subsidiary of Alkane Resources. Due to the size of the resource, the mine is expected to process 1,000,000 tonnes of ore throughput per year over a period of 70 years or more. AZL owns 3,441 hectares of land at Toongi, including the operating site, significant Biodiversity Offset Areas and residual agricultural land. Having survived the rains, Alkane expects construction of the processing plant to take place during 2017-2019, and since the sun always shines after a storm, this could very well be the year that Dubbo goes live.