ASX ANNOUNCEMENT

ASX: QEM

31 October 2019

Quarterly update for the period ending 30 September 2019

- **Significant Resource Upgrade has resulted in a 62% increase in size of the Julia Creek Vanadium JORC Resource**
- **The Project now holds a 2,760Mt Vanadium JORC Resource with an average V2O5 content of 0.30%, comprising 220Mt in the Indicated category and 2,540Mt in the Inferred category**
- **The Project also contains 783MMBBls of Oil in the 3C category**
- **Stage 2 testwork using Petroteq Energy Inc's technology on previously drilled core samples was completed, demonstrating that Petroteq's proprietary technology was able to recover up to 65% of the contained oil from Julia Creek project samples.**

QEM Limited (ASX:QEM) **("QEM" or "Company")** is pleased to provide an update on its activities for the period ending 30 September 2019.

Resource Upgrade

On 14 October 2019, the Company announced a significant Resource Upgrade at the Company's flagship Julia Creek vanadium / oil shale project ("**Project**"), covering 249.6km^2, in the Julia Creek area of North Western Queensland, Australia. Following the Resource Upgrade, the Project now holds a 2,760Mt Vanadium JORC resource, with an average V2O5 content of 0.30%, making it **one of the largest vanadium deposits in the world.**

The Resource Upgrade incorporated historic data from drill holes in the newly granted tenement EPM 27057 (ASX Release – 7 May 2019), in addition to the data from the recent 26km 2D seismic survey data completed in May 2019 (ASX Release - 7 May 2019), and seven recently cored holes by QEM (two holes in 2018 and five holes in 2019).

QEM Non-Executive Director, David Fitch, commented: "The September quarter has been an important period for the Company with the recently announced Resource Upgrade, which has further established the Julia Creek project as one of the largest vanadium resources in the world. During the reporting period, we have continued to advance testwork for extraction and look forward to advancing the project over the coming period."

QEM Limited
Level 11, 216 St Georges Terrace
Perth WA 6000 Australia

John Foley Chairman
Daniel Harris Non-Executive Director
David Fitch Executive Director

www.qldem.com.au
info@qldem.com.au
+61(0) 8 9481 0389

ASX ANNOUNCEMENT

ASX: QEM

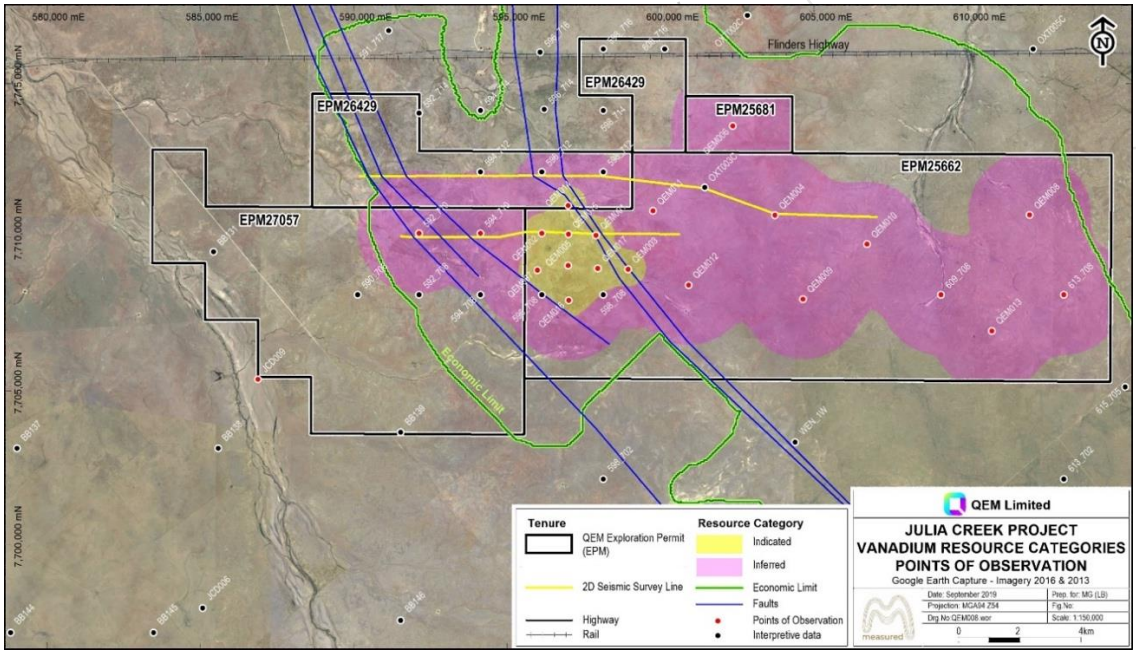

Figure 1: Resource Area and Categories

Table 1: Summary of JORC Mineral Resource Estimate

Total										
Resource Class	**Strat. Unit**	**Mass (Mt)**	**Average Thickness (m)**	**Insitu Density (gm/cc)**	**V2O5 (wt%)**	**Cu (ppm)**	**Mo (ppm)**	**Ni (ppm)**	**Zn (ppm)**	**Al (ppm)**
Indicated	CQLA	73	3.16	2.27	0.25	155	138	123	780	4752
	CQLB	67	2.97	2.24	0.28	182	168	142	890	5706
	OSU	40	1.94	2.08	0.33	223	153	191	1087	55317
	OSL	38	1.87	2.11	0.32	199	149	184	1015	55009
Sub-total		**220**								
Inferred	CQLA	687	2.57	2.28	0.23	154	139	121	819	2854
	CQLB	874	3.33	2.15	0.38	220	221	201	1184	5323
	OSU	504	2.01	2.11	0.30	232	147	188	1148	62477
	OSL	481	1.98	2.13	0.29	212	134	171	1058	60316
Sub-total		**2,540**								
Total		**2,760**		**2.18**	**0.30**	**201**	**166**	**170**	**1043**	**26100**

Note: 1. The estimate uses a minimum cut-off of 0.2% V_2O_5 for the oil shale units, and minimum cut-off of 0.15% V_2O_5 for the Coquina units.

2. The total resource tonnage reported is rounded to reflect the relative uncertainty in the estimate categories and component horizons may not sum correctly.

QEM Limited
Level 11, 216 St Georges Terrace
Perth WA 6000 Australia

John Foley Chairman
Daniel Harris Non-Executive Director
David Fitch Executive Director

www.qldem.com.au
info@qldem.com.au
+61(0) 8 9481 0389

Table 2: Summary of SPE-PRMS Contingent Oil Resource

Total					
Strat.Unit	**Mass (Mt)**	**Average Thickness (m)**	**Oil Yield (L/tonne)**	**MMBarrels (insitu-PIIP)**	**MMBarrels 3C**
CQL	1,701	5.93	44	446	401
OSU	544	2.01	72	231	208
OSL	518	1.97	63	193	174
TOTAL	**2,760**		**53**	**870**	**783**

Note: 1. The total resource tonnage reported is rounded to reflect the relative uncertainty in the estimate and component horizons may not sum correctly.

2. The estimated (unrisked) 3C Contingent Oil Resource of 783 MMbbls is derived from the PIIP using a 0.9 recovery factor and is contained within Oil shale in the 2,760Mt of the Mineral Resource estimate. There are no 1C or 2C resources as the points of observation (drill hole spacing and composite intervals) of oil shale grade are insufficient to place reliable confidence on both grade and thickness continuity required for 1C or 2C resources.

Petroteq Testing

In July 2019, Stage 2 testwork using Petroteq Energy Inc's (Petroteq) technology on previously drilled core samples was completed. The testwork demonstrated that Petroteq's proprietary technology was able to recover up to 65% of the contained oil from Julia Creek project samples. It was also noted by PRI, that from the Petroteq's process, an average 20% of residual material from the original mass (after oil recovery), contained metals including Vanadium. The PRI results also show that the Vanadium is contained only in this material.

These results warrant a bulk sample test in order to produce sufficient oil and V205 required to carry out API (petrology analysis) testing of the oil, and V205 extraction. The bulk sample testing will provide a result that is a better representation for the beneficiation of the V205.

The Company has continued to work with Petroteq during the quarter to progress this testing.

Other processing options

The Company is assessing several other processing options and technologies to identify the optimum methodology for the recovery of vanadium and oil, in addition to any other potential base metal bi-products (Cu, Mo, Ni and Zn).

ASX ANNOUNCEMENT

ASX: QEM

Tenement Schedule

In line with obligations under ASX Listing Rule 5.3.3, QEM Limited provides the following information with respect to its Mining Tenement holdings as at 30 September 2019.

Project	Country	Tenement	Status	% Held	Change During Quarter
Julia Creek	Australia	EPM25662	Granted	100%	-
Julia Creek	Australia	EPM25681	Granted	100%	-
Julia Creek	Australia	EPM26429	Granted	100%	-
Julia Creek	Australia	EPM27057	Granted	100%	-

- END -

For further information, please contact:

David Fitch
Managing Director
P: +61 7 3303 0161
E: david@qldem.com.au

Jane Morgan
Investor Relations
P: +61405 555 618
E: jm@janemorganmanagement.com.au

ABOUT QEM

QEM Limited (ASX:QEM) is a publicly listed company which is focussed on the exploration and development of its flagship Julia Creek Project, covering 250km^2 in the Julia Creek area of North Western Queensland.

The Julia Creek vanadium / oil shale project is a unique world class resource with the potential to deliver innovative energy solutions, through the production of energy fuels and vanadium pentoxide. QEM strives to become a leading producer of liquid fuels and in response to a global vanadium deficit, also aims to become a global supplier of high quality vanadium pentoxide, to both the nascent energy storage sector and the Australian steel industry.

This globally significant JORC (2012) Mineral Resource of 2,760 Mt @ 0.30% V2O5 is one of the single largest ASX listed vanadium resources and represents a significant opportunity for development.

The tenements form part of the vast Toolebuc Formation, which is recognised as one of the largest deposits of vanadium and oil shale in the world and located less than 16km east of the township of Julia Creek. In close proximity to all major infrastructure and services, the project is intersected by the main infrastructure corridor of the Flinders Highway and Great Northern Railway, connecting Mt/ Isa to Townsville.