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# ACTIVITIES REPORT FOR QUARTER ENDED 30 SEPTEMBER 2011

## Victory Bore Vanadium Project - 100%

The Company announced on October 7 the commencement of a scoping study into the development of a dedicated vanadium operation at its 100% owned Victory Bore project in the Midwest region of WA, where the company has previously announced a Maiden Mineral Resource of 151Mt at 0.44%  $V_2O_5$ , 25% Fe and 6.73% TiO<sub>2</sub>, estimated in accordance with JORC guidelines.

The study is being undertaken by Mineral Engineering Technical Services (METS), and is scheduled for completion in the December Quarter 2011.

Recent price increases for vanadium as well as industry analysis which points towards a significant rise in future demand for the metal has given Quest confidence that a positive scoping study will allow the Company to add significant value to the project.

Quest believes that the project fundamentals including vanadium grades, exploration upside and positive metallurgical testing to date indicate that the project has the potential to be economically robust when compared with publicly available information on the Windimurra vanadium project currently operated by Atlantic Ltd (ASX : ATI), 35km to the west of Victory Bore, and where production is scheduled to commence in the 3rd calendar quarter of 2011 at a forecast rate of 6,300 tonnes per annum of ferrovanadium product. Long term production costs at the Windimurra vanadium project are estimated to be in the lowest quartile cash costs of vanadium producers globally.

# Perenjori Iron Ore Project - earning 80%

Post quarter and on 18 October the Company announced a Maiden Inferred Mineral Resource of 147Mt at 36.8% Fe which was estimated by independent geological consultants CSA Global Pty Ltd (CSA) in accordance with JORC guidelines (Table 1). Importantly the Mineral Resource covers only 5km of a 9km strike length of Banded Iron Formation hosted magnetite on the key Eastern Limb (Figure 3) as interpreted from detailed aeromagnetics. Key aspects of the Mineral Resource estimate and magnetite mineralisation are as follows -

- Previous metallurgical testwork indicates magnetite can upgrade to clean high grade (68% Fe) concentrate at relatively coarse grind (45 micron)
- Mineral Resource primarily based upon 5km of key Eastern Limb with further 4km of mineralised horizon untested by drilling
- Further Davis Tube Recovery (metallurgical) testwork planned
- Geological review underway to determine extent of potential mineralisation
- Close to key infrastructure in developing Mid West Iron Ore region

		Perenjori Iron Ore Project - Feral Prospect Mineral Resource											
1	Domain	Category	Million	Fe	Fe <sub>2</sub> O <sub>3</sub>	MAGSUS	Al <sub>2</sub> O <sub>3</sub>	SiO2	S	P <sub>2</sub> O <sub>5</sub>	LOI		
)			Tonnes										
/	Western Limb	Inferred	19	29.71	42.39	37.02	3.19	47.21	0.31	0.09	3.226		
	Eastern Limb	Inferred	128	37.81	53.38	47.12	1.26	41.26	0.07	0.11	0.698		
i	Total	Inferred	147	36.77	51.97	45.83	1.51	42.02	0.1	0.11	1.022		

# Table 1 Mineral Resource Grade Tonnage reported above a grade cut off of 20% Fe

Note : The CSA Mineral Resource was estimated within constraining wireframe solids based on a nominal lower cut-off grade of 20% Fe and Inverse Distance weighted interpolation. The resource is quoted from blocks above the specified Fe% cut-off grade.

Previous drilling at the Feral prospect in 2007 recognized that significant potential exists to delineate wide zones of high grade magnetite iron ore which is suitable for upgrade to a clean, high grade magnetite concentrate. Metallurgical testing to date consisting of Davis Tube Recovery testwork has shown that at a relatively coarse grind size of 45 micron a concentrate of 68.2% Fe can be obtained with low impurities. The drilling identified that whilst much of the Banded Iron Formation within the Feral prospect contains intersections of high grade magnetite, the greatest widths and grades are located on the Eastern Limb of the Koolanooka synform at Feral (Figure 2). Key characteristics of this zone are -

- True widths of 40m to 80m over 2km
- Strike length of over 5km
- Average magnetite iron grades of +39% Fe
- Mineralisation open along strike to North and at depth



# Figure 1 Perenjori Iron Ore and Feral prospect location

During the quarter the Company announced the results of drilling at the Perenjori Iron Ore project with significant magnetite intersections reported from the Feral prospect as follows -

Hole Number	Northing (m)	Easting (m)	Azimuth	Dip	From (m)	To (m)	Intersection
PJRC052	6753622	438969	240	-53	30	180	150m @ 39.45% Fe*
PJRC053	6754555	438832	240	-50	91	181	90m @ 31.7% Fe*
PJRC054	6753992	438918	240	-60	51	181	130m @ 39.33% Fe*

# Table 1 Feral Prospect significant drill hole intersections

\* denotes drill hole ended in mineralisation

Iron mineralisation at the Feral prospect is associated with a thick sequence of magnetite rich Banded Iron Formation which forms the southern extent of the Koolanooka Synform.

The Mineral Resource estimate is primarily based upon Reverse Circulation (RC) drilling completed in 2007 which confirmed high grade magnetite mineralisation with significant widths intersected in the Eastern Limb at the Feral Prospect.

Infill drilling in May 2011 by Quest has highlighted the continuity, high grade and depth extent of the magnetite mineralisation and a total of 124 RC holes (Figure 2) were incorporated into the current Mineral Resource estimate.

Mineralised lenses were interpreted and identified by wireframes between sectional interpretations of drill data using lithology, Fe grade, SiO<sub>2</sub> content and magnetic susceptibility. For continuity purposes, adjacent drill holes and sections were used to refine the geological relationship and modelling was completed in 3D utilising Datamine Studio geological software (Figure 2).

A block model was created using  $25.0 \text{mE} \times 50.0 \text{mN} \times 10.0 \text{mRL}$  parent blocks and block grades were interpolated using the Inverse Distance Weighted (IDW) technique. A 4m composite data set for both the Eastern and Western Limbs was used for statistical analysis and estimation. The lenses were extrapolated to a maximum of 150m below surface.

Density was assumed at 3.2 g/cm<sup>3</sup> based on a conservative comparison to the density of Banded Iron Formation of similar Fe grade at other locations in the Mid West region.



Figure 2 Plan view of mineralisation wireframes with drillhole collars

It is planned to conduct more extensive metallurgical testwork on mineralisation at Feral as the initial testwork indicates that the concentrate produced is comparable to, or better than, other proposed magnetite operations within the Mid West region.



# Figure 3 Location of Quest drillholes May 2011 and selected historical drillholes over reduced to pole aeromagnetics Feral Prospect – Eastern Limb

# Perenjori Project Location and Infrastructure

The Feral prospect benefits significantly from its proximity to excellent road, rail and port infrastructures in the emerging Mid-West Iron Ore province. It is located 12km northwest of the township of Perenjori where major upgrades are being carried out on existing rail infrastructure to the Geraldton Port.

The Karara Iron Ore magnetite project (Gindalbie Metals Ltd / Ansteel) is located 40km northeast of Feral prospect and is scheduled for commissioning in January 2012 with first shipments in June 2012 at rate of up to 8Mtpa.

The Koolanooka magnetite project (Sinosteel / Midwest) which is located 20km northwest of Feral has stated Mineral Resources (Indicated and Inferred) of 430Mt at 35% Fe. A Scoping Study in March 2006 concluded that the magnetite resource could be substantial enough to justify the construction of a beneficiation plant to supply blast furnace grade magnetite product to the export market.

# **Nigeria Gold Exploration**

During the Quarter the Company announced the results of its first exploration program at its highly prospective gold projects in the Federal Republic of Nigeria in West Africa. Key points of the results are as follows -

- Rock Chip sampling with high grade gold values up to 13.76g/t and 10.62g/t
- Significant anomaly of +0.5g/t defined over 750m in quartz outcrop
- Adjacent to large scale artisanal workings for alluvial gold
- No previous modern exploration
- Follow-up sampling and mapping program planned for Q4 2011
- Generation of drill targets underway for Q1 2012

Geological mapping was conducted and a total of 205 rock chip samples were taken over three distinct quartz ridges at the Kurege Prospect in the northeastern portion of EL7283 (Figure 5) in the Yelwa region of northwest Nigeria. Two of the three ridges sampled returned significant gold values of up to **13.76g/t** and **10.62g/t** with a 750 meter-long gold anomaly of +0.5g/t values being located along the western ridge (Figure 4).



Figure 4 Rock chip results – Kurege Prospect Yelwa region

Gold mineralisation is associated with quartz veining within reefs which are up to 5m in width. These quartz reefs are related to shear zones within schist, and are common hosts to gold mineralisation within this region, as seen at the historical Bin Yauri gold mining centre 20km to the south west.





### Figure 5 Regional Geology- Kurege Prospect Yelwa region

Following field inspections in November 2010 and in March 2011 by Quest geologists, and the acquisition, processing and interpretation of geophysical imagery, the Yelwa project area was considered to be the priority target for immediate field exploration. Local artisanal miners are actively involved in the extraction of coarse alluvial gold from surface soils at Kurege where it has been interpreted that gold is derived from proximal quartz reefs exposed in elevated ridges (Figure 4). It is important to note that whilst the mining of alluvial gold from these areas has been carried out historically for many years, there has been no modern, systematic exploration for gold in these regions. Quest is therefore highly encouraged by the success of this, its first field program which has identified a significant 750m high grade gold anomaly within outcropping quartz reefs.

Analyses were carried out at the Intertek Minerals Laboratory in Ghana via 50g Aqua Regia digest with AAS finish for gold. Samples are also being analysed for base metals Cu, Pb, Zn - the results of which are awaited.

A follow up program of further geological mapping and sampling is planned to commence at the Kurege project in Q4 2011 in order to better define the identified gold anomaly. The aim of this program will be to generate drill targets ahead of a potential drilling program in Q1 2012. It is also planned to commence work on adjoining tenements to evaluate further opportunities within this highly prospective region.

## Gold in Nigeria

Officially recorded gold production in Nigeria commenced in 1913 and peaked in the period 1933- 1943 when about 1.4t of gold was produced. Production declined during the Second World War and never recovered as mines were abandoned by British colonial companies. It is estimated that over 4 million ounces of gold have been produced historically, primarily by small scale artisanal mining. Despite prospective geology and significant artisanal mining activity for gold in several regions, the Nigerian resources sector has until recently not benefitted from the application of modern exploration techniques. The Ministry of Mines and Steel Development was established in 1985 in an effort to develop Nigerian mineral resources outside of oil, and in 2005 the current Mining Cadastre Office was established.

The potential for the development of gold resources in Nigeria is evidenced by the recent success of Ratel Group Limited (TSX : RTG) at the Segilola project where a first phase drilling program of 11,000m has identified a NI 43-101 compliant indicated resource of 3.7Mt @ 4.4g/t for 520koz of gold. Ratel recently announced a further 4,200m diamond drilling program at the project ahead of the completion of a feasibility study into the development of the project.

### Johnson Range E77/1809 and E77/1810 - 100%

During the March quarter the Company was granted two exploration licences covering approximately 290km2 within the Johnson Range region north of Southern Cross in Western Australia which the Company believes may be prospective for iron ore mineralisation. Quest will carry out regional geological mapping at the project during the second half of 2011.

# Robinson Range E52/2622 – 100%

The Company currently holds an exploration licence covering approximately 300km2 within the Robinson Range near Peak Hill in Western Australia. Previous mapping by the Geological Survey has identified occurrences of Banded Iron Formation within the tenement which Quest believes may be prospective for iron ore mineralisation. Quest will carry out regional geological mapping at the project during the second half of 2011.

### **Corporate Activities**

On 13 July, the Company announced the issue of an Unsecured Convertible Note for the amount of \$200,000. Upon maturity, 12 months from the date of issue, the Note will convert into Ordinary Shares at \$0.02 and in addition to the Shares issued, the Noteholder will be entitled to one Option (unlisted and exercisable at \$0.02 on or before 29 June 2015) for every share issued.

On 2 August, the Company completed a placement to professional and sophisticated investors, of 45,000,000 shares at an issue price of \$0.02 cents per share to raise \$900,000 before costs of the issue. The shares were issued pursuant to the approval granted by shareholders at a General Meeting of the Company held on 2nd May 2011. The funds raised from the issue will be applied to a scoping study and metallurgical testwork at the Victory Bore Vanadium project, evaluation and acquisition of new opportunities, corporate and administrative activities and working capital and the costs of the issue.

DR DENNIS GEE

DIRECTOR

QUEST MINERALS LIMITED

Information in this report that relates to exploration results reflects information compiled by Mr Paddy Reidy, a consultant to the company and a member of the AusIMM. Mr Reidy has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity upon which he is reporting on as a Competent Person as defined in the 2004 Edition of "The Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves." Mr Reidy consents to the inclusion in this report of the matters based on the information compiled by him, in the form and context in which it appears.

The information in this report that relates to in-situ Mineral Resources at the Victory Bore Vanadium project is compiled by David Williams of CSA Global Pty Ltd. David Williams is a Member of the Australian Institute of Geoscientists and the Australasian Institute of Mining and Metallurgy and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). Mr Williams consents to the inclusion in this report of the matters based on the information compiled by him, in the form and context in which it appears.

The information in this report that relates to in-situ Mineral Resources at the Perenjori Iron Ore project is compiled by Dr Bielin Shi of CSA Global Pty Ltd. Dr Bielin Shi is a Member of the Australian Institute of Geoscientists and has sufficient experience, which is relevant to the style of mineralisation and type of deposit under consideration, and to the activity he is undertaking, to qualify as a Competent Person in terms of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code 2004 Edition). Dr Shi consents to the inclusion in this report of the matters based on the information compiled by him, in the form and context in which it appears.