



# NSL Consolidated

25 August 2014

## AP14 DESIGNATED AS CRITICAL MAJOR NATIONAL PROJECT BY GOVERNMENT OF INDIA

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### HIGHLIGHTS

- AP14 Mining Lease designated a critical project to the national interest by the Government of India.
- AP14 has been sponsored by Government of India to remove implementation bottlenecks with the project on a fast-track basis.
- State Government Mining Lease approval already granted.
- Fast track to start production from targeted second (AP14) mining area in line with the company's strategy and budget.
- The AP14 project consists of a Mining Lease application over 290 acre property in Karimnagar, 200 km North East of Hyderabad.
- Average concentrate grade of 68.9% Fe, 3.0% SiO<sub>2</sub> and 0.2% Al<sub>2</sub>O<sub>3</sub> with average mass recoveries of 33.4%.
- AP14 represents significant scale project development pathway for NSL.

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NSL Consolidated Limited (Company, ASX: **NSL, NSLO**) is pleased to announce that Government of India, through the Prime Minister's Office and Cabinet Secretariat has accepted the AP14 project into the Project Monitoring Group (**PMG**) which is designed to remove implementation bottlenecks in Major National Projects on a fast-track basis.

The Department of Industrial Policy and Promotion (DIPP), coming under the Central Government's Ministry of Commerce and Industry in India is sponsoring the AP14 Project with the PMG.

The PMG has been set up by the Prime Minister's Office, Government of India to proactively pursue new major infrastructure projects and any stalled projects to ensure that the projects are commissioned on time.

The PMG restricts its interest to projects deemed critical to the National Interest or involving more than 1,000 Indian Crores (approximately A\$180 million) of total investments.

NSL has also been actively promoting the AP14 project through the recently bifurcated Telangana State. Company representatives recently met with the Honourable Chief Minister, Government of Telangana, Sri K Chandrasekhar Rao (the state AP14 is located in), the Chief Secretary Government of Telangana, Principal Secretary to the Chief Minister, Government of Telangana and the Special Principal Secretary for Industry and Commerce, Government of Telangana.

The Chief Minister and his team of advisors were well aware of our project and presented this in a very strong light. Particular discussion was held around the use of low grade resources, the focus on value addition, the potential employment generation within the new state, and the fact that the scale of the project makes it amenable to future steel activities.

The Chief Minister gave his personal assurances to provide all support required, and welcomed openly the investment into the mining industry of the State, which in the past has not been strategically developed.

NSL Managing Director, Mr Cedric Goode, said:

"The sponsoring of the AP14 project by the Government of India's Project Monitoring Group, is yet another significant step forward towards the progression and development of this project, particularly, in a State where large scale mining is yet to be introduced."

"We are very excited to be accepted into and sponsored by the Project Monitoring Group, as this is an important development and further lays the groundwork as part of our future expansion plans in the years ahead, as we continue to progress our development vision and strategy in India."

### **Project Summary**

As announced on 1<sup>st</sup> February 2013, the AP14 exploration target is 134 million to 377 million tonnes of magnetite at grades ranging from 20% to 50% Fe.

Contained within this exploration target there exists potential for a high grade core of Direct Ship Ore (**DSO**) quality enriched magnetite, with estimates from 5 million to 10 million tonnes with a grade range from 55% to 65% Fe.

It should be noted that the exploration target quoted above is conceptual in nature and there has been insufficient exploration to define a Mineral Resource under the JORC Code. It is uncertain if further exploration will result in the determination of a Mineral Resource.

Metallurgical testing based on Davis Tube Recovery (**DTR**) methods of 25 grab samples provided the following averages for recovery, head grade and concentrate grade:

#### **Magnetite Head Grade Quality**

Fe %	FeO %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %
33.89	7.62	50.66	0.23	0.03	0.02	0.31

#### **Magnetite Concentrate Quality**

Recovery %	Fe %	FeO %	SiO <sub>2</sub> %	Al <sub>2</sub> O <sub>3</sub> %	P %	S %	LOI %
33.4	68.93	19.65	3.00	0.18	0.02	0.02	<0.10

For full details related to this AP14 exploration target and metallurgical testing please refer to the ASX announcement dated 1<sup>st</sup> February 2013.

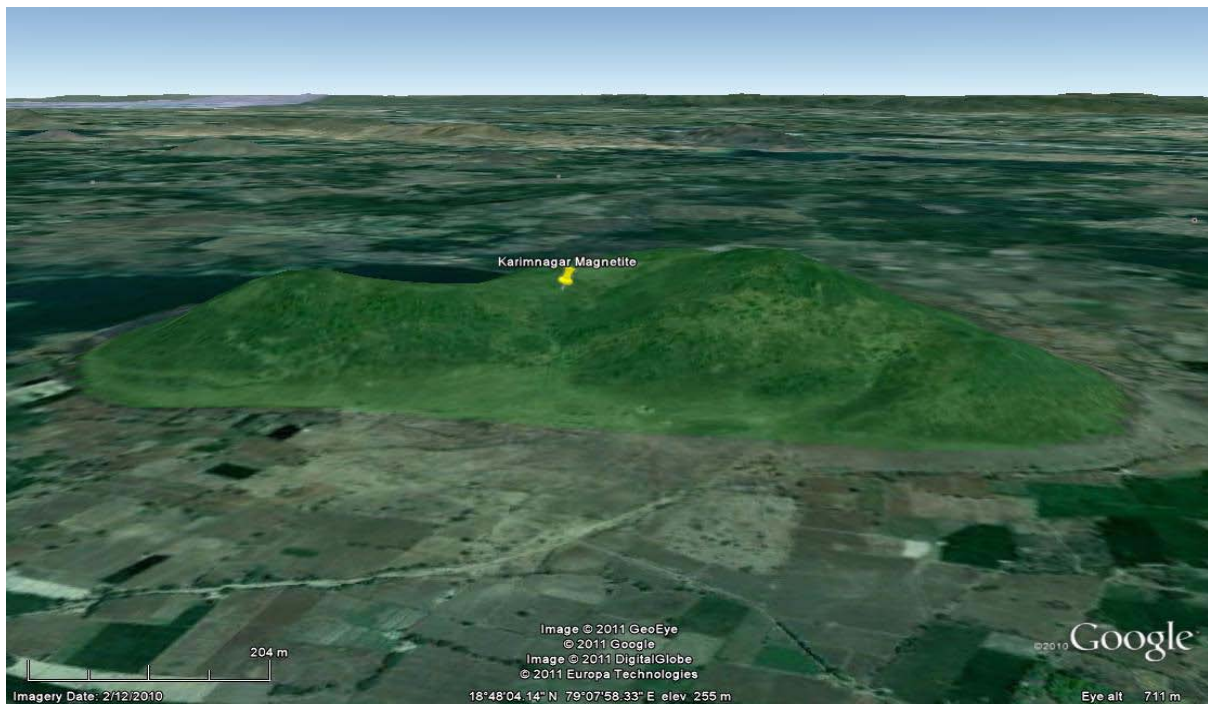
## Project Overview

The AP14 project covers 290 acres (113 hectares) and is located in the Karimnagar District of Andhra Pradesh State, approximately 200 km north east from the State capital of Hyderabad. The local topography of the project area consists of five peaks which rise between 40m to 200m above the surrounding terrain which is at an elevation of around 190m above mean sea level.

The project area comprises upper Archean rock formations. The target mineralisation consists of Banded Magnetite Quartzite (**BMQ**), which from surface mapping and geomagnetic surveys covers between 50% and 70% of the project area, and is seen as outcrop from the base to the top of the peaks. Intrusions represented by granitic sills and dykes varying in width from 1m to 5m are present within the project area.

Historic mining operations are evident with small pits being present across the project area.

For full project details please refer to ASX announcement dated, 1<sup>st</sup> February 2013.



Project Topography at AP14 showing distinctive hillock feature



Project Topography at AP14 showing distinctive hillock feature

## Exploration Target

The potential mineralisation for the AP14 magnetite project has been based on the following key parameters:

- Geomagnetic surface surveys suggest mineralisation ranging from 50% to 70% of the surface area, which is 113 hectares in total;
- Depth persistence through geomagnetic surveys has shown good consistency to 75 metres depth, and good indicators beyond 150 metres, which is also the approximate height of the terrain above the local surrounding ground level; and
- A bulk density factor of 3.1 t/m<sup>3</sup>.

The exploration target is represented in the table below:

Material	Min. Tonnes (million tonnes)	Max. Tonnes (million tonnes)	Min. Grade (Fe)	Max. Grade (Fe)
<b>BMQ</b>	128	364	20%	50%
<b>Enriched BMQ</b>	5	10	55%	65%
<b>Float Material</b>	1	3	25%	50%
<b>Total</b>	<b>134</b>	<b>377</b>	<b>20%</b>	<b>50%</b>

It should be noted that the exploration target quoted above is conceptual in nature and there has been insufficient exploration to define a Mineral Resource under the JORC Code. It is uncertain if further exploration will result in the determination of a Mineral Resource.

Contained within this exploration target there exists potential for a high grade core of DSO quality magnetite, with estimates from 5 million to 10 million tonnes with a grade range from 55% to 65% Fe.

The grade range for the BMQ is expected to vary from **20% - 50% Fe**. The average head grade data from all 66 samples collected in the second phase of testing is represented in the following table:

Fe	FeO	SiO <sub>2</sub>	Al <sub>2</sub> O <sub>3</sub>	LOI	S	P
32.91	5.03	51.34	0.39	0.37	0.02	0.03

For full details related to this AP14 exploration target and metallurgical testing please refer to the ASX announcement dated 1<sup>st</sup> February 2013.

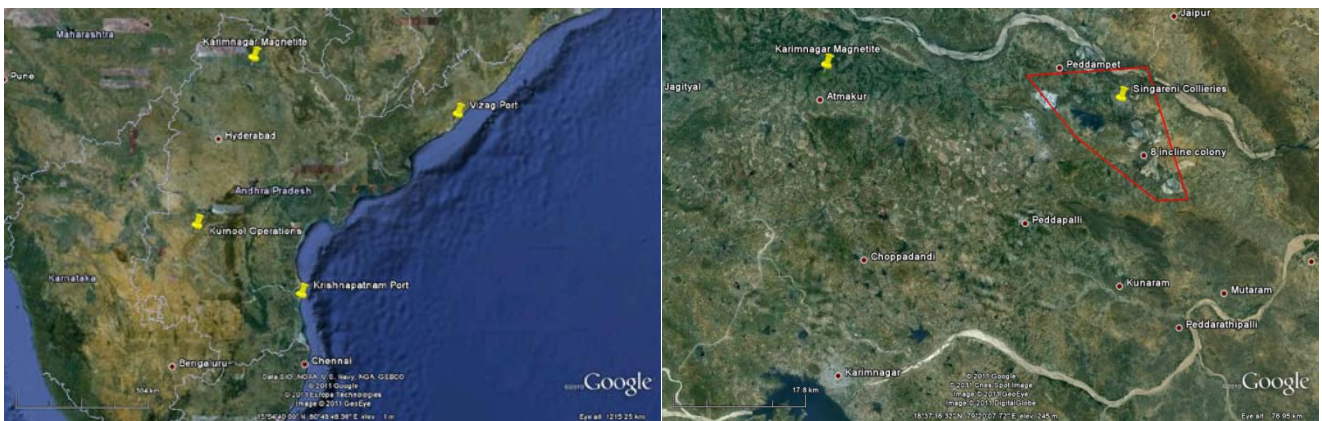


## Future Development Scenario

Based upon the geology and tested material beneficiation quality and recovery characteristics, the company has considered high level future development scenarios to guide project development activities. At this stage, a high level operational concept is being pursued which will include an initial phase 1 mining operation with an associated beneficiation plant. Phase 2 operations will include a pellet plant and consider capacity expansions.

Given the potential nature of the deposit the company is evaluating a Phase One project scale including the following:

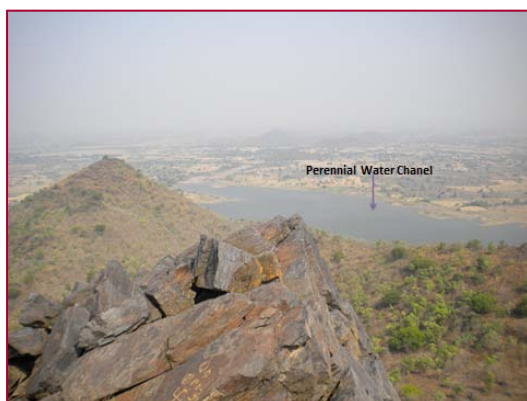
- 10 million tonne per annum mining operation;
- 10 million tonne per annum associated crushing, screening and beneficiation plant; and
- 4 million tonne per annum high grade concentrate production.



## Region Map Overview

The project area is well served by local infrastructure including:

- Vizag Port and Krishnapatnam Port for international export;
- Railway siding within 30km, connected by bitumen road and National Highway;
- Domestic power line within 5km and significant power generation capacity associated with nearby coal mines; and
- Perennial surface water resource adjacent to project, available for industrial use with Government approval.



View from top of AP14 project



AP14 Location showing nearby water resource

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**Competent Persons Statement:**

The information in this statement relating to the iron ore exploration results is based on information compiled by Mr Paul Blackney who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Blackney is employed by Optiro Pty Ltd. Mr Blackney has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which he is undertaking to qualify 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 Paul Blackney consents to the inclusion in this report of the matters based on his information in the form and context in which it appears.