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ASX Release

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## ENCOURAGING METALLURGICAL RESULTS

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### Highlights

- **Improved recoveries of up to 60% indicated for oxidised (transition) materials**
- **Consistent, good recoveries of 65% in fresh material**
- **Reduced reagent consumptions highlights potential to lower costs**
- **Gravity test work shows possibility of upgrading material prior to flotation**

Cradle Resources Limited (ASX: CXX, CXXO) (**Cradle**) is pleased to announce that the flotation test work being carried out as part of the Pre-feasibility Study at SGS Canada is progressing well with the program nearing the half-way point.

The flotation test work has focused on the oxidised and weathered material types. In addition preliminary test work has been carried out on gravity concentration as a possible method for rejecting the bulk of the gangue minerals prior to flotation.

The results to date from the test work demonstrate that:

- The niobium recoveries from the oxidised materials show predicted recoveries better than the 50% recoveries used in the Scoping Study. Recoveries in this rock type could be as high as 60%. These results will be confirmed in the locked cycle tests which are scheduled to be undertaken in September 2014.
- The fresh rock types tested are showing recoveries consistent with those seen in the Scoping Study (average 65%) with the cleaner higher recovery sovite rock type still to be tested. The weathered material types are indicating recoveries in the 50%-55% range as expected. These results have been accomplished with lower reagent addition rates which will positively impact on plant operating costs.
- Gravity testwork has demonstrated that gangue rejection with dense media separation (DMS) or gravity separation (tables & jigs) is possible. Further work on optimising the feed size distribution and minimising niobium losses to tails will occur during September and October 2014.

Further open circuit flotation tests will be completed in early September after which a series of locked cycle tests will be undertaken on the optimised circuits to confirm recoveries and concentrate grades of each material type in a number of circuit configurations.

**Grant Davey, the Managing Director of Cradle, commented:** *"We are pleased with the met results being obtained. The metallurgical test work confirms that Panda Hill has good recoveries across all major ore types and is comparable to the 3 other existing niobium mines in Brazil and Canada. Ongoing work will aim for further optimisation and improvement."*

For further information, please visit [www.cradleresources.com.au](http://www.cradleresources.com.au) or contact:

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