

ASX Announcement

Friday, 15 May 2009

D-TREE PHOSPHATE PROJECT – MAIDEN RESOURCE FOR JV

Highlights:

- Maiden Inferred Mineral Resource announced for the D-Tree deposit (EPM 14753)
 → 135Mt @ 13.8% P₂O₅ (10% lower cut-off-grade, 100% basis)
- Updated global Inferred Mineral Resource reported for all granted joint venture tenements
 → 305Mt @ 15% P₂O₅ (10% cut-off grade, 100% basis, includes EPM 14753)
- Global resource excludes 30% of the known phosphate system located within additional tenement applications
- Resource delineation drilling commenced at D-Tree West (EPM 15763)

The Board of Mt Isa Metals (MET) is pleased to announce that a maiden Inferred Mineral Resource estimate has been completed for the D-Tree phosphate deposit within tenement EPM 14753 together with an updated global resource figure for all granted tenements within the D-Tree Project area.

The D-Tree Project is a joint venture between Mt Isa Metals (MET 20%) and Legend International Holdings, Inc. (Legend 80%, manager). The joint venture controls 100% of the known D-Tree phosphate deposit which extends over an area of approximately 100km².

A summary of the global joint venture Inferred Mineral Resources together with a breakdown of resources by tenement area is presented in table 1. The data illustrates resources available at 5% and 10% P₂O₅ lower cut-of-grades.

	EPM 14753 (D-Tree)		EPM 15763 (D-Tree West)		Total ¹ (Granted Tenements)	
Cut-off grade	Tonnes (Mt)	Grade (P ₂ O ₅ %)	Tonnes (Mt)	Grade (P ₂ O ₅ %)	Tonnes (Mt)	Grade (P ₂ O ₅ %)
5% P ₂ O ₅	292	10.5	340	11.0	632	10.8
10% P ₂ O ₅	135	13.8	170	16.0	305	15.0

Table 1: D-Tree Inferred Mineral Resource (EPM 14753 and EPM 15763) – 100% basis.

¹ Parts of EPM 15763 and EPM 14753 are overlain by the Gregory Wild River area under the Gregory Wild River Declaration 2007 (GWRD) and as a result, the conducting of mining and exploration activities on those parts of the tenements will be limited by any restrictions placed under the GWRD.

Significant potential exists to extend the current resources through additional delineation drilling and additional tenement grants. The global Inferred Mineral Resource presented in table 1 is conservative in that it excludes those parts of the D-Tree deposit located within joint venture tenement applications (EPMA's 17333, 17437, 17443 and 17446). These areas account for in excess of 30% of the known phosphate system by area (refer figure 1).

Details on the resource estimation methodology adopted for EPM 14753 and EPM 15763 are provided in Appendix 1.

The D-Tree joint venture participants are currently focussed on the development of a direct shipment ore (DSO) operation by the end of calendar 2009 which will target high grade (+30% P₂O₅) mineralisation.

Beyond this proposed 'phase one' DSO development, the joint venture participants are also actively investigating the potential for a larger scale (phase two) development of the D-Tree deposit as a feed source to Legend's proposed 100%-owned Paradise beneficiation plant to be constructed approximately 15km to the east of the D-Tree site.

Under the phase two scenario the resource tonnages reported above are significant in that they confirm that a substantial quantity of D-Tree phosphate rock appears to be available as potential beneficiation plant feed.

Legend has advised that at full capacity the proposed Paradise beneficiation plant is expected to generate 5Mt/yr of phosphate rock concentrate of 30%+ P₂O₅. This plant output will require plant feed well in excess of 5Mt/yr which may be sourced from the D-Tree deposit or other 100% Legend-owned phosphate deposits in the region.

Results from preliminary bench-scale metallurgical test-work of D-Tree mineralisation have previously been reported². The results of this test work (summarised in table 2) indicate that high grade (+30% P₂O₅) phosphate concentrate can be generated from a simple beneficiation process and provide significant further encouragement that the substantial D-Tree resource inventory will present as attractive beneficiation plant feed.

Constituent	Concentrate Sample							
	YT-27		YT-27(Fe)		YT-141		YT-141(Fe)	
	Coarse	Fine	Coarse	Fine	Coarse	Fine	Coarse	Fine
P ₂ O ₅ %	32.13	34.10	33.66	33.65	38.61	36.04	38.95	36.09
Fe ₂ O ₃ %	0.84	0.40	0.53	0.37	0.24	0.58	1.61	4.96
Acid Insol. %	12.20	10.12	13.16	8.06	3.29	6.20	2.29	4.17
Flotation Recovery %	67.6	76.0	89.9	87.3	69.1	91.3	41.5	89.2

Table 2: Phosphate concentrate results from bench-scale wet process metallurgical test-work.

Note that the bench-scale testwork completed to date at D-Tree is limited and has been restricted to mineralisation exposed in historical trenches. Given the significant footprint of the D-Tree phosphate system a substantial amount of additional bulk sampling and metallurgical test-work will be required to assess metallurgical characteristics over the entire deposit.

² Refer MET ASX Release 'PHOSPHATE EXPLORATION RESULTS' dated 26 February 2009.

Future activities

Broad spaced resource delineation drilling re-commenced at D-Tree in early May including the initial joint venture drilling within the D-Tree West tenement (EPM 15763). This drilling is focussed on extending and improving the confidence of the current resource inventory and identifying additional high grade potential DSO material.

The focus of the D-Tree joint venture remains on the development of a 0.5Mtpa Direct Shipment Ore operation by the end of 2009. Feasibility studies in respect of that proposed development are continuing.

Results will be reported as they come to hand.

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Competent Persons Statement

The information in this report which relates to D-Tree Mineral Resources (EPM 14753) is based on a resource estimate compiled by Mr Stephen Hyland MAusIMM, who is a full time employee and Principle Consultant of Ravensgate Minerals Industry Consultants. Mr Hyland 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 Hyland consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

The information in this report that relates to Exploration Results and D-Tree West Mineral Resources (EPM 15763) is based on information compiled by Mr Peter Spiers B.Sc (Hons) Geol., who is a Member of The Australasian Institute of Mining and Metallurgy. Mr Spiers is a full time employee of the company. Mr Spiers 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 Spiers consents to the inclusion in the report of the matters based on his information in the form and context in which it appears.

More information pertaining to site access, geology, tenure, drilling and sampling methodology can be found in the Mt Isa Metals ASX release dated 26th of February 2009 which can be accessed on the company website (<http://www.mtisametals.com.au/>).

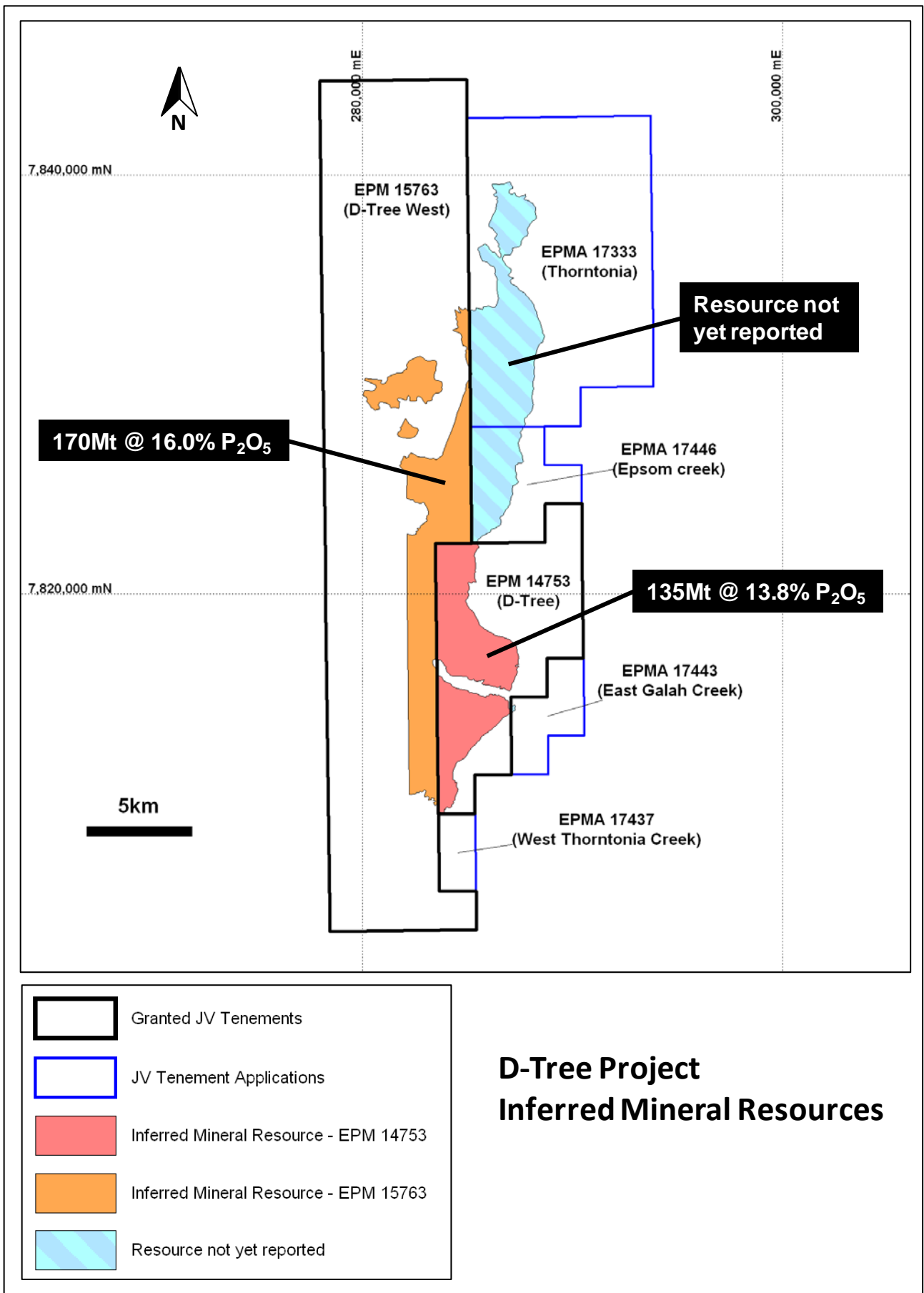


Figure 1: Location diagram including Mineral Resource outline and tenement status.

Appendix 1 – Notes Relating to Resource Statements

EPM 14753

The resource estimate within [EPM 14753](#) was completed by Steve Hyland (Ravensgate Consulting) using data prepared and provided by Legend.

Geology

The D-Tree deposit is hosted within predominantly flat-lying Cambrian-age sediments which lie on the eastern edge of the regional Georgina Basin. Mineralisation of economic interest is predominantly restricted to the Beetle Creek Formation – a marine sedimentary phosphorite.

The topography of the mineralised horizons undulates, in part reflecting the topography of the original depositional surface, and subsequent minor deformation. Infrequent steeply dipping late stage faults are interpreted to offset portions of the deposit.

Data Density

The majority of data was obtained from reverse circulation (RC) drilling with a small number of diamond drill holes (diamond) also incorporated in the estimation.

Drilling was conducted on a 100m x 100m grid for areas of high grade (DSO) potential such as D-Tree North and North Galah, or a 300m x 300m grid or a 300m x 600m grid for the remainder of the resource area.

All holes were drilled vertically and therefore give a true thickness due to the flat lying nature of the mineralisation. A total of 476 RC and 11 diamond holes were used in the geological and mineralogical interpretation and interpolation of the block model estimate.

Geological Interpretation

Resource outlines were generated by creating wireframes of interpreted zones of grade continuity. The wireframes are snapped to drill holes and converted into an orebody solid model. Wireframes were interpreted at a nominal 5% lower cut-off grade. This interpretation was carried out by Legend geologists and Ravensgate.

Drilling Technique

Three types of drilling were conducted over the deposit to date. Reverse Circulation (RC) drilling is used as the base for all results reported in this document and is the most extensive type of drilling. The second type was Diamond drilling, which mainly consisted of holes to twin current RC drilling for quality control purposes. A third type, Sonic drilling was also used to obtain larger samples which are appropriate for metallurgical sampling and testing. Sonic drilling uses an ultra-high frequency oscillating drill bit to cut through the rock giving full sample recovery as there is no high pressure air or water required in the process. Sonic drill results were not used in this resource estimation.

The RC holes were completed using either a 4.5" (114.3mm) or 5" (127mm) drill bit. All Diamond core was drilled at HQ triple tube size.

Sample recoveries for the RC drilling (sample weight) and diamond drilling have been logged and recorded.

Accuracy of Drill Hole Locations

Drill hole collars were surveyed with a sub-metre accuracy GPS. Down holes surveys were conducted on a limited number of RC holes which indicated minimal deviation from the planned vertical angle.

Sampling Techniques

RC holes were sampled on one metre intervals. Diamond core holes sampled at lesser intervals according to geological logging.

RC samples were collected using a 3-tier riffle splitter over 1 metre intervals, yielding a 2-3 kg sample for subsequent assaying. A second split was also collected from some high grade intervals to use in quality assurance of the sampling process. Assay results from all such field duplicate samples received so far show very good correlation between assays from original and duplicate samples.

Specific Gravity

214 diamond core samples were taken across the resource area and bulk densities measured using the Archimedes method. Measurement was undertaken by an external laboratory.

Quality of Assay Data

All phosphate samples were submitted to either one of two commercial laboratories located in either Mt Isa or Brisbane. The analytical technique used was fused bead XRF, but some samples were also tested using a fused bead ICP method for comparison. All samples were analyzed for P₂O₅, Al₂O₃, Fe₂O₃, MgO, CaO and SiO₂.

A series of pulp duplicates were taken at the preparation stage to test for laboratory accuracy and precision with all results showing good correlation and within acceptable limits. A series of matrix matched phosphate reference standards have also been submitted with the samples to ensure accuracy and precision of assaying. The results of these standards came back within acceptable limits.

Quality of Data Description

All drill holes were logged by qualified geologists. Features relating to lithology, grain size and weathering were recorded and have been stored in an electronic database.

Estimation Technique

Blocks grades were interpolated into the 3-D block model using the Ordinary Kriging algorithm and were constrained according to the local ore horizon geometry. A suite of ancillary elements were also interpolated into the block model, including Fe₂O₃, Al₂O₃, MgO, CaO and SiO₂.

The block size used for the estimation is 50m x 50m x 1m. This block size is deemed to be adequate with respect to sample and block support considerations as localized coefficients of variation are low.

Cut-off Grades

No direct cutting of high grades was applied. Instead a moderated 'Grade Cut-off / Distance Restriction' regime was employed. The general application of the cut-off threshold was set at the +99th percentile level as analysed from any given mineralized horizon probability distribution. The range of interpolation influence in the block model was then restricted for those composites above the +99th percentile cut-off level. The distance of restriction for these 'out-lier' composites was variable according to the localized drilling density, ranging from 50 metres in the higher density drilling areas to 150 metres in the sparsely drilled areas.

This method of moderating high grade outliers and preventing them from extending influence too far into sparsely drilled areas of the block model is still considered somewhat 'arbitrary'. However, it is standard approach employed by Ravensgate in certain situations where some level of conservatism need to be introduced at the early stage of project development when data acquisition is at an early stage. The 'Grade Cut-off / Distance Restriction' method is considered superior to the 'traditional' and also arbitrary 'hard cut' to sample or composite grade values.

Metallurgical Considerations

Preliminary metallurgical testwork has been completed on various D-Tree samples including those collected from sonic drilling, diamond drilling and bulk sampling of exposed ore within historical trenches.

The testwork is ongoing and therefore results of the studies have not yet been reported.

Note that the resource estimate within EPM 14753 compares favourably with non-JORC compliant resources estimated from historical drilling.

EPM 15763

The resource estimate within EPM 15763 was completed by Peter Spiers (Mt Isa Metals Limited) using historical drill hole data comprising in excess of 70 predominantly reverse circulation drill holes completed during the period from the late 1960's to the mid 1980's.

D-Tree mineralisation on EPM 15763 is contiguous with that described above for EPM 14753 and hence the comments above in respect of the geological setting etc also apply to EPM 15763.

A simple polygonal estimation methodology was applied with the total resource figure representing the aggregate of individual polygons.

A summary of the key resource estimation inputs follows:

- intersections were defined for each drill hole based on two lower cut-off grade criteria comprising a +10% P₂O₅ cut-off, and a lower grade +5% P₂O₅ cut-off
- A minimum bed thickness of 5 feet (1.52m) was used for both grade ranges
- Each drill hole was assigned a polygonal area of influence (in plan view) and a volume was calculated on the basis of the polygonal area and drill hole intersection width
- Tonnage was calculated by applying a specific gravity of 18.8 cu ft./ton (1.7 tonnes per cubic metre) to each polygonal volume

Note that it was not possible to accurately locate historical drill hole collars on the ground due to the elapsed time since the bulk of exploration drilling was conducted. In addition the Department of Mines and Energy records do not provide co-ordinate data for most of the drill hole collars. Historical tenement boundaries and cultural features shown on historical maps (tracks, bores, streams, etc) were utilised to locate drill hole collars in relation to modern digital images and current tenement boundaries.

It should be noted that there will be inherent uncertainty / error in locating drill hole data in this manner, however it is considered that the drill hole accuracy is sufficient for the definition and reporting of a JORC compliant Inferred Mineral Resource particularly with reference to the significant scale of the deposit (30km strike length, mineralised footprint approximately 100km²).

The favourable reconciliation between the historical drilling data and new joint venture drilling within tenement EPM 14753 (as noted above) further supports this use of this approach.