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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**FORM 8-K**

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**CURRENT REPORT**

**Pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934**

**Date of Report (Date of earliest event reported): May 14, 2009**

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**LEGEND INTERNATIONAL HOLDINGS, INC**  
(Exact name of registrant as specified in its charter)

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**Delaware**  
(State or Other Jurisdiction  
of Incorporation)

**000-32551**  
(Commission  
File Number)

**23-3067904**  
(I.R.S. Employer  
Identification No.)

**Level 8, 580 St Kilda Road, Melbourne, Victoria Australia 3004**  
(Address of Principal Executive Office) (Zip Code)

**61-3-8532-2866**  
(Registrant's telephone number, including area code)

**N/A**  
(Former name or former address, if changed since last report)

Check the appropriate box below if the Form 8-K filing is intended to simultaneously satisfy the filing obligation of the registrant under any of the following provisions:

- Written communications pursuant to Rule 425 under the Securities Act (17 CFR 230.425)
  - Soliciting material pursuant to Rule 14a-12 under the Exchange Act (17 CFR 240.14a-12)
  - Pre-commencement communications pursuant to Rule 14d-2(b) under the Exchange Act (17 CFR 240.14d-2(b))
  - Pre-commencement communications pursuant to Rule 13e-4(c) under the Exchange Act (17 CFR 240.13e-4(c))
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## Item 8.01 Other Events.

### Maiden Resource<sup>(1)</sup> Estimate for D-Tree Phosphate Deposit and Update on the D-Tree Direct Shipping Ore Project

Legend International Holdings Inc. (the "Company") (OTC.BB:LGDI) is pleased to announce the maiden Inferred JORC Resource estimate for the D-Tree phosphate deposit (EPM14753) at its 80% owned D-Tree Phosphate Project in Queensland Australia. The recent drilling undertaken at D-Tree has also confirmed the presence of significant quantities of near surface Direct Shipping Ore ("DSO") and the DSO Project remains on schedule to commence production in Q4 2009.

Highlights:

- **Maiden Inferred JORC Resource of 135 Mt @ 13.8% P<sub>2</sub>O<sub>5</sub> for the D-Tree deposit (EPM 14753).**
- **Total JV Inferred JORC Resource currently 305 Mt @ 15% P<sub>2</sub>O<sub>5</sub> for the combined D-Tree West (EPM15763) and D-Tree (EPM14753).**
- **D-Tree DSO project advancing towards production start in Q4 2009, recent drilling results confirm potential of near surface high grade (>30% P<sub>2</sub>O<sub>5</sub>) phosphate rock.**

#### Maiden Inferred JORC Resource of 135Mt @ 13.8% P<sub>2</sub>O<sub>5</sub> for the D-Tree deposit

The maiden D-Tree resource estimate is 135Mt @ 13.8% P<sub>2</sub>O<sub>5</sub> at a 10% P<sub>2</sub>O<sub>5</sub> lower cut off grade. This Inferred Mineral Resource has been compiled in accordance with JORC Code (2004) guidelines.

Table 1 Maiden Inferred JORC Resource

Cut off grade (%)	Tonnage (Mt)	P <sub>2</sub> O <sub>5</sub> Grade (%)
5	292	10.5
10	135	13.8

In combination with the previously reported JORC compliant Inferred Resource of 170Mt @ 16% P<sub>2</sub>O<sub>5</sub>, at a 10% P<sub>2</sub>O<sub>5</sub> lower cut off grade, (as reported by Mt Isa Metals Ltd for the contiguous portion of the D-Tree deposit contained within EPM 15763), the total Inferred Mineral Resource for the D-Tree phosphate deposit is 305 Mt @ 15.0% P<sub>2</sub>O<sub>5</sub> at a 10% P<sub>2</sub>O<sub>5</sub> lower cut off grade.

Table 2 Total Inferred JORC Mineral Resource

Deposit	Tonnage (Mt)	P <sub>2</sub> O <sub>5</sub> Grade (%)
D-Tree	135	13.8
D-Tree West	170	16.0
Total	305	15.0

The resource estimate compares favourably with previously historically reported estimates (Denaro et al, 2007) for the D-Tree deposit (339Mt @ 16.0% P<sub>2</sub>O<sub>5</sub> at a 10% P<sub>2</sub>O<sub>5</sub> lower cut off grade), with a large proportion, approximately 30% by area, of the known deposit currently not contained within the current resource estimates due to the Exploration Permit Application pending for these areas (refer to Figure 1 D-Tree Phosphate Deposit). Upon grant further resource validation will occur within these tenements (EPM17446 & EPM17333) with a focus on identifying additional DSO mineralisation.

## DSO project advancing towards commencing production in Q4 2009

Previous drilling undertaken by Legend highlighted the potential for D-Tree to host a significant tonnage of DSO and this has been confirmed by recent drilling undertaken on the Mining Lease Application (“MLA”) area. A total of 122 holes for 4,615 additional metres have been drilled into the D-Tree North area, directly aimed at defining DSO material. To date, results for a total of 96 holes have been received with the remaining due back before the end of May 2009. The following significant intercepts (Table 3) have been returned (also refer to Figure 2 D-Tree DSO MLA drilling and Figure 3 D-Tree 284200 Cross Section).

Table 3 Significant D-Tree North DSO drilling intercepts

Hole ID	Intercept	P <sub>2</sub> O <sub>5</sub> (%)	R <sub>2</sub> O <sub>3</sub> * (%)	East	North
DTRC0098B	3m @ 30.60% P <sub>2</sub> O <sub>5</sub> from 8m	30.60	2.53	284198.4	7820500.7
DTRC0147B	3m @ 34.70% P <sub>2</sub> O <sub>5</sub> from 8m	34.70	2.41	284201.3	7820199.1
DTRC0148A	2m @ 31.90% P <sub>2</sub> O <sub>5</sub> from 6m	31.90	6.29	284505.1	7820185.9
DTRC0500	2m @ 32.45% P <sub>2</sub> O <sub>5</sub> from 11m	32.45	4.10	284050.2	7820200.9
DTRC0501	3m @ 30.73% P <sub>2</sub> O <sub>5</sub> from 9m	30.73	3.21	284074.1	7820199.8
DTRC0502	4m @ 32.12% P <sub>2</sub> O <sub>5</sub> from 9m	32.13	3.18	284101.8	7820202.8
DTRC0504	2m @ 30.10% P <sub>2</sub> O <sub>5</sub> from 9m	30.10	3.98	284151.1	7820201.2
DTRC0507	2m @ 30.00% P <sub>2</sub> O <sub>5</sub> from 7m	30.00	7.38	284300.4	7820202.1
DTRC0523	3m @ 30.40% P <sub>2</sub> O <sub>5</sub> from 7m	30.40	5.75	284200.5	7820325.5
DTRC0524	2m @ 30.90% P <sub>2</sub> O <sub>5</sub> from 9m	30.90	5.03	284200.4	7820350.7
DTRC0525	4m @ 32.02% P <sub>2</sub> O <sub>5</sub> from 8m	32.02	2.69	284200.3	7820375.1
DTRC0526	4m @ 31.60% P <sub>2</sub> O <sub>5</sub> from 7m	31.60	3.12	284200.0	7820399.0
DTRC0527	2m @ 32.15% P <sub>2</sub> O <sub>5</sub> from 10m	32.15	2.97	284200.4	7820424.8
DTRC0529	2m @ 33.10% P <sub>2</sub> O <sub>5</sub> from 7m	33.10	2.88	284200.5	7820474.9
DTRC0535	2m @ 31.00% P <sub>2</sub> O <sub>5</sub> from 3m	31.00	5.43	284402.6	7820700.1
DTRC0538	3m @ 31.03% P <sub>2</sub> O <sub>5</sub> from 7m	31.03	3.40	284299.3	7820601.2
DTRC0539	2m @ 30.10% P <sub>2</sub> O <sub>5</sub> from 10m	30.10	6.11	284400.1	7820599.9
DTRC0540	2m @ 32.20% P <sub>2</sub> O <sub>5</sub> from 9m	32.20	3.33	284099.2	7820501.0
DTRC0544	2m @ 30.90% P <sub>2</sub> O <sub>5</sub> from 6m	30.90	3.59	284301.3	7820401.7
DTRC0548	3m @ 31.43% P <sub>2</sub> O <sub>5</sub> from 9m	31.43	3.74	284301.7	7820298.1
DTRC0551	2m @ 33.40% P <sub>2</sub> O <sub>5</sub> from 11m	33.40	2.72	284000.8	7820098.5
DTRC0564	2m @ 30.35% P <sub>2</sub> O <sub>5</sub> from 17m	30.35	5.89	284101.3	7819801.5
DTRC0572	2m @ 30.20% P <sub>2</sub> O <sub>5</sub> from 7m	30.20	4.17	284100.4	7820999.3

\*R<sub>2</sub>O<sub>3</sub> = Fe<sub>2</sub>O<sub>3</sub> + Al<sub>2</sub>O<sub>3</sub>

Table 3: Drill hole intercepts calculated using minimum width of 2 metres, with average grade set at 30% P<sub>2</sub>O<sub>5</sub>. Internal waste was set as no more than 2 contiguous metres with a maximum of 5 metres of internal waste per intercept.

This estimate of mineralised material was completed by Steve Hyland (Ravensgate Consulting) using data prepared and provided by Legend. 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 DSO potential such as D-Tree North, 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 ore body. A total of 476 RC and 11 diamond holes were used in the geological and mineralogical interpretation and interpolation of the block model estimate.

Each hole was sampled on one metre intervals with the block model interpolation composited using a one metre bench. 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. 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 Fe<sub>2</sub>O<sub>3</sub>, Al<sub>2</sub>O<sub>3</sub>, MgO, CaO and SiO<sub>2</sub>.

The D-Tree DSO project is on schedule to begin shipping phosphate rock by the end of this year. It is forecast that the project will have an estimated operating cost of A\$100-125/tonne FOB (Free on Board) at the Port of Townsville (Queensland, Australia), and the project capital cost is estimated to be A\$10-A\$15m.

**Joseph Gutnick**  
**President and Chief Executive Officer**

**Background**

Legend is led by Joseph Gutnick, a prominent Australian mining industry entrepreneur, who has overseen some of Australia's largest and most prestigious resource discoveries.

Legend's primary focus is the development of its phosphate interests in the Georgina Basin, Queensland, Australia including Paradise (Lady Annie, Lady Jane), D-Tree, Thornton, Lily Creek, Quita Creek, Sherrin Creek and Highland Plains.

Legend plans to produce an average of 5 million tonnes per year of phosphate rock concentrate of 30%+ P<sub>2</sub>O<sub>5</sub> by 2012, thus becoming one of the world's leading producers of phosphate rock.

More information on the company is available at <http://www.lqdi.net/>.

**Contact details**

For further information, please contact:

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E-mail: legendinfo@axisc.com.au

**Forward-Looking Statements**

Forward-looking statements in this press release are made pursuant to the "safe harbour" provisions of the Private Securities Litigation Reform Act of 1995. Investors are cautioned that such forward-looking statements involve risks and uncertainties including, without limitation, the risks of exploration and development stage projects, risks associated with environmental and other regulatory matters, mining risks and competition and the volatility of mineral prices. Actual results and timetables could vary significantly. Additional information about these and other factors that could affect the Company's business is set forth in the Company's fiscal 2008 Annual Report on Form 10-K and other filings with the Securities and Exchange Commission.

*The information in this report which relates to D-Tree Mineral Resources 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 is based on information compiled by Mr Mark Edwards MAusIMM, the Geology Manager of Legend International Holdings Inc. Mr Edwards 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 Edwards 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 Form 8-K as released on the 25th of February 2009 which can be accessed on the company website (<http://www.lqdi.net/>).*

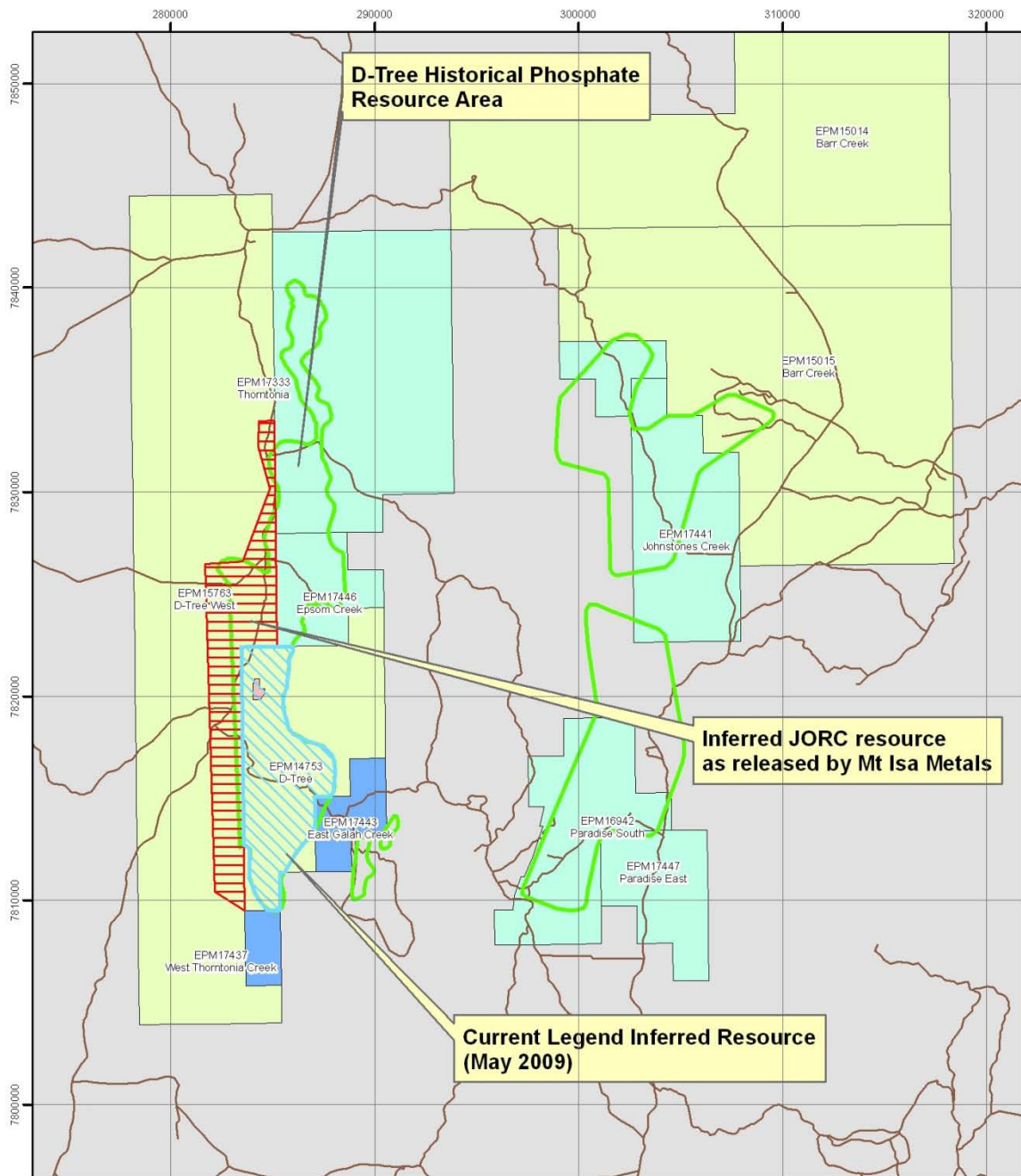
*1. Mineral resources ("resources") have been calculated as at May 12, 2009 in accordance with JORC Code (2004) guidelines. For United States reporting purposes, Industry Guide 7, (under the Securities and Exchange Act of 1934), as interpreted by Staff of the SEC, applies different standards in order to classify mineralization as a reserve. Accordingly, for U.S. reporting purposes, D-Tree is classified as non reserve mineralized material. In addition, while the terms "measured", "indicated" and "inferred" mineral resources are required pursuant to the JORC Code, the U.S. Securities and Exchange Commission does not recognize such terms. JORC standards differ significantly from the requirements of the U.S. Securities and Exchange Commission, and mineral resource information contained herein is not comparable to similar information regarding mineral reserves disclosed in accordance with the requirements of the U.S. Securities and Exchange Commission.*

*U.S. investors should understand that "inferred" mineral resources have a great amount of uncertainty as to their existence and great uncertainty as to their economic and legal feasibility. In addition, U.S. investors are cautioned not to assume that any part or all of Legend's mineral resources constitute or will be converted into reserves.*

*References:*

*Denaro T., Ramsden C., and Brown D. (2007) Queensland Minerals, A summary of Major Mineral Resources, Mines and Projects. Fourth Edition. Published by the Queensland Department of Mines and Energy.*

Figure 1 D- Tree Phosphate Deposit



<b>Legend</b> 		
	North QLD Phosphate	
	Date: 05/05/09	Author: BW
	Filepath: K:\GIS\Company\Legend\Geology\Statewide\QLD\Map Documents\Tenements and Phosphate\D-Tree and Paradise Ore zones 050509.mxd	

Figure 2 D-Tree DSO MLA drilling

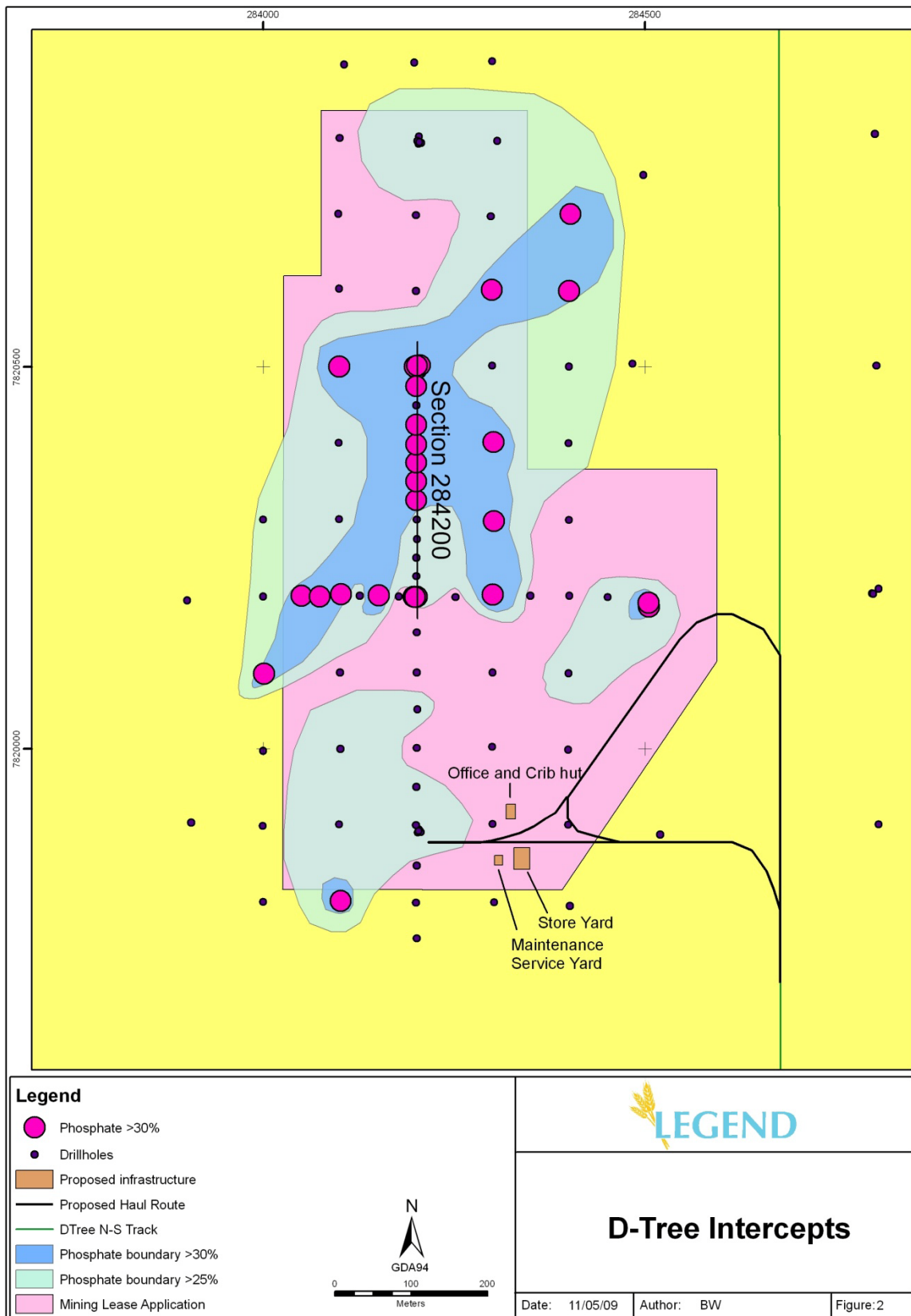
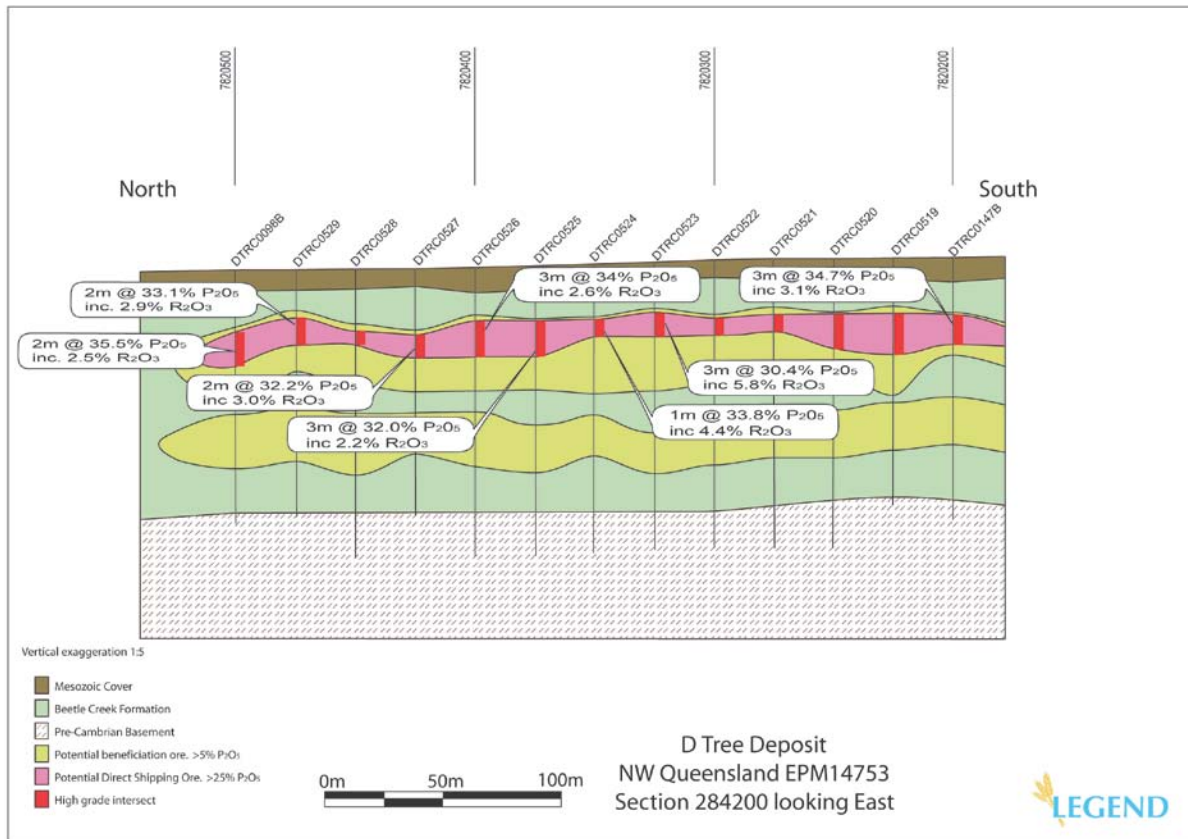




Figure 3 D-Tree 284200 Cross Section





**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned, hereunto duly authorized.

**LEGEND INTERNATIONAL HOLDINGS, INC.**

By:

A handwritten signature in black ink, appearing to read "Peter Lee", written over a horizontal line.

Peter Lee  
Secretary

Date: May 14, 2009