Rule 2.7, 3.10.3, 3.10.4, 3.10.5

Appendix 3B

New issue announcement, application for quotation of additional securities and agreement

Information or documents not available now must be given to ASX as soon as available. Information and documents given to ASX become ASX's property and may be made public.

Introduced 1/7/96. Origin: Appendix 5. Amended 1/7/98, 1/9/99, 1/7/2000, 30/9/2001, 11/3/2002, 1/1/2003, 24/10/2005.

Name of entity

PREDICTIVE DISCOVERY LIMITED

ABN

11 127 171 877

We (the entity) give ASX the following information.

Part 1 - All issues

You must complete the relevant sections (attach sheets if there is not enough space).

1	+Class of +securities issued or to be issued	1. Ordinary Shares 2. Unlisted options with an exercise price of 10 cents to 30 June 2013, 15 cents from 1 July 2013 to 30 June 2014 and 20 cents from 1 July 2014 to the expiry date on 30 June 2015 3. Unlisted options with an exercise price of 15 cents and an expiry date of the third anniversary of the allotment of the shares the subject of this Appendix 3B

2	Number of +securities issued or to be issued (if known) or maximum number which may be issued	1 & 2 Up to 25,111,081 ordinary shares pursuant to a 1 for 5 non-renounceable rights issue plus up to 12,555,541 free attaching unlisted options on a 1 for 2 basis with an exercise price of 10 cents to 30 June 2013, 15 cents from 1 July 2013 to 30 June 2014 and 20 cents from 1 July 2014 to the expiry date on 30 June 2015 pursuant to a prospectus. These numbers are subject to reconciliation of entitlements and rounding and exclude any allowance for shares issued in the event that any existing option holders exercise their rights to convert their securities to ordinary shares prior to the record date. 3. 2,000,000 unlisted options with an exercise price of 15 cents and an expiry date of the third anniversary of the allotment of the shares the subject of this Appendix 3B (as part of the fee paid to the lead manager to the issue)
3	Principal terms of the +securities (eg, if options, exercise price and expiry date; if partly paid +securities, the amount outstanding and due dates for payment; if +convertible securities, the conversion price and dates for conversion)	1. Fully paid ordinary shares 2. Unlisted options with an exercise price of 10 cents to 30 June 2013, 15 cents from 1 July 2013 to 30 June 2014 and 20 cents from 1 July 2014 to the expiry date on 30 June 2015. 3. Unlisted options with an exercise price of 15 cents and an expiry date of the third anniversary of the allotment of the shares the subject of this Appendix 3B (as part of the fee paid to the lead manager to the issue) Both tranches of options are exercisable at any time up to their expiry date and each option entitles the holder to be issued one fully paid ordinary share upon payment of the exercise price.
4	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	1. Ordinary shares – Yes, with fully paid ordinary shares 2 & 3 Unlisted options - No, but shares issued on exercise of the options will rank equally with fully paid ordinary shares from the date of allotment

5	Issue price or consideration	1. Ordinary shares – 8 cents 2. Unlisted options – Nil, free attaching options attaching to ordinary shares under rights issue 3. Unlisted options – Nil, issued as part of the fee paid to the lead manager for the issue
6	Purpose of the issue (If issued as consideration for the acquisition of assets, clearly identify those assets)	Exploration of gold project portfolio in Burkina Faso, costs of the offer and general working capital.
7	Dates of entering +securities into uncertificated holdings or despatch of certificates	To be determined and announced

8 Number and +class of all +securities quoted on ASX (*including* the securities in clause 2 if applicable)

Number	+Class
Up to 130,469,611	Ordinary Shares

9 Number and +class of all +securities not quoted on ASX (*including* the securities in clause 2 if applicable)

Number	+Class
20,196,875	Ordinary shares escrowed

	6,000,000	Options exercisable at 25 cents expiring 20 August 2015
	500,000	Options exercisable at 31 cents expiring 11 July 2015
	Up to 12,555,541	Unlisted options with an exercise price of 10 cents to 30 June 2013, 15 cents from 1 July 2013 to 30 June 2014 and 20 cents from 1 July 2014 to the expiry date on 30 June 2015.
	2,000,000	Unlisted options with an exercise price of 15 cents and an expiry date of the third anniversary of the allotment of the shares the subject of this Appendix 3B

10	Dividend policy (in the case of a trust, distribution policy) on the increased capital (interests)	The Company does not currently have a dividend policy

Part 2 - Bonus issue or pro rata issue

11	Is security holder approval required?	No
12	Is the issue renounceable or non-renounceable?	Non-renounceable and entitlements will not be tradable on ASX or otherwise transferable.
13	Ratio in which the +securities will be offered	One share held for every five shares held at the record date
14	+Class of +securities to which the offer relates	1. Fully paid ordinary shares 2. Unlisted options with an exercise price of 10 cents to 30 June 2013, 15 cents from 1 July 2013 to 30 June 2014 and 20 cents from 1 July 2014 to the expiry date on 30 June 2015.
15	+Record date to determine entitlements	To be determined and announced
16	Will holdings on different registers (or subregisters) be aggregated for calculating entitlements?	N/A

17	Policy for deciding entitlements in relation to fractions	Round up to nearest whole number
18	Names of countries in which the entity has +security holders who will not be sent new issue documents Note: Security holders must be told how their entitlements are to be dealt with. Cross reference: rule 7.7.	Shareholders whose registered address is not in Australia or New Zealand.
19	Closing date for receipt of acceptances or renunciations	To be determined and announced
20	Names of any underwriters	N/A, although the Directors reserve the right to obtain an underwriter at any stage in accordance with the *Corporations Act (Cth) 2001* and the ASX Listing Rules.
21	Amount of any underwriting fee or commission	N/A
22	Names of any brokers to the issue	Canaccord BGF
23	Fee or commission payable to the broker to the issue	- 2% management fee of the total gross amount raised - 4% management fee of the total gross amount placed by Canaccord in any shortfall - corporate options: 2,000,000 options exercisable at $0.15 on or before the 3 year anniversary of the allotment of the shares the subject of this Appendix 3B
24	Amount of any handling fee payable to brokers who lodge acceptances or renunciations on behalf of +security holders	2% of the total of an application with a maximum of $400 per application.
25	If the issue is contingent on +security holders' approval, the date of the meeting	N/A
26	Date entitlement and acceptance form and prospectus or Product Disclosure Statement will be sent to persons entitled	To be determined and announced.
27	If the entity has issued options, and the terms entitle option holders to participate on exercise, the date on which notices will be sent to option holders	To be determined and announced

28	Date rights trading will begin (if applicable)	N/A
29	Date rights trading will end (if applicable)	N/A
30	How do +security holders sell their entitlements *in full* through a broker?	N/A
31	How do +security holders sell *part* of their entitlements through a broker and accept for the balance?	N/A
32	How do +security holders dispose of their entitlements (except by sale through a broker)?	N/A
33	+Despatch date	To be determined and announced

Part 3 - Quotation of securities

You need only complete this section if you are applying for quotation of securities

34 Type of securities
(*tick one*)

(a) ☐ Securities described in Part 1

(b) ☐ All other securities

Example: restricted securities at the end of the escrowed period, partly paid securities that become fully paid, employee incentive share securities when restriction ends, securities issued on expiry or conversion of convertible securities

Entities that have ticked box 34(a)

Additional securities forming a new class of securities

Tick to indicate you are providing the information or documents

35 ☐ If the +securities are +equity securities, the names of the 20 largest holders of the additional +securities, and the number and percentage of additional +securities held by those holders

36 ☐ If the +securities are +equity securities, a distribution schedule of the additional +securities setting out the number of holders in the categories
1 - 1,000
1,001 - 5,000
5,001 - 10,000

10,001 - 100,000
100,001 and over

37 ☐ A copy of any trust deed for the additional +securities

Entities that have ticked box 34(b)

38	Number of securities for which +quotation is sought	
39	Class of +securities for which quotation is sought	
40	Do the +securities rank equally in all respects from the date of allotment with an existing +class of quoted +securities? If the additional securities do not rank equally, please state: • the date from which they do • the extent to which they participate for the next dividend, (in the case of a trust, distribution) or interest payment • the extent to which they do not rank equally, other than in relation to the next dividend, distribution or interest payment	
41	Reason for request for quotation now Example: In the case of restricted securities, end of restriction period (if issued upon conversion of another security, clearly identify that other security)	

		Number	+Class
42	Number and +class of all +securities quoted on ASX (*including* the securities in clause 38)		

Quotation agreement

1 +Quotation of our additional +securities is in ASX's absolute discretion. ASX may quote the +securities on any conditions it decides.

2 We warrant the following to ASX.

- The issue of the +securities to be quoted complies with the law and is not for an illegal purpose.

- There is no reason why those +securities should not be granted +quotation.

- An offer of the +securities for sale within 12 months after their issue will not require disclosure under section 707(3) or section 1012C(6) of the Corporations Act.

  Note: An entity may need to obtain appropriate warranties from subscribers for the securities in order to be able to give this warranty

- Section 724 or section 1016E of the Corporations Act does not apply to any applications received by us in relation to any +securities to be quoted and that no-one has any right to return any +securities to be quoted under sections 737, 738 or 1016F of the Corporations Act at the time that we request that the +securities be quoted.

- If we are a trust, we warrant that no person has the right to return the +securities to be quoted under section 1019B of the Corporations Act at the time that we request that the +securities be quoted.

3 We will indemnify ASX to the fullest extent permitted by law in respect of any claim, action or expense arising from or connected with any breach of the warranties in this agreement.

4 We give ASX the information and documents required by this form. If any information or document not available now, will give it to ASX before +quotation of the +securities begins. We acknowledge that ASX is relying on the information and documents. We warrant that they are (will be) true and complete.

Sign here:

.... Date: 28 May 2012

Company secretary

Print name: Ian Hobson

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