
MONGOLIAN RESOURCES LIMITED
(TO BE RENAMED MRL CORPORATION LIMITED)
ACN 007 870 760

NOTICE OF GENERAL MEETING

TIME: 10.00am WST

DATE: Wednesday, 9th October 2013

PLACE: Mongolian Resources Limited
Suites 6 & 7
61 Hampden Road
Nedlands WA 6009

This Notice of Meeting should be read in its entirety. If Shareholders are in doubt as to how they should vote, they should seek advice from their professional advisers prior to voting.

Should you wish to discuss the matters in this Notice of Meeting please do not hesitate to contact the Executive Director, Mr Peter Youd on (+61) 0400 556 471 or the Company Secretary, Ms Nerida Schmidt on (+61) 0411 709 472.

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CRITICAL DATES*

Event	Date
Execution of Share Sale Agreement and Consultancy Agreement	29 May 2013
Dispatch Notice of Meeting	6 September 2013
Lodgement of Prospectus with the ASIC	11 September 2013
General Meeting	9 October 2013
Closing Date – Capital Raising	9 October 2013
Despatch of holding statements – Capital Raising	11 October 2013
Settlement of Stage 1 of Acquisition	11 October 2013
Expected date for re-quotation of the Company's securities on ASX	16 October 2013
Settlement of Stage 2 of Acquisition	16 October 2013

* This timetable is indicative only and subject to change. The Directors of the Company reserve the right to amend the timetable

IMPORTANT INFORMATION

TIME AND PLACE OF MEETING

Notice is given that the meeting of the Shareholders to which this Notice of Meeting relates will be held at **10.00am WST on Wednesday, 9th October 2013** at:

Mongolian Resources Limited
Suites 6 & 7
61 Hampden Road
Nedlands WA 6009

YOUR VOTE IS IMPORTANT

The business of the Meeting affects your shareholding and your vote is important.

VOTING ELIGIBILITY

The Directors have determined pursuant to Regulation 7.11.37 of the Corporations Regulations 2001 (Cth) that the persons eligible to vote at the Meeting are those who are registered Shareholders at **5pm WST on 7th October 2013**.

VOTING IN PERSON

To vote in person, attend the Meeting at the time, date and place set out above.

VOTING BY PROXY

To vote by proxy, please complete and sign the enclosed Proxy Form and return by the time and in accordance with the instructions set out on the Proxy Form.

In accordance with section 249L of the Corporations Act, members are advised that:

- each member has a right to appoint a proxy;
- the proxy need not be a member of the Company; and
- a member who is entitled to cast 2 or more votes may appoint 2 proxies and may specify the proportion or number of votes each proxy is appointed to exercise. If the member appoints 2 proxies and the appointment does not specify the proportion or number of the member's votes, then in accordance with section 249X(3) of the Corporations Act, each proxy may exercise one-half of the votes.

New sections 250BB and 250BC of the Corporations Act came into effect on 1 August 2011 and apply to voting by proxy on or after that date. Shareholders and their proxies should be aware of these changes to the Corporations Act, as they will apply to this Meeting. Broadly, the changes mean that:

- if proxy holders vote, they must cast all directed proxies as directed; and
- any directed proxies which are not voted will automatically default to the Chair, who must vote the proxies as directed.

Further details on these changes is set out below.

Proxy vote if appointment specifies way to vote

Section 250BB(1) of the Corporations Act provides that an appointment of a proxy may specify the way the proxy is to vote on a particular resolution and, **if it does**:

- the proxy need not vote on a show of hands, but if the proxy does so, the proxy must vote that way (i.e. as directed); and
- if the proxy has 2 or more appointments that specify different ways to vote on the resolution – the proxy must not vote on a show of hands; and
- if the proxy is the chair of the meeting at which the resolution is voted on – the proxy must vote on a poll, and must vote that way (i.e. as directed); and
- if the proxy is not the chair – the proxy need not vote on the poll, but if the proxy does so, the proxy must vote that way (i.e. as directed).

Transfer of non-chair proxy to chair in certain circumstances

Section 250BC of the Corporations Act provides that, if:

- an appointment of a proxy specifies the way the proxy is to vote on a particular resolution at a meeting of the Company's members; and
- the appointed proxy is not the chair of the meeting; and
- at the meeting, a poll is duly demanded on the resolution; and
- either of the following applies:
 - the proxy is not recorded as attending the meeting;
 - the proxy does not vote on the resolution,

the chair of the meeting is taken, before voting on the resolution closes, to have been appointed as the proxy for the purposes of voting on the resolution at the meeting.

LETTER TO SHAREHOLDERS

Dear Shareholder

I have pleasure in presenting an exciting opportunity which promises the potential of significant future growth for the Company.

Mongolian Resources Limited (**Company**) has negotiated an agreement to acquire the shares of a company which is the holder of licences to exercise the exclusive right to explore for graphite within 45km² of land located in several provinces of Sri Lanka (**Projects**).

Sri Lanka is famed for being the only major producer of crystalline vein graphite (lump or Ceylon graphite), the highest quality of naturally occurring material in the world. The quality of vein graphite produced in the country has a purity level in excess of 90% carbon which means little upgrading and processing is required to make a high-quality saleable product.

The presence of vein graphite in Sri Lanka has been known since 1675, while the mining, processing and export of graphite have been continuous since 1821. According to the eminent geologist, Professor Dung Ham, Sri Lanka contains the largest known reserves of high quality natural graphite in the Commonwealth member countries. During the 19th century and the first decade of the 20th century, graphite was a major export product, equally important as tea, rubber and coconuts. Both as an industry and a commodity, graphite still occupies a leading position in the economy of the country.

In 2012 Sri Lanka is expected to produce 5,000 tonnes with the majority of production from the two major producers, Bogala Graphite Lanka Ltd and Kahatagaha Graphite Lanka Ltd, and other small scale producers.

Sri Lanka is a vibrant fast growing economy following from the 26 year conflict which ended in May 2009. The country's GDP has grown consistently at a rate of 6.5% - 8% from 2010 - 12. Infrastructure in the areas of interest is excellent with suitable power, water, communications and a ready work force available.

Sri Lanka has favourable investment and tax regimes for the import of capital equipment and foreign investment in natural resources including the potential for a tax free holiday period of up to 10 years upon an investment agreement being approved by the Board of Investment of Sri Lanka (**BOI**). The legal system is based on the British common law system.

The country has a population of approximately 20 million people and a high literacy rate approaching 92%. As a Member of the Commonwealth English is taught and spoken as a second language.

Upon approval of the acquisition, the Company plans to undertake the rehabilitation of existing shaft areas and extensive exploration of the Projects areas, with an initial focus on the historic mines in the Warakapola Projects area.

The acquisition is subject to the satisfaction of a number of conditions including Shareholder approval which is being sought at the forthcoming General Meeting. I ask that you read the Notice of Meeting and attached Explanatory Statement carefully, including the associated risks, advantages and disadvantages of the transaction.

As the acquisition involves a new focus on graphite exploration, the acquisition represents a change in the Company's activities.

Your Board believes this is a unique opportunity to participate in a graphite project which has the potential to generate significant organic growth and widespread market support for both the Projects and Company.

I would also like to take this opportunity to thank my fellow Directors for their support and advice throughout the processes required in developing this opportunity.

Yours sincerely

PETER T. REILLY
CHAIRMAN

BUSINESS OF THE MEETING

AGENDA

1. RESOLUTION 1 – CHANGE TO NATURE AND SCALE OF ACTIVITIES

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

“That, subject to the passing of Resolutions 2 and 6, for the purpose of ASX Listing Rule 11.1.2 and for all other purposes, approval is given for the Company to make a significant change in the nature and scale of its activities as described in the Explanatory Statement.”

Voting Exclusion: The Company will disregard any votes cast on this Resolution by any person who may obtain a benefit, except a benefit solely in the capacity of a shareholder, if this Resolution is passed and any associates of those persons. However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form, or, it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

2. RESOLUTION 2 – ISSUE OF SHARES TO SUPREME SOLUTIONS (PVT) LTD

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

“That, subject to the passing of Resolution 1, for the purposes of ASX Listing Rule 7.1 and for all other purposes, approval is given for the Company to issue 5,000,000 Shares to Supreme Solutions (Pvt) Ltd (or its nominee) on the terms and conditions set out in the Explanatory Statement.”

Voting Exclusion: The Company will disregard any votes cast on this Resolution by any person who may participate in the proposed issue and a person who might obtain a benefit, except a benefit solely in the capacity of a holder of ordinary securities, if the Resolution is passed and any associates of those persons. However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form, or, it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

3. RESOLUTION 3 – CHANGE OF COMPANY NAME

To consider and, if thought fit, to pass the following resolution as a **special resolution**:

“That, subject to the completion of the Acquisition, for the purposes of section 157(1)(a) of the Corporations Act and for all other purposes, approval is given for the name of the Company to be changed to “MRL Corporation Limited”.”

4. **RESOLUTION 4 – REMOVAL OF AUDITOR**

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

"That, pursuant to section 329 of the Corporations Act and for all other purposes, approval is given for the removal of Grant Thornton Audit Pty Ltd as the current auditor of the Company effective from the date of the Meeting."

5. **RESOLUTION 5 – APPOINTMENT OF AUDITOR TO REPLACE AUDITOR REMOVED FROM OFFICE**

To consider and, if thought fit, to pass the following resolution as a **special resolution**:

"That, subject to the passing of Resolution 4, pursuant to section 327 of the Corporations Act and for all other purposes, approval is given for the appointment of BDO (Audit) WA Pty Ltd as auditor of the Company effective from the date of the Meeting."

6. **RESOLUTION 6 – PLACEMENT – SHARES AND OPTIONS**

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

"That, for the purposes of ASX Listing Rule 7.1 and for all other purposes, approval is given for the Company to issue up to 7,500,000 Shares and 7,500,000 Options on the terms and conditions set out in the Explanatory Statement."

Voting Exclusion: The Company will disregard any votes cast on this Resolution by any person who may participate in the proposed issue and a person who might obtain a benefit, except a benefit solely in the capacity of a holder of ordinary securities, if the Resolution is passed and any associates of those persons. However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form, or, it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

7. **RESOLUTION 7 – PARTICIPATION BY RELATED PARTY IN CAPITAL RAISING – MR CRAIG MCGUCKIN**

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

"That, subject to the passing of Resolution 6, for the purpose of ASX Listing Rule 10.11 and for all other purposes, approval is given for the Directors to issue up to 250,000 Shares and 250,000 Options to Mr Craig McGuckin (or his nominee) on the terms and conditions set out in the Explanatory Statement."

Voting Exclusion: The Company will disregard any votes cast on this Resolution by Mr McGuckin or his nominee and any of their associates. However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form or it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

8. RESOLUTION 8 – PARTICIPATION BY RELATED PARTY IN CAPITAL RAISING – MR PETER YOUD

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

“That, subject to the passing of Resolution 6, for the purpose of ASX Listing Rule 10.11 and for all other purposes, approval is given for the Directors to issue up to 250,000 Shares and 250,000 Options to Mr Peter Youd (or his nominee) on the terms and conditions set out in the Explanatory Statement.”

Voting Exclusion: The Company will disregard any votes cast on this Resolution by Mr Youd or his nominee and any of their associates. However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form or it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

9. RESOLUTION 9 – PARTICIPATION BY RELATED PARTY IN CAPITAL RAISING – MR PETER REILLY

To consider and, if thought fit, to pass, with or without amendment, the following resolution as an **ordinary resolution**:

“That, subject to the passing of Resolution 6, for the purpose of ASX Listing Rule 10.11 and for all other purposes, approval is given for the Directors to issue up to 250,000 Shares and 250,000 Options to Mr Peter Reilly (or his nominee) on the terms and conditions set out in the Explanatory Statement.”

Voting Exclusion: The Company will disregard any votes cast on this Resolution by Mr Reilly or his nominee and any of their associates. However, the Company need not disregard a vote if it is cast by a person as a proxy for a person who is entitled to vote, in accordance with the directions on the Proxy Form or it is cast by the person chairing the meeting as proxy for a person who is entitled to vote, in accordance with a direction on the Proxy Form to vote as the proxy decides.

DATED: 4 SEPTEMBER 2013

BY ORDER OF THE BOARD

**MS NERIDA LEE SCHMIDT
COMPANY SECRETARY**

EXPLANATORY STATEMENT

This Explanatory Statement has been prepared to provide information which the Directors believe to be material to Shareholders in deciding whether or not to pass the Resolutions which are the subject of the business of the Meeting.

1. RESOLUTION 1 – CHANGE IN NATURE AND SCALE OF ACTIVITIES

1.1 Background

The Company is a public company listed on the ASX (ASX code: MRF). The Company's main existing asset is its 100% shareholding in Kumai Energy Limited, a company which has a 70% interest (through its wholly owned subsidiary, Kumai Energy Pte Ltd) in the following Mongolian exploration licences which are considered prospective for coal:

- (a) XV-014573 and XV-014574 - Khangai Tevshin Project;
- (b) XV-014571 – Khangai Saikhan Project; and
- (c) XV-014572 – Khangai Altangobi Project.

The Mongolian Government has recently announced proposed changes to the Mongolian Minerals Law which may restrict the mining exploration operations of foreign owned entities within Mongolia. The Board believes that the proposed changes have the potential to adversely affect the Company's existing activities, and that the Company needs to make a strategic change of focus in order to provide value for Shareholders. Accordingly, the Board has continued to investigate additional mineral exploration opportunities around the globe.

On 9 April 2013, the Company announced the proposed acquisition of 45km² of graphite exploration licences in Sri Lanka comprising three project areas (**Projects**). The proposed acquisition of the Projects (**Acquisition**) represents a change in the nature and scale of the Company's activities to include graphite exploration. Accordingly, Resolution 1 seeks Shareholder approval for this change.

Further information regarding the proposed Acquisition and the Projects is set out in Sections 1.3 and 1.6 of this Explanatory Statement, and in the Independent Geologist's Report contained in Appendix 1. Other information considered to be material to Shareholders' decision on whether to pass Resolution 1 is set out in this Explanatory Statement and Shareholders are advised to read this information carefully.

1.2 ASX Listing Rule 11.1

ASX Listing Rule 11.1 provides that where an entity proposes to make a significant change, either directly or indirectly, to the nature and scale of its activities, it must provide full details to ASX as soon as practicable and comply with the following:

- (a) provide to ASX information regarding the change and its effect on future potential earnings, and any information that ASX asks for;
- (b) if ASX requires, obtain the approval of holders of its shares and any requirements of ASX in relation to the notice of meeting; and

- (c) if ASX requires, meet the requirements of Chapters 1 and 2 of the ASX Listing Rules as if the company were applying for admission to the official list of ASX.

ASX has advised the Company that, given the change in the nature and scale of the Company's activities upon completion of the acquisition of the Projects, ASX requires the Company to:

- (a) obtain Shareholder approval; and
- (b) re-comply with the admission requirements set out in Chapters 1 and 2 of the ASX Listing Rules.

For this reason, the Company is seeking Shareholder approval for the Company to change the nature and scale of its activities under ASX Listing Rule 11.1.2. If the Acquisition is approved by Shareholders, the Company's securities will continue to be suspended from trading until the requirements of Chapters 1 and 2 of the ASX Listing Rules have been satisfied.

1.3 Overview of the Proposed Acquisition

The Company (through its Sri Lankan subsidiary, MRL Investments (Pvt) Ltd) has entered into a conditional share sale agreement (**Share Sale Agreement**) and conditional consultancy agreement (**Consultancy Agreement**) with Supreme Solutions (Pvt) Ltd (**Supreme Solutions**) to purchase all of the issued capital of MRL Graphite (Pvt) Ltd, a company incorporated in Sri Lanka (**MRL Graphite**).

MRL Graphite has been issued licences to exercise the exclusive right to explore for graphite within 45km² of land located in Sri Lanka comprising the Projects.

Due to regulations regarding foreign investment in Sri Lanka, completion of the Acquisition will occur in two stages.

Stage 1 (being the acquisition of 40% of MRL Graphite) will occur upon the completion of certain conditions precedent, including the passing of the Shareholder approvals sought pursuant to Resolution 1 and 2.

Stage 2 (being the acquisition of the remaining 60% of MRL Graphite) will occur upon the granting of Sri Lankan Government approval by the Board of Investment of Sri Lanka for the Company to acquire 100% of the shares in MRL Graphite.

The Company will pay Supreme Solutions the following consideration for the Acquisition:

- (a) a refundable deposit of US\$100,000 (which has been paid);
- (b) upon completion of Stage 1 of the Acquisition – US\$400,000;
- (c) upon completion of Stage 2 of the Acquisition – the issue of 5,000,000 Shares;
- (d) upon the first conversion of an area within the Projects to an industrial mining licence – the issue of 5,000,000 Shares; and
- (e) upon the first commencement of commercial mining activities within the Projects – the payment of US\$500,000.

Summaries of the Share Sale Agreement and Consultancy Agreement are set out in Sections 1.4 and 1.5 of this Explanatory Statement.

In conjunction with the Acquisition, the Company plans to raise additional working capital through the Capital Raising which is the subject of Resolution 6. The proceeds raised, in addition to the Company's existing cash balance, will be used to fund the Acquisition, along with an immediate exploration programme to demonstrate the existence of an economic graphite deposit. The proceeds will also contribute to the funding of future acquisitions as detailed in Section 1.7.

1.4 Share Sale Agreement

The material terms of the Share Sale Agreement are as follows:

- (a) **(Acquisition of MRL Graphite)**: subject to the satisfaction of the conditions precedent described in paragraph 1.4(b) below, Supreme Solutions agrees to sell, and MRL Investments (a wholly owned subsidiary of the Company) agrees to buy, all of the issued capital of MRL Graphite (**Acquisition**). The acquisition shall occur in two tranches, with the first tranche relating to 40% of the issued capital of MRL Graphite (**First Tranche**), and the second tranche relating to 60% of the issued capital of MRL Graphite (**Second Tranche**);
- (b) **(Conditions Precedent)**: completion of the Acquisition is subject to the satisfaction (or waiver by the Company) of the following conditions precedent on or before 11 October 2013 (or such other date as is mutually agreed between the parties):
 - (i) the Company completing financial, legal and operating due diligence on MRL Graphite to its satisfaction;
 - (ii) the Company obtaining all necessary Shareholder approvals required to complete the Acquisition;
 - (iii) the parties obtaining all necessary government or regulatory approvals required to complete the Acquisition;
 - (iv) all of the Licences being registered in the name of the Company; and
 - (v) there being no breach of any of the warranties provided by Supreme Solutions to the Company.

Completion of the purchase of the Second Tranche is also subject to the Sri Lankan Board of Investment approving the 100% shareholding of MRL Investments in MRL Graphite;

- (c) **(Consideration)**: at completion of the purchase of the First Tranche, the Company must pay Supreme Solutions the Sri Lankan Rupee equivalent of US\$160,000. The balance of the consideration is payable pursuant to the Consultancy Agreement; and
- (d) **(Warranties)**: the Share Sale Agreement contains warranties relating to MRL Graphite and the Licences which are customary for agreements of this nature.

1.5 Consultancy Agreement

The material terms of the Consultancy Agreement are as follows:

- (a) **(Engagement)**: subject to the satisfaction of the conditions precedent described in paragraph 1.5(b) below, the Company shall engage Supreme Solutions as a consultant to the Company;
- (b) **(Condition Precedent)**: the engagement of Supreme Solutions as consultant is conditional upon the completion of the purchase of the First Tranche under the Share Sale Agreement;
- (c) **(Services)**: Supreme Solutions shall provide consulting services to the Company in relation to the management of the Company's Sri Lankan business, and shall also advise the Company of the details of any new opportunity that comes to its attention;
- (d) **(Fee)**: in consideration of the provision of the consulting services, the Company shall provide the following fee to Supreme Solutions:
 - (i) the payment of a US\$100,000 prior to execution of the Consultancy Agreement, which shall be refundable if the condition precedent is not satisfied by 11 October 2013 or such other date as mutually agreed by the parties;
 - (ii) the payment the Sri Lankan Rupee equivalent of US\$240,000 at the time of completion of the acquisition of the First Tranche under the Share Sale Agreement;
 - (iii) the issue of 5,000,000 Shares at the time of completion of the Second Tranche under the Share Sale Agreement;
 - (iv) the issue of 5,000,000 Shares upon the first conversion of any area within the Licences to an industrial mining licence; and
 - (v) the payment of US\$500,000 upon the first commencement of commercial mining from the Licences.

1.6 The Projects

Summary

The Projects are comprised of exploration licences totalling 45km² (or 45 exploration grids) in what has been described by the Sri Lankan Geological Survey and Mining Bureau (**GSMB**) as the best graphite areas in Sri Lanka.

The Licences have been aggregated into the following three projects based on a logical geographical allocation (**Projects**):

- Warakapola Project (25 grids or 25km²) Gampaha & Kegalle Districts;
- Palinda Nuwara Project (10 grids or 10km²) Kalutara District; and
- Hikkaduwa Project (10 grids or 10km²) Galle District.

All grid areas have numerous old workings which appear to date back as far as the 1880s and most mines in the southern regions around Galle appear to have ceased operation in the period up until the 1930s. Only very primitive mining methods had been used during the peak of the Sri Lankan graphite industry due

to the lack of access to technology and appropriately skilled mining professionals. Due to these factors, graphite mining generally ceased at the water table (approximately 10 to 25m).

All Projects are at an exploration stage despite the presence of considerable historic small to moderate scale vein graphite mines on the vast majority of the licences. The Projects require systematic evaluation including geological mapping, geophysical surveying and targeted diamond drilling.

The use of modern mining equipment, pumps and ventilation may allow deeper portions of the vein structures to be mined. There is a significant opportunity for the Company to reopen areas of the Sri Lankan graphite industry and provide future upside in multiple locations. The potential also exists for small scale production to begin in the medium term following the refurbishment of existing underground workings at certain locations following conversion from exploration to mining. The Company will be actively applying for further license areas following the completion of the Acquisition.

Further information on the Projects is included in the Independent Geologists Report attached as Appendix 1.

Table of Licences

A full list of the Licences is attached as Schedule 1.

All Licences will be held in the name of MRL Graphite (Pvt) Ltd following the completion of the Acquisition and the transfer of the shares from Supreme Solutions (Pvt) Ltd.

Location and Access

Gampaha & Kegalle Districts (Warakapola Project)

This project is approximately 50kms, in a straight line, northeast of Colombo via the village of Pasyala and is easily accessed by sealed roads in a standard road vehicle. Some narrow unsealed tracks in and around the licences may require an off-road vehicle following periods of heavy rainfall.

This project is the largest of the three Projects and the 25 grids (25km²) is divided into five areas of at least two contiguous tenements.

The largest group of tenements comprising nine grids (9km²) due south of Warakapola has been identified by MRL as the preferred location for exploration activities to commence due to the favourable regional geology, the presence of significant scale historic workings and the size of the footprint provided by the contiguous nature of the tenement grouping. This site is approximately 14km in a straight line North West of Bogala Mining Operation.

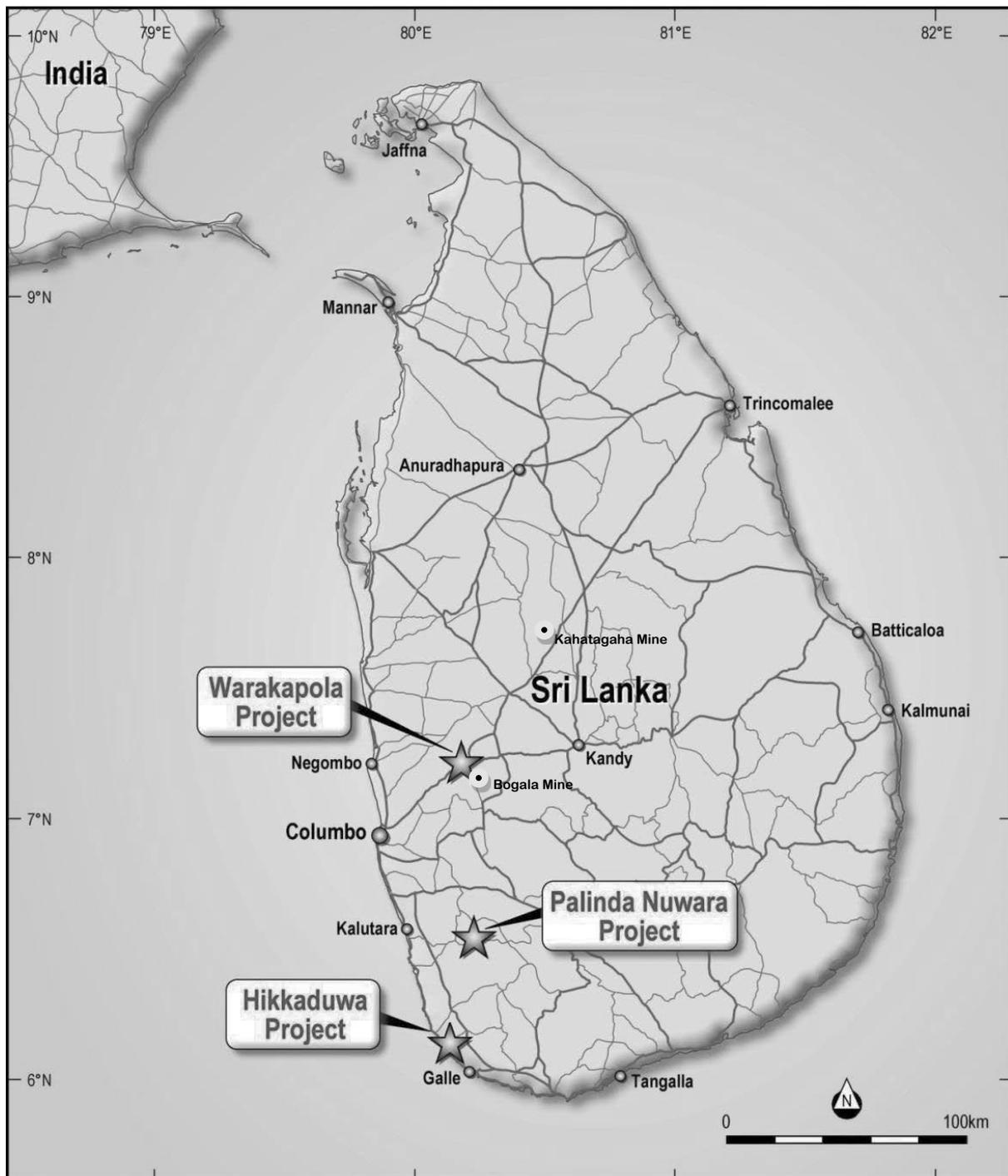


Figure 1 – Location of Projects

Kalutara District (Palinda Nuwara Project)

This project is approximately 60kms, in a straight line, south-southeast of Colombo via the village of Baduraliya and is accessed by sealed roads in a standard road vehicle. Some narrow unsealed tracks in and around the licences may require an off-road vehicle following periods of heavy rainfall.

This project is the second largest of the three Projects and the 10 grids (10km²) is composed of two areas of contiguous tenements.

Galle District (Hikkaduwa Project)

This project is approximately 15kms, in a straight line, northwest of the southern coastal town of Galle via the village of Gonapinuwala and is accessed by sealed roads in a standard road vehicle. Some narrow unsealed tracks in an around the licence area may require an off-road vehicle following periods of heavy rainfall. The newly constructed Southern Lanka Express Highway or Southern Expressway, as it is now known, provides for fast access to this project area and has reduced the trip south to Galle by several hours by avoiding the traditional coastal route.

This project is the smallest of the three Projects and the ten grids (10km²) is composed of a single area of joined but barely contiguous tenements.

Proposed Exploration Program

Gampaha & Kegalle Districts (Warakapola Project)

A preliminary budget and work programme of approximately AUS \$542,000 has been prepared by the Company for all direct "on ground" exploration costs on this priority project for the period October 2013 to September 2014 (inclusive) and includes:

- (a) the establishment of survey control;
- (b) detailed geological mapping at 1:5,000 and 1:10,000 scales;
- (c) the refurbishment of historical workings at Pandeniya and Wallagalla;
- (d) geophysical surveys;
- (e) diamond drilling; and
- (f) "in country" management support.

The first exploration and mining investigations will be concentrated into two adjacent projects, Pandeniya and Wallagalla.

Kalutara District (Palinda Nuwara Project)

A preliminary budget and work programme of approximately AUS \$55,000 has been prepared by the Company for all direct "on ground" exploration costs for the period October 2013 to September 2014 (inclusive) and includes:

- (a) the establishment of survey control;
- (b) detailed geological mapping at 1:5,000 and 1:10,000 scales;
- (c) geophysical surveys; and
- (d) "in country" management support.

Galle District (Hikkaduwa Project)

A preliminary budget and work programme of approximately AUS \$34,000 has been prepared by the Company for all direct "on ground" exploration costs for the period October 2013 to September 2014 (inclusive) and includes:

- (a) the establishment of survey control;
- (b) detailed geological mapping at 1:5,000 and 1:10,000 scales;
- (c) geophysical surveys; and
- (d) "in country" management support.

A full breakdown of the preliminary budget and work program is included in the Independent Geologists Report attached as Appendix 1.

1.7 Future Acquisitions

As previously announced to ASX, the Company continues to investigate additional opportunities in the resources sector both within Mongolia and Sri Lanka.

The Company intends to pursue further project opportunities in line with its investment strategy of acquiring and developing high quality resource assets.

1.8 Re-compliance with Chapters 1 and 2 of the ASX Listing Rules

On the basis that approval pursuant to Resolution 1 is obtained, the Company will seek to re-comply with the requirements of Chapters 1 and 2 of the ASX Listing Rules.

In accordance with these requirements, the Company will complete the Capital Raising the subject of Resolution 6.

The securities of the Company have been suspended since 9 April 2013, and will remain in suspension until the Company satisfies the requirements of Chapters 1 and 2 of the ASX Listing Rules. It is anticipated that this will occur in October 2013.

1.9 Capital Structure

The capital structure of the Company following completion of the Acquisition and the Capital Raising is as follows¹:

	Shares	Options
Current issued capital ²	58,773,104	42,752,604
Issue of Shares to Supreme Solutions as consideration for the Acquisition ³	10,000,000	Nil
Shares and Options to be issued pursuant to the Prospectus ⁴	7,500,000	7,500,000
Total	76,273,104	50,252,604

Notes:

1. This assumes no other securities are issued or converted other than as contemplated by this Notice of Meeting.
2. The Options comprise:
 - a. 12,500,000 listed options exercisable at \$0.20 each and expiring on 17 October 2016;
 - b. 7,054,053 listed options exercisable at \$0.40 each and expiring on 31 December 2014;

- c. 23,198,551 unlisted options exercisable at \$0.20 each and expiring on 17 October 2016;
3. This figure includes the deferred issue of 5,000,000 Shares which is contingent upon the conversion of any area within the Licences to a mining lease.
4. The Company proposes to issue a prospectus for the offer of up to 7,500,000 Shares at an issue price of \$0.20 per Share to raise up to \$1,500,000 (less costs) together with up to 7,500,000 free attaching Options on a one for one basis. The offer of Shares and Options is subject to Shareholders approving the issue pursuant to Resolution 6.

1.10 Advantages of the Acquisition

The Directors are of the view that the following non-exhaustive list of advantages may be relevant to a Shareholder's decision on how to vote on the proposed Resolutions:

- (a) the Acquisition represents an opportunity for the Company to increase the scale of its activities which should increase the number and size of the investor pool that may invest in the Company's shares;
- (b) the Acquisition provides an opportunity for the Company to diversify into graphite exploration and development;
- (c) the Board considers that the timing of the Acquisition will enable the Company to benefit from the improving economic and political situation in Sri Lanka; and
- (d) the potential to provide near term production with industry low operating and capital costs.

1.11 Disadvantages of the Acquisition

The Directors are of the view that the following non-exhaustive list of disadvantages may be relevant to a Shareholder's decision on how to vote on the proposed Resolutions:

- (a) the Company will be changing the nature of its activities to become a company focused on graphite exploration activities, which may not be consistent with the objectives of all Shareholders;
- (b) there are many risk factors associated with the change in nature of the Company's activities, including sovereign risk, and risks associated with the requirement to obtain the Board of Investment Approval, and environmental and other regulatory approvals;
- (c) current Shareholders will have their interests in the Company diluted by the issue of Shares pursuant to the Acquisition, the Capital Raising and any future equity funding undertaken by the Company; and
- (d) the Projects are at a very early stage of exploration and there is no guarantee that exploration on the Projects by the Company will result in the discovery of an economically viable graphite deposit.

1.12 Risk Factors

Shareholders should be aware that if the proposed Acquisition is approved, the Company will be subject to various risk factors relating to the investment in MRL Graphite and the Projects. Based on the information available, a non-exhaustive list of risk factors is set out below:

Risks relating to the change in nature and scale of activities:

Re-Quotation of Shares on ASX

The acquisition of the Projects constitutes a significant change in the nature and scale of the Company's activities and the Company needs to re-comply with Chapters 1 and 2 of the ASX Listing Rules as if it were seeking admission to the official list of ASX.

There is a risk that the Company may not be able to meet the requirements of the ASX for re-quotation of its Shares on the ASX. Should this occur, the Shares will not be able to be traded on the ASX until such time as those requirements can be met, if at all. Shareholders may be prevented from trading their Shares should the Company be suspended until such time as it does re-comply with the ASX Listing Rules.

Counterparty and Contractual Risk

Pursuant to the Share Sale Agreement and Consultancy Agreement the Company has agreed to acquire 100% of MRL Graphite from Supreme Solutions subject to the fulfilment of certain conditions precedent.

The ability of the Company to achieve its stated objectives will depend on the performance by Supreme Solutions of its obligations under these agreements. If Supreme Solutions or any other counterparty defaults in the performance of its obligations, it may be necessary for the Company to approach a court to seek a legal remedy. Legal action instituted in Australia or overseas can be costly.

Board of Investment Approval

As noted in Section 1.3 of this Explanatory Statement, Stage 2 of the Acquisition (being the acquisition of the remaining 60% of MRL Graphite) is conditional upon the relevant Sri Lankan statutory body approving the Company's acquisition of 100% of the shares in MRL Graphite (**Board of Investment Approval**).

Whilst the Company is not aware of any reason why the Board of Investment Approval will not be granted to the Company, there is a risk that if the Board of Investment Approval is not obtained, the Company will not be able to acquire 100% of MRL Graphite.

In these circumstances, the Company would hold a 40% indirect interest in the Projects and would manage the Projects jointly with Supreme Solutions. Should this situation arise the Company would work to develop the Projects and generate cash flow while it continued to obtain Board of Investment Approval.

Limited History of MRL Graphite

Broadly speaking, since the strategy of investing in Sri Lankan graphite assets is a new direction for the Company, and is subject to risks commonly encountered by companies in the early stage of their development.

Shareholders should understand that the mineral exploration sector has a high level of inherent uncertainty and accordingly, investments in graphite exploration and development are relatively high-risk undertakings.

The Projects are at an early stage of exploration, and no JORC Resource has been defined on the Projects. Further exploration is required to determine whether the Licences contain any economically viable mineral deposits.

There can be no assurance that this exploration activity will result in the discovery of an economic mineral deposit or JORC Code resource classification. Furthermore, even if an apparently viable mineral deposit is identified, there is no guarantee that it can be profitably exploited.

Risks relating to the Company's operations:

Sovereign and Political Risks Associated with Operating in Sri Lanka

The Projects are located in Sri Lanka and the Company will be subject to the risks associated with operating in that country, including various levels of political, economic and other risks and uncertainties.

General risks include economic, social or political instability or change, hyperinflation, currency non-convertibility or instability and changes of law affecting foreign ownership, government participation, taxation, working conditions, rates of exchange, exchange control, exploration licensing, export duties, repatriation of income or return of capital, environmental protection, mine safety, labour relations as well as government control over mineral properties or government regulations that require the employment of local staff or contractors or require other benefits to be provided to local residents.

Failure to comply strictly with applicable laws, regulations and local practices relating to mineral rights applications and tenure, could result in loss, reduction or expropriation of entitlements, or the imposition of additional local or foreign parties as joint venture partners with carried or other interests.

Outcomes in courts in Sri Lanka may be less predictable than in Australia, which could affect the enforceability of contracts entered into by the Company or its subsidiaries in Sri Lanka.

The occurrence of these various factors and uncertainties cannot be accurately predicted and could have an adverse effect on the operations or profitability of the Company.

Mineral Licence Title Risks

There are a number of conditions that the Company must satisfy with respect to the Sri Lankan mineral licences it will acquire an interest in, including minimum expenditure and annual reporting requirements to keep the licences in good standing. There is a risk that the Company (through MRL Graphite) may not be able to satisfy these requirements, in which case the Company may lose the rights under those licences.

Licences are also subject to periodic renewal and may only be renewed a limited number of times for a limited period of time. While the Company anticipates that such renewals will be given as and when sought, there can be no assurance that these renewals will be given as a matter of course and that new conditions will not be imposed in connection therewith.

Furthermore, the Company will require mining licences in order to conduct mining operations in Sri Lanka. There can be no assurance, however, that such licences will be obtained on terms favourable to the Company or at all for the Company's future intended mining and/or exploration targets in Sri Lanka.

If the owner of any part of the land areas covered by the licences is in possession of the owner (including a state organization) of such land, it is necessary to obtain the consent of such owner to enter and possess such area

of land for the purpose of mining on that land. The owner in possession raising objections to the entry and possession cannot be ruled out.

Operating Risks

The current and future operations of the Company, including exploration, appraisal and possible production activities may be affected by a range of factors.

A summary of factors that may affect the operations of the Company, include:

- (a) geological conditions;
- (b) unanticipated operational and technical difficulties encountered in geophysical surveys, drilling and production activities;
- (c) mechanical failure of operating plant and equipment, industrial and environmental accidents, acts of terrorism or political or civil unrest and other force majeure events;
- (d) industrial action, disputation or disruptions;
- (e) unavailability of aircraft or drilling equipment to undertake airborne electromagnetic and other geological and geophysical investigations;
- (f) unexpected shortages or increases in the costs of consumables, spare parts, plant and equipment;
- (g) prevention or restriction of access by reason of political unrest, outbreak of hostilities, and inability to obtain consents or approvals;
- (h) current exploration operations and future mine development of the tenements are subject to the Company's ability to obtain a wide range of permits, licences, and approvals and there is no guarantee that such permits, licences and approvals will be granted or will be granted in a timely matter; and
- (i) advancement of the exploration operations to mine development can be a lengthy process taking a number of years where the Company's projects may be subject to new laws, regulations, and taxes which may have a material impact on the Company.

Exploration Success

There can be no assurance that exploration of the Projects will result in the discovery of economic graphite deposits. Even if an apparently viable deposit is identified, there is no guarantee it can be economically exploited.

Graphite price volatility

Substantially all of the Company's revenues and cash flow (should the Company enter production) will be derived from the sale of graphite. Therefore, the financial performance of the Company would be exposed to fluctuations in the graphite price.

Graphite prices are affected by numerous factors and events that are beyond the control of the Company. These factors and events include general

economic activity, world demand, forward selling activity as well as general global economic conditions and political trends.

If graphite prices should fall below or remain below the Company's costs of production for any sustained period due to these or other factors and events, the Company's exploration and proposed production could be delayed or even abandoned. A delay in exploration or production or the abandonment of one or more of the Company's projects may require the Company to write-down its graphite resources and may have a material adverse effect on the Company's production, earnings and financial position.

Foreign exchange risk

The Company will be exposed to the volatility and fluctuations of the exchange rate between the United States dollar, the Sri Lanka rupee and the Australian dollar.

Global currencies are affected by a number of factors that are beyond the control of the Company. These factors include economic conditions in the relevant country and elsewhere and the outlook for interest rates, inflation and other economic factors. These factors may have a positive or negative effect on the Company's exploration, project development and production plans and activities together with the ability to fund those plans and activities.

Environmental risks

The operations and proposed activities of the Projects are subject to Sri Lankan laws and regulation concerning the environment. As with most exploration projects and mining operations, the Company's activities are expected to have an impact on the environment. It is the Company's intention to conduct its activities to the highest standard of environmental obligation, including compliance with all environmental laws.

General risks

Future capital requirements

Future funding will be required by the Company to develop the Projects. There can be no assurance that such funding will be available on satisfactory terms or at all. Any additional equity financing will dilute shareholdings, and debt financing, if available, may involve restrictions on financing and operating activities.

If the Company is unable to obtain additional financing as needed, it may be required to reduce the scope of its operations and scale back its exploration program as the case may be, which may adversely affect the business and financial condition of the Company and its performance.

Insurance risks

The Company intends to insure its operations in accordance with industry practice. However, in certain circumstances, the Company's insurance may not be of a nature or level to provide adequate insurance cover. The occurrence of an event that is not covered or fully covered by insurance could have a material adverse effect of the business, financial condition and results of the Company.

Insurance against all risks associated with mining exploration and production is not always available and where available the costs can be prohibitive.

Competition risk

The industry in which the Company will be involved is subject to domestic and global competition. While the Company will undertake all reasonable due diligence in its business decisions and operations, the Company will have no influence or control over the activities or actions of its competitors, whose activities or actions may, positively or negatively, affect the operating and financial performance of the Company's projects and business.

Market risk

Share market conditions may affect the value of the Company's quoted Securities regardless of the Company's operating performance. Share market conditions are affected by many factors such as:

- (a) general economic outlook;
- (b) interest rates and inflation rates;
- (c) currency fluctuations;
- (d) commodity price fluctuations;
- (e) changes in investor sentiment toward particular market sectors;
- (f) the demand for, and supply of, capital; and
- (g) terrorism and other hostilities.

Government

Government action or policy change, both in Australia and Sri Lanka, particularly in relation to lands and infrastructure, compliance with environmental regulations, taxation and royalties, may adversely affect the Company's operations and financial performance.

Potential Acquisitions

As part of its business strategy, the Company intends to make acquisitions of, or significant investments in, complementary companies or projects. Any such future transactions would be accompanied by the risks commonly encountered in making such acquisitions.

Reliance on Key Personnel

The responsibility of overseeing the day-to-day operations and the strategic management of the Company depends substantially on its senior management and its key personnel. There can be no assurance given that there will be no detrimental impact on the Company if one or more of these employees cease their employment.

1.13 Directors' Recommendation

The directors of the Company unanimously recommend the Acquisition and that Shareholders vote in favour of Resolutions 1, 2, 3 and 6. It is the view of the Company's Directors that the Acquisition will give the Company's Shareholders the opportunity to participate in a potentially significant exploration program in a prospective graphite region.

1.14 Competent Person Statement

The information in this Notice that relates to Exploration Results is based on information compiled by Mr Terry Burns, who is a full time employee of Warbrooke-Burns & Associates Pty Ltd, a Fellow of the Australasian Institute of Mining and Metallurgy and Member of the Australian Institute of Company Directors.

Mr Burns has sufficient experience, relevant to the style of mineralisation and type of deposits under consideration and to the activity, under review to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code and a Representative Expert as defined in the 2005 Edition of the VALMIN Code.

Mr Burns consents to the inclusion in this Notice of the matters based on his information in the form and context in which it appears.

1.15 Pro Forma Balance Sheets

Pro forma balance sheets of the Company showing the effect of the transactions contemplated by this Notice and the effects of a Capital Raising assuming a minimum and maximum subscription are set out in Schedule 1.

2. RESOLUTION 2 – ISSUE OF SHARES TO SUPREME SOLUTIONS (PVT) LTD

2.1 General

Resolution 2 seeks Shareholder approval for the issue of 5,000,000 Shares to Supreme Solutions (Pvt) Ltd (**Supreme Solutions**) pursuant to the terms of the Consultancy Agreement.

As set out in Section 1.3 of this Explanatory Statement, these Shares form part of the consideration for the Company's acquisition of MRL Graphite, which in turn holds the Projects.

The Company anticipates that these Shares will be subject to escrow under the ASX Listing Rules for a period of 12 months commencing on the date on which the Shares are issued, in addition to (and concurrent with) the voluntary escrow of 12 months commencing on the date of issue of the Shares.

ASX Listing Rule 7.1 provides that a company must not, subject to specified exceptions, issue or agree to issue more equity securities during any 12 month period than that amount which represents 15% of the number of fully paid ordinary securities on issue at the commencement of that 12 month period.

The effect of Resolution 2 will be to allow the Company to issue the Shares to Supreme Solutions during the period of 3 months after the Meeting (or a longer period, if allowed by ASX), without using the Company's 15% annual placement capacity.

2.2 Technical information required by ASX Listing Rule 7.1

Pursuant to and in accordance with ASX Listing Rule 7.3, the following information is provided in relation to the proposed issue of Shares to Supreme Solutions:

- (a) the maximum number of Shares to be issued is 5,000,000;

- (b) the Shares will be issued no later than 3 months after the date of the Meeting (or such later date to the extent permitted by any ASX waiver or modification of the ASX Listing Rules) and it is intended that allotment will occur on the same date;
- (c) the Shares will be issued as part consideration for the acquisition of MRL Graphite;
- (d) the Shares will be allotted and issued to Supreme Solutions (Pvt) Ltd (or its nominee), which is not a related party of the Company;
- (e) the Shares issued will be fully paid ordinary shares in the capital of the Company issued on the same terms and conditions as the Company's existing Shares; and
- (f) no funds will be raised from the issue as the Shares are being issued in consideration for the acquisition of MRL Graphite.

3. RESOLUTION 3 – CHANGE OF COMPANY NAME

Section 157(1)(a) of the Corporations Act provides that a company may change its name if the company passes a special resolution adopting a new name.

Resolution 3 seeks the approval of Shareholders for the Company to change its name to "MRL Corporation Limited".

If Resolution 3 is passed the change of name will take effect when ASIC alters the details of the Company's registration.

The proposed name has been reserved by the Company and if Resolution 3 is passed, the Company will lodge a copy of the special resolution with ASIC on completion of Stage 1 of the Acquisition in order to effect the change.

The Board proposes this change of name on the basis that it more accurately reflects the proposed future operations of the Company.

4. RESOLUTION 4 - REMOVAL OF AUDITOR

Under section 329 of the Corporations Act, an auditor of a company may be removed from office by resolution at a general meeting of which 2 months' notice of intention to move the resolution has been given.

It should be noted that under this section, if a company calls a meeting after the notice of intention has been given, the meeting may pass the resolution even though the meeting is held less than 2 months after the notice of intention is given.

Resolution 4 is an ordinary resolution seeking the removal of Grant Thornton Audit Pty Ltd as the auditor of the Company. An auditor may be removed in a general meeting provided that the notice of intention to remove the auditor has been received from a member of the company.

In accordance with section 329(2) of the Corporations Act, the Company has sent a copy of the notice to Grant Thornton Audit Pty Ltd and the ASIC.

5. RESOLUTION 5 – APPOINTMENT OF AUDITOR TO REPLACE AUDITOR REMOVED FROM OFFICE

Under section 327D of the Corporations Act, the Company in a general meeting may appoint an auditor to replace an auditor removed under section 329 of the Corporations Act.

Resolution 5 is a special resolution seeking the appointment of BDO Audit (WA) Pty Ltd as the new auditor of the Company. As required by the Corporations Act, a nomination for BDO Audit (WA) Pty Ltd to be appointed as the auditor of the Company has been received from a member. A copy of the nomination of BDO Audit (WA) Pty Ltd as auditors is set out at Schedule 3.

BDO Audit (WA) Pty Ltd has given its written consent to act as the Company's auditor in accordance with section 328A(1) of the Corporations Act subject to shareholder approval of this resolution.

If Resolutions 4 and 5 are passed, the appointment of BDO Audit (WA) Pty Ltd as the Company's auditor will take effect at the close of this Meeting. Resolution 5 is subject to the passing of Resolution 4.

6. RESOLUTION 6 – CAPITAL RAISING – SHARES AND OPTIONS

6.1 General

Resolution 6 seeks Shareholder approval for the issue of up to 7,500,000 Shares at an issue price of \$0.20 per Share, together with 1 free attaching Option for every 1 Share subscribed for and issued, to raise up to \$1,500,000 (**Capital Raising**).

A summary of ASX Listing Rule 7.1 is set out in section 2.1 above.

The effect of Resolution 6 will be to allow the Company to issue the Shares and Options pursuant to the Capital Raising during the period of 3 months after the Meeting (or a longer period, if allowed by ASX), without using the Company's 15% annual placement capacity.

6.2 Technical information required by ASX Listing Rule 7.1

Pursuant to and in accordance with ASX Listing Rule 7.3, the following information is provided in relation to the Capital Raising:

- (a) the maximum number of Shares to be issued is 7,500,000 and the maximum number of Options to be issued is 7,500,000;
- (b) the Shares and Options will be issued no later than 3 months after the date of the Meeting (or such later date to the extent permitted by any ASX waiver or modification of the ASX Listing Rules) and it is intended that issue of the Shares and Options will occur on the same date;
- (c) the issue price will be \$0.20 per Share and nil per Option as the Options will be issued free attaching with the Shares on a 1 for 1 basis;
- (d) the Directors will determine to whom the Shares and Options will be issued but, other than the Shares and Options the subject of Resolutions 7, 8 and 9 which may be issued to the Directors, these persons will not be related parties of the Company;

- (e) the Shares issued will be fully paid ordinary shares in the capital of the Company issued on the same terms and conditions as the Company's existing Shares;
- (f) the Options will be issued on the terms and conditions set out in Schedule 4; and
- (g) the Company intends to use the funds raised from the Capital Raising towards:
 - (i) the cost of the Acquisition as detailed in Resolution 1 of this Explanatory Statement;
 - (ii) an exploration program on the graphite concessions;
 - (iii) additional licence evaluation and future transactions;
 - (iv) the costs of the Capital Raising; and
 - (v) working capital.

7. RESOLUTIONS 7, 8 AND 9 - PARTICIPATION BY RELATED PARTIES IN CAPITAL RAISING

7.1 General

As set out in section 6.1, the Company proposes to issue up to 7,500,000 Shares and 7,500,000 Options at an issue price of \$0.20 per Share pursuant to a Prospectus to raise up to \$1,500,000 as part of the Capital Raising in connection with the Company's readmission to ASX.

The Directors of the Company, Mr Craig McGuckin, Mr Peter Youd and Mr Peter Reilly, wish to participate in the Capital Raising.

Resolutions 7, 8 and 9 seek Shareholder approval for the in the issue of up to 250,000 Shares and 250,000 Options to each of Messrs McGuckin, Youd and Reilly (or their nominees) arising from the participation by Messrs McGuckin, Youd and Reilly in the Capital Raising (**Participation**).

7.2 Chapter 2E of the Corporations Act

For a public company, or an entity that the public company controls, to give a financial benefit to a related party of the public company, the public company or entity must:

- (a) obtain the approval of the public company's members in the manner set out in sections 217 to 227 of the Corporations Act; and
- (b) give the benefit within 15 months following such approval,

unless the giving of the financial benefit falls within an exception set out in sections 210 to 216 of the Corporations Act.

The Participation will result in the issue of Shares which constitutes giving a financial benefit and Messrs McGuckin, Youd and Reilly are related parties of the Company by virtue of being Directors.

The Directors consider that Shareholder approval pursuant to Chapter 2E of the Corporations Act is not required in respect of the Participation because the Shares will be issued to Messrs McGuckin, Youd and Reilly on the same terms as Shares issued to non-related party participants in the Capital Raising and as such the giving of the financial benefit is on arm's length terms.

7.3 ASX Listing Rule 10.11

ASX Listing Rule 10.11 also requires shareholder approval to be obtained where an entity issues, or agrees to issue, securities to a related party, or a person whose relationship with the entity or a related party is, in ASX's opinion, such that approval should be obtained unless an exception in ASX Listing Rule 10.12 applies.

As the Participation involves the issue of Shares to related parties of the Company, Shareholder approval pursuant to ASX Listing Rule 10.11 is required unless an exception applies. It is the view of the Directors that the exceptions set out in ASX Listing Rule 10.12 do not apply in the current circumstances.

7.4 Technical Information required by ASX Listing Rule 10.13

Pursuant to and in accordance with ASX Listing Rule 10.13, the following information is provided in relation to the Participation:

- (a) the Shares and Options will be issued to Mr Craig McGuckin, Mr Peter Youd and Mr Peter Reilly (or their nominees);
- (b) the maximum number of securities to be issued is:
 - (i) 250,000 Shares and 250,000 Options to Mr McGuckin;
 - (ii) 250,000 Shares and 250,000 Options to Mr Youd; and
 - (iii) 250,000 Shares and 250,000 Options to Mr Reilly;
- (c) the Shares and Options will be issued no later than 1 month after the date of the Meeting (or such later date to the extent permitted by any ASX waiver or modification of the ASX Listing Rules) and it is intended that issue will occur on the same date;
- (d) the issue price of the Shares will be the same as the issue price of Shares issued under the Capital Raising, which shall be \$0.20. The Options will be issued for nil cash consideration as the Options will be issued free attaching with the Shares on a 1 for 1 basis;
- (e) the Shares issued will be fully paid ordinary shares in the capital of the Company issued on the same terms and conditions as the Company's existing Shares;
- (f) the Options will be issued on the terms and conditions set out in Schedule 4; and
- (g) the funds raised will be applied towards:
 - (i) the cost of the Acquisition as detailed in Resolution 1 of this Explanatory Statement;
 - (ii) an exploration program on the graphite concessions;

- (iii) additional licence evaluation and future transactions;
- (iv) the costs of the Capital Raising; and
- (v) working capital.

GLOSSARY

\$ means Australian dollars.

Acquisition means the acquisition of MRL Graphite pursuant to the Share Sale Agreement.

ASIC means the Australian Securities and Investments Commission.

ASX means ASX Limited.

ASX Listing Rules means the Listing Rules of ASX.

Board means the current board of directors of the Company.

Business Day means Monday to Friday inclusive, except New Year's Day, Good Friday, Easter Monday, Christmas Day, Boxing Day, and any other day that ASX declares is not a business day.

Capital Raising means a proposed issue of up to 7,500,000 Shares and 7,500,000 Options pursuant to a prospectus at an issue price of \$0.20 per Share to raise up to \$1,500,000.

Chair means the chair of the Meeting.

Company means Mongolian Resources Limited (ACN 007 870 760) (to be renamed "MRL Corporation Limited").

Constitution means the Company's constitution.

Consultancy Agreement means the consultancy agreement dated 29 May 2013 between the Company, Supreme Solutions, and RM Manivanaan.

Corporations Act means the Corporations Act 2001 (Cth).

Directors means the current directors of the Company.

Explanatory Statement means the explanatory statement accompanying the Notice.

General Meeting or **Meeting** means the meeting convened by the Notice.

Licences means 45 graphite exploration licences, the details of which are set out in Schedule 1.

MRL Investments means MRL Investments (Pvt) Ltd (PV 92247) (a company incorporated in Sri Lanka).

MRL Graphite means MRL Graphite (Pvt) Ltd (PV 92009) (a company incorporated in Sri Lanka).

Notice or **Notice of Meeting** means this notice of meeting including the Explanatory Statement and the Proxy Form.

Option means an option to acquire a Share.

Projects means the Sri Lankan graphite exploration projects comprising the Licences, further details of which are set out in Section 1.6 of the Explanatory Statement.

Proxy Form means the proxy form accompanying the Notice.

Resolutions means the resolutions set out in the Notice, or any one of them, as the context requires.

Share means a fully paid ordinary share in the capital of the Company.

Shareholder means a holder of a Share.

Share Sale Agreement means the share sale agreement dated 29 May 2013 between the Company, MRL Investments, Supreme Solutions, and MRL Graphite.

Supreme Solutions means Supreme Solutions (Pvt) Ltd (PV 19731) (a company incorporated in Sri Lanka).

WST means Western Standard Time as observed in Perth, Western Australia.

SCHEDULE 1 - LICENCES

Grid Numbers as per mineral titling references of Geological Survey and Mining Bureau.

Ambalangoda - 86	
No	Grid Number
1	131102
2	128102
3	131103
4	128103
5	127103
6	130104
7	129104
8	129105
9	128105
10	127105
Matugama - 80	
No	Grid Number
1	143147
2	142147
3	141147
4	140147
5	137147
6	144148
7	143148
8	137148
9	144149
10	143149
Kegalle - 50 and Attanagalla - 60	
No	Grid Number
1	138217
2	137217
3	138218
4	137218
5	136218
6	135218
7	131218
8	130218
9	129218
10	137219
11	136219
12	135219
13	129219
14	130220
15	129220
16	129221
17	144222
19	143222
19	129222
20	134224
21	128224
22	127224
23	134225
24	133225
25	128225

SCHEDULE 2 – PRO FORMA BALANCE SHEETS

	Balance Sheet (unaudited) 30 June 2013	Capital raising from Prospectus; net of costs Minimum subscription	Completion of Stage 1 Share Sale Agmt; Issue of Shares	Balance Sheet Proforma 30 June 2013
Current Assets				
Cash and cash equivalents	1,065,139	900,000	-	1,965,139
Trade and other receivables	7,944	-	-	7,944
Other	560,521	-	-	560,521
Total Current Assets	1,633,604	900,000	-	2,533,604
Non-Current Assets				
Property, plant & equipment	5,139	-	-	5,139
Exploration & evaluation Assets	-	-	1,000,000	1,000,000
Total Non-Current Assets	5,139	-	1,000,000	1,005,139
Total Assets	1,638,743	900,000	1,000,000	3,538,743
Current Liabilities				
Trade & other payables	241,425	-	-	241,425
Total Current Liabilities	241,425	-	-	241,425
Non-current Liabilities				
Non-interest bearing liabilities	429,637	-	-	429,637
Total Non-current Liabilities	429,637	-	-	429,637
Total Liabilities	671,062	-	-	671,062
Net Assets	967,681	900,000	1,000,000	2,867,681
Equity				
Contributed equity	56,453,317	900,000	1,000,000	58,353,317
Other reserves	1,629,152	-	-	1,629,152
Retained losses	(57,019,355)	-	-	(57,019,355)
Capital & reserves attributable to owners	1,063,114	900,000	1,000,000	2,963,114
Non-controlling interests	(95,433)	-	-	(95,433)
Total Equity	967,681	900,000	1,000,000	2,867,681

	Balance Sheet (unaudited)	Capital raising from Prospectus	Completion of Stage 1 Share Sale Agmt;	Balance Sheet Proforma
	30 June 2013	Maximum subscription	Issue of Shares	30 June 2013
Current Assets				
Cash and cash equivalents	1,065,139	1,400,000	-	2,465,139
Trade and other receivables	7,944	-	-	7,944
Other	560,521	-	-	560,521
Total Current Assets	1,633,604	1,400,000	-	3,033,604
Non-Current Assets				
Property, plant & equipment	5,139	-	-	5,139
Exploration & evaluation Assets	-	-	1,000,000	1,000,000
Total Non-Current Assets	5,139	-	1,000,000	1,005,139
Total Assets	1,638,743	1,400,000	1,000,000	4,038,743
Current Liabilities				
Trade & other payables	241,425	-	-	241,425
Total Current Liabilities	241,425	-	-	241,425
Non-current Liabilities				
Non-interest bearing liabilities	429,637	-	-	429,637
Total Non-current Liabilities	429,637	-	-	429,637
Total Liabilities	671,062	-	-	671,062
Net Assets	967,681	1,400,000	1,000,000	3,367,681
Equity				
Contributed equity	56,453,317	1,400,000	1,000,000	58,853,317
Other reserves	1,632,607	-	-	1,632,607
Retained losses	(57,022,810)	-	-	(57,022,810)
Capital & reserves attributable to owners	1,063,114	1,400,000	1,000,000	3,463,114
Non-controlling interests	(95,433)	-	-	(95,433)
Total Equity	967,681	1,400,000	1,000,000	3,367,681

SCHEDULE 3 – NOMINATION OF AUDITOR

Mongolian Resources Limited
Suites 6 and 7
61 Hampden Road
Nedlands WA 6009

Dear Sirs,

CLEMM Pty Ltd, being a member of Mongolian Resources Limited (**Company**), hereby nominates BDO Audit (WA) Pty Ltd in accordance with Section 328B(1) of the *Corporations Act 2001* (Cth) (**Act**) to fill the office of auditor of the Company.

Please distribute copies of this notice of this nomination as required by Section 328B(3) of the Act.

Signed and dated 17th June 2013:

A handwritten signature in black ink, appearing to be 'angh', followed by a period.

For and on behalf of

CLEMM Pty Ltd

SCHEDULE 4 – TERMS AND CONDITIONS OF OPTIONS

The Options will be granted on the terms and conditions set out below.

- (a) Each Option entitles the holder to subscribe for one Share in the Company at an exercise price of 20 cents (**Exercise Price**).
- (b) The Options will expire at 5.00 pm (AEST) on 17 October 2016 (**Expiry Date**). Any Option not exercised before the Expiry Date will automatically lapse on the Expiry Date.
- (c) The Company will apply for quotation of Options on ASX within 7 days after the date of the prospectus. If ASX does not grant official quotation of the Shares and Options within 3 months after the date of the Prospectus, the Company will not issue any Options.
- (d) There is no obligation to exercise the Options.
- (e) The Options may be exercised in whole or in part, and if exercised in part, multiples of 500 Options must be exercised on each occasion. Where less than 500 Options are held, all Options must be exercised together.
- (f) A holder of Options may exercise its Options by lodging with the Company Secretary at the Company's registered office, before the Expiry Date:
 - (i) a written notice of exercise of Options specifying the number of Options being exercised (**Exercise Notice**); and
 - (ii) a cheque or electronic funds transfer for the total Exercise Price for the number of Options being exercised.
- (g) An Exercise Notice is only effective when the Company has received the full amount of the Exercise Price in cleared funds.
- (h) Within 10 Business Days of receipt of the Exercise Notice accompanied by the appropriate Exercise Price, the Company will allot the number of Shares required under these terms in respect of the number of Options specified in the Exercise Notice.
- (i) The Options are freely transferable.
- (j) All Shares allotted upon the exercise of Options will be fully paid and will rank pari passu in all respects with other issued Shares.
- (k) The Company will apply for Official Quotation by ASX of the Shares issued upon exercise of Options within 10 Business Days of allotment of the Shares.
- (l) If the Company offers Shares by way of a pro rata issue (except a bonus issue) to the holders of Shares (whether renounceable or non renounceable), the exercise price of a Options will be reduced in accordance with the formula set out in the ASX Listing Rules.
- (m) If there is a bonus issue to the holders of Shares in the Company then the number of Shares over which each Option is exercisable will be increased by the number of Shares which the holder would have received under the bonus issue if the Option had been exercised before the record date for the bonus issue.

- (n) In the event of any reorganisation (including a consolidation, sub-division, reduction, cancellation or return) of the issued capital of the Company, the rights of the Option holder will be changed to the extent necessary to comply with the Listing Rules applying to a reorganisation of capital at the time of the reorganisation.
- (o) Options do not entitle the holder to:
- (i) participate in a new issue of Shares or other Securities;
 - (ii) receive dividends; or
 - (iii) attend, or vote at, meetings of the Company,
- without first exercising the Option.
- (p) Other than as set out above, an Option does not confer the right to a change in the Exercise Price or a change in the number of underlying Securities over which the Option can be exercised.

Independent Geologist’s Report

Sri Lankan Graphite Projects

Mongolian Resources Limited



Warbrooke-Burns & Associates Pty Ltd

**P.O. Box 127
Joondalup DC
Western Australia
Australia 6919**



Disclosure

Purpose

The purpose of this report is to provide an independent overview and assessment of the technical merits that might reasonably be expected to be applied by the market when considering an investment in the Sri Lankan interests currently held by Mongolian Resources Limited.

Reporting Standards

This report has been prepared in accordance with:

- The 2005 edition of the Code for the Technical Assessment and Valuation of Mineral and Petroleum Assets and Securities for Independent Expert Reports (VALMIN Code); and
- The 2012 Edition of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves (JORC Code).

Data

Warbrooke-Burns & Associates Pty Ltd has based its report on site visits (26-30 March 2013 & 16-26 April 2013), technical studies/research and data compiled by Mongolian Resources Limited or other associated technical personnel. This additional material has consisted of internal project memorandums, technical reports and location plans, all of which were provided by Mongolian Resources Limited. Warbrooke-Burns & Associates Pty Ltd also conducted independent research into publically available reports and documentation on Sri Lanka, the Sri Lankan mining industry and the legal framework affecting foreign investment and the resources sector in general. The key sources of information are outlined in the accompanying bibliography.

Disclaimer and warranty

The conclusions expressed in this report are appropriate as at 17/08/2013. The opinions contained within this report are only appropriate for this date and may change in time in response to variations in economic, market, legal or political factors, in addition to ongoing exploration results.

Warbrooke-Burns & Associates Pty Ltd has made due enquiries to the Sri Lankan Government’s Geological Survey and Mines Bureau (GSMB) in order to validate information provided by Mongolian Resources Limited. However, Warbrooke-Burns & Associates Pty Ltd is not qualified to express legal opinion and has not sought any independent legal opinion on the ownership rights and obligations relating to the respective graphite assets under licence or any other fiscal or legal agreements that Mongolian Resources Limited may have with any third party in relation to the Sri Lankan graphite projects.

A draft version of this report was provided to the directors of Mongolian Resources Limited for comment in respect of omissions and factual accuracy. Mongolian Resources Limited has represented that full disclosure has been made of all material information and that to the best of its knowledge and understanding, such information is complete, accurate and true.

This report may contain or refer to forward-looking information based on current expectations, including, but not limited to timing of mineral resource estimates, future exploration or project development programmes and the impact of these events on Mongolian Resources Limited’s Sri Lankan graphite projects. Forward-looking information is subject to significant risks and uncertainties, as actual results may differ materially from forecasted results. Forward-looking information is provided as of the date hereof and Warbrooke-Burns & Associates Pty Ltd assumes no responsibility to update or revise them to reflect new events or circumstances.

As recommended in Section 39 of the VALMIN Code, Mongolian Resources Limited has provided Warbrooke-Burns & Associates Pty Ltd with an indemnity under which Warbrooke-Burns & Associates Pty Ltd is to be compensated for any liability and/or any additional work or expenditure resulting from any additional work required which:

- results from Warbrooke-Burns & Associates Pty Ltd’s reliance on information provided by Mongolian Resources Limited and/or Independent consultants that is materially inaccurate or incomplete,
- or relates to any consequential extension of workload through queries, questions or public hearings arising from this report.

All monetary values outlined in this report are expressed in United States dollars (USD) unless otherwise stated.



Author

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Principal Consultant | Director

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The information in this report that relates to exploration results is based on a compilation, which has been reviewed by Mr Terry Burns. Mr Burns is a full time employee of Warbrooke-Burns & Associates Pty Ltd, a Fellow of the Australasian Institute of Mining and Metallurgy and Member of the Australian Institute of Company Directors. Mr Burns has sufficient experience, relevant to the style of mineralisation, type of deposits under consideration and to the activity, under review to qualify as a Competent Person as defined in the 2012 Edition of the JORC Code and a Representative Expert as defined in the 2005 Edition of the VALMIN Code.

Review of Technical Work & Report

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Warbrooke-Burns & Associates Pty Ltd has prepared this report on behalf of Mongolian Resources Limited. Mongolian Resources Limited has received consent from Warbrooke-Burns & Associates Pty Ltd to use this document for the purposes of public disclosure, publication or the presentation of any information contained in this document.

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1 Executive Summary

Mongolian Resources Limited – Australian Company Number (ACN) 007 870 760 (Mongolian Resources or the Company) engaged Warbrooke-Burns & Associates Pty Ltd (Warbrooke-Burns) to complete an Independent Geologist’s Report into three graphite exploration projects located in Sri Lanka that are subject to an acquisition Heads of Agreement with the Supreme Group of Sri Lanka.

Warbrooke-Burns understands that this report will be used in a Shareholder’s Notice of Meeting that has been called to approve the proposed acquisition of 100% of the issued capital in MRL Graphite (Pvt) Ltd, a wholly owned subsidiary of the Supreme Group of Sri Lanka which holds a 100% interest in 45 graphite exploration licences.

Terry Burns, Principal Consultant and Director of Warbrooke-Burns conducted two trips to Sri Lanka (26-30 March 2013 & 16-26 April 2013) as part of the investigative process to complete this report.

The assets considered in this report comprise three separate and distinct projects:

1. The Warakapola Project (25 grids or 25km²) located in the Gampaha & Kegalle Districts approximately 50kms north-east of Colombo,
2. The Palinda Nuwara Project (10 grids or 10km²) located in the Kalutara District approximately 60kms south-southeast of Colombo, and
3. The Hikkaduwa Project (10 grids or 10km²) located approximately 15kms northwest of the southern coastal town of Galle.

In Warbrooke-Burns’ opinion, all projects are at an exploration stage despite the presence of considerable historic small to moderate scale vein graphite mines on the vast majority of the licences. The projects therefore require further systematic evaluation to resolve this geological uncertainty and initiatives would generally include geological mapping, geophysical surveying and targeted diamond drilling.

While abandoned historic graphite mines are located on the licences and supports a hypothesis which includes the presence of remnant or unmined graphite veins, there remains considerable risk in the above project areas actually containing economic accumulations of saleable carbon as graphite.

Warbrooke-Burns has investigated past mining and exploration activities on the licences and considers the exploration programs appropriate for each of the projects in terms of geoscientific approach, including the innovative proposal to refurbish two historic mines as part of a wider exploration initiative.

The proposed budgets for the three projects are sufficient in activity to meet the relevant statutory expenditure commitments necessary to maintain the tenements in “good standing” under the relevant Sri Lankan mining legislation.



2 Sri Lankan Overview

2.1 Introduction

Sri Lanka, officially the Democratic Socialist Republic of Sri Lanka, is an island country in the northern Indian Ocean off the southern coast of the Indian subcontinent in South Asia.

Sri Lanka has maritime borders with India to the northwest and the Maldives to the southwest.

Figure 1 shows the general infrastructure of the country and the proximity of its neighbours.

Figure 1 – Map of Sri Lanka



Source – Central Intelligence Agency



2.2 History

2.2.1 Ancient

The early inhabitants of Sri Lanka were probably the ancestors of the Vedda, a small indigenous community still living in modern-day Sri Lanka.

One of the first written references to the island is found in an ancient Indian story which provides details of a kingdom named “Lanka” that had been created by the divine sculptor Vishwakarma, for Kubera, the lord of wealth. It is also believed that the southern city of Galle was the ancient seaport of Tarshish from which King Solomon is said to have drawn ivory, peacocks and other valuables.

2.2.2 Modern

Sri Lanka's documented history spans three thousand years and its location and deep harbours made it of great strategic importance from the time of the ancient Silk Road through to World War 2. This has had the effect of producing a diverse country which is home to many religions, ethnicities and languages.

2.2.3 The Arrival of the Portuguese

The modern period of Sri Lanka begins with the arrival of the first Portuguese soldier and explorer in 1505. The Portuguese subsequently founded a fort at the port city of Colombo in 1517 and gradually extended their control across many coastal areas.

In 1592 the indigenous kingdom was relocated to the inland city of Kandy which was deemed more secure against an attack. Intermittent warfare continued through most of the 16th century and in 1619 the independent existence of the northern Jaffna Kingdom came to an end at the hands of the Portuguese.

2.2.4 The Dutch Treaty

During the early 1600s, Dutch explorers started visiting the island and in 1638 a treaty with the Dutch East India Company was signed to effectively remove the Portuguese who governed most of the coastal areas.

A Dutch-Portuguese war for control was subsequently won with Colombo falling into Dutch hands by 1656 because they remained in the areas they captured and in violation of the treaty.

The Kingdom of Kandy was the last independent monarchy of Sri Lanka and despite intermittent warfare with Europeans was able to survive.

2.2.5 British Colonisation

During the Napoleonic Wars, Great Britain occupied the coastal areas of the island from 1796, fearing that French control of the Netherlands might deliver Sri Lanka to the French.

A full-scale British invasion was thwarted in 1803 yet the entire coastal area was under the British controlled East India Company after the first recognition of the French Republic by Britain.



In early 1815, Britain finally ended Sri Lanka’s independence by taking Kandy and exiling the last native monarch to India. The following Kandyan Convention ceded the entire country to the British Empire.

By the end of the 19th century, a new educated social class transcending race and caste had developed through British attempts to staff the Ceylon Civil Service and the legal, educational, and medical professions. These new leaders represented the various ethnic groups of the population in the Ceylon Legislative Council on a communal basis.

The first two decades in the 20th century saw a unique harmony among Sinhalese and Tamil political leadership and in 1919, major Sinhalese and Tamil political organizations united to form the Ceylon National Congress (CNC).

The reforms of 1931 repudiated the communal representation and introduced the right to vote which had previously only been available to 4% of the population.

In 1937, the Tamil leadership demanded a 50–50 representation (50% for the Sinhalese and 50% for other ethnic groups) in the State Council which was not forthcoming in the subsequent Soulbury reforms of 1944/45.

2.2.6 Independence

The Soulbury constitution ushered in Dominion status, with independence proclaimed in early February 1948. The British Royal Navy remained stationed on the eastern side of the island until 1956.

The controversial “Sanhala Only Act” which recognised Sinhala as the only official language of the government was introduced in 1956 and although partially reversed in 1958, the bill posed a grave concern for the Tamil community, which perceived it a threat to their language and culture.

A pact brokered between the differing factions proved ineffective in the face of ongoing protests by those opposed including the Buddhist clergy. Tensions were high between Sinhalese and Tamil political leaders and reached near breaking point when Prime Minister S.W.R.D. Bandaranaike was assassinated by an extremist Buddhist monk in 1959.

Sirimavo Bandaranaike, the widow of the murdered leader, took office as prime minister in 1960, and withstood an attempted coup d’état in 1962. During her second term as prime minister, the government instituted socialist economic policies and strengthened ties with the USSR and China.

In 1972, the country became a republic named Sri Lanka and repudiated dominion status.

2.2.7 A Thirty Year Civil War

A fledgling Tamil militancy began to develop in the north during the 1970s but a policy of standardisation around rectifying university enrolment disparities acted as the immediate catalyst for the rise of militancy. The assassination of the mayor of Jaffna in 1975 marked a crisis point in the country’s inherent ethnic relationships.



A new constitution was introduced in 1977 and together with a free market economy and a powerful executive presidency modeled after that of France, made Sri Lanka the first South Asian country to liberalise its economy.

Ethnic tensions were manifested in an intermittent insurgency against the government by the Liberation Tigers (“Tigers”) of Tamil Eelam (LTTE) and following the riots of July 1983, more than 150,000 Tamil civilians fled the island, seeking asylum in other countries.

Lapses in foreign policy resulted in strengthening the Tigers by providing arms and training from offshore and in 1987, the Indo Sri Lanka Accord was signed and an Indian peace keeping force was deployed in northern Sri Lanka to stabilise the region by neutralising the LTTE. Later that same year, a second insurrection was launched in Southern Sri Lanka which provided for the need to redeploy the Indian peacekeepers in 1990. In 2002, the Sri Lankan government and LTTE signed a Norwegian-mediated ceasefire agreement.

From 1985 to 2006, the Sri Lankan government and Tamil insurgents held four rounds of peace talks without success and both sides resumed fighting in 2006. The government subsequently backed out of the ceasefire in 2008.

In 2009, the Sri Lankan Armed Forces defeated the LTTE and the Sri Lankan government re-established control of the entire country. It is estimated that between 60,000 and 100,000 people were killed during the 26 years of conflict.

Following the LTTE's defeat, the Tamil National Alliance dropped its demand for a separate state in favour of a federal solution.

Sri Lanka has now emerged from its 26-year war to become one of the fastest growing economies in the world as reconstruction efforts abound to help the country to recover from a period of global economic isolation.

2.2.8 Ethnography and Religion

The Sinhalese people are the majority, although there are many ethnic minorities including Sri Lankan Tamils, Indian Tamils, Moors, Burghers, Malays, Kaffirs and the aboriginal Vedda.

Sri Lanka has a rich Buddhist heritage, and the first known Buddhist writings were composed on the island.

2.2.9 Government

Sri Lanka is a republic and is governed by a semi-presidential system which is a mixture of a presidential and a parliamentary system.

The nation’s political capital is Sri Jayawardenapura Kotte and is a suburb of Colombo, the largest city and cultural capital.

2.2.10 Trade

Sri Lanka is an important producer of tea, coffee, gemstones, coconuts, rubber and the native cinnamon.



2.2.11 International Relations

The country has had a long history of international engagement, being a founding member of the South Asian Association for Regional Cooperation (SAARC), a member of the United Nations, the Commonwealth of Nations, a foundation member of the Group of G77 and a member state of the 120-strong Non-Aligned Movement.

Sri Lanka is the only country in South Asia that is currently rated as high on the Human Development Index.



3 Sri Lankan Specifics

3.1 Law

The legal framework of Sri Lanka is complex and a mixture of laws ranging from Rome, England, Holland, South India and Old Ceylon. The religious and colonial history of the nation is the factor responsible for such a rich legislative inheritance.

The Sri Lankan judicial system has the Supreme Court as the apex court of the nation followed by the Court of Appeal, High Court, District Courts, Magistrates' Courts and Primary Courts.

The Constitution of the Democratic Socialist Republic of Sri Lanka has been the constitution since its original promulgation by the National State Assembly on 7 September 1978. It is Sri Lanka's second republican constitution and the third since the country's independence (as Ceylon) in 1948 and has been formally amended 18 times since.

The Constitution provided for an independent judiciary and guaranteed fundamental rights that allow for any aggrieved person to invoke the Supreme Court for any violation of his/her fundamental rights.

The Constitution also provided for a Parliamentary Commissioner for Administration (Ombudsman) who can investigate public grievances against government institutions and state officers and give redress. It also introduced referendums on certain bills and on specific issues of national importance.

3.2 Administrative Divisions

The government of the country is administered via a well-defined, two-tiered structural hierarchy comprised of provinces and districts.

3.2.1 Provinces

Provinces have existed in Sri Lanka since the 19th century but without legal status until 1987 when the 13th Amendment to the 1978 Constitution of Sri Lanka established nine provincial councils. The provincial council is an autonomous body that undertakes activities which had earlier been the domain of the Central Government Ministries, Departments, Corporations and Statutory Authorities

3.2.2 Districts

Sri Lanka is also divided into 25 districts that are administered by a District Secretariat. The districts are further subdivided into 256 Divisional Secretariats and these in turn, to approximately 14,008 Grama Nilahari or village leaders.

There are also three other types of local authorities known as Municipal Councils, Urban Councils (13) and Pradeshiya Sabha.



3.3 Geography

Sri Lanka lies in the Indian Ocean southwest of the Bay of Bengal, between latitudes 5° North and 10° North and longitudes 79° East and 82° East. The island is separated from the Indian sub-continent by the Gulf of Mannar and the Palk Strait (refer Figure 1).

A land bridge between India and the island was reportedly passable on foot up to 1480 AD when abnormal storm activity of the time deepened the channel.

Sri Lanka's coastline is 1,585 km long and a 200 nautical mile Exclusive Economic Zone is claimed. The coastline and associated waterways support highly productive marine ecosystems such as coral reefs and shallow beds of coastal and estuarine sea grasses.

The longest of the 103 rivers in the country is the Mahaweli River. This waterway covers 335kms and the drainage basin is the largest in the country covering almost one-fifth of the total area of the island. The river reaches the Bay of Bengal on the eastern side of the island and six dams supply more than 40% of Sri Lanka's electricity needs.

3.4 Climate

The island consists mostly of flat-to-rolling coastal plains, with mountains rising only in the south-central part where the highest point reaches 2,524m ASL.

The climate is tropical and warm where the temperature is often moderated by the effect of sea breezes. Average temperature ranges from 17 °C in the central highlands where frost may occur for several days in the winter, to a maximum of 33 °C in other low-altitude areas. Average yearly temperature ranges from 28 °C to 31 °C where day and night temperatures vary between 14 °C and 18 °C.

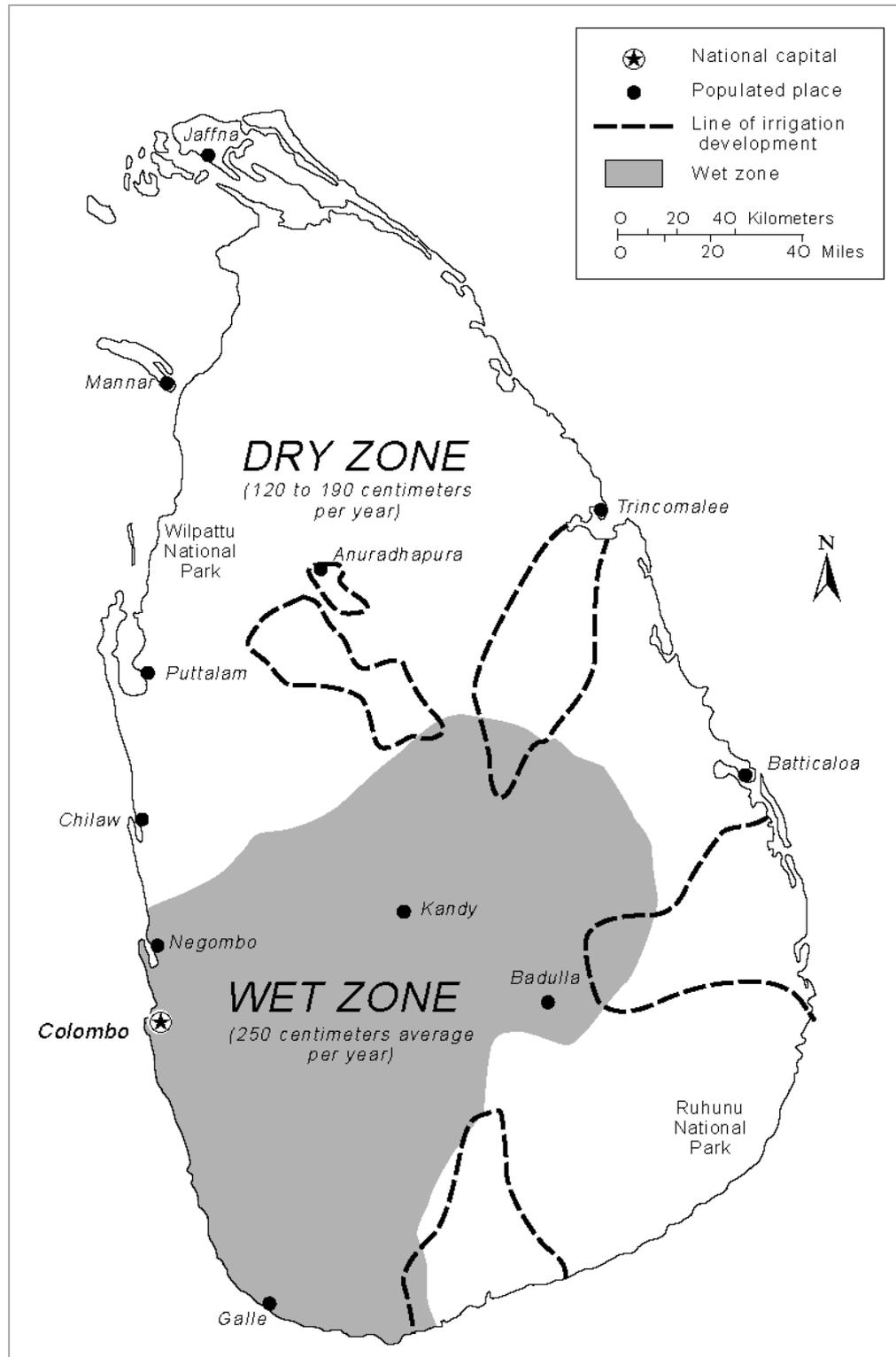
Rainfall patterns are influenced by monsoon winds from the Indian Ocean and Bay of Bengal and the "wet zone" (refer Figure 2) and some of the windward slopes of the central highlands receive up to 2.5m of rain each month. Most of the east, southeast, and northern parts of the country comprise the "dry zone" and receive between 1.2m and 1.9m of rain annually. The arid northwest and southeast coasts receive even less at 0.8m to 1.2m per year.

Humidity is typically higher in the southwest and mountainous areas and depends on the seasonal patterns of rainfall.

Periodic squalls and the infrequent tropical cyclone can bring overcast skies and rains to the southwest, northeast, and eastern parts of the island.



Figure 2 – Rainfall map of Sri Lanka



Source – Wikipedia



3.5 Culture & Language

Sri Lankan culture is diverse and it varies from region to region and has managed to retain much of its ancient aspects from the country’s long history and Buddhist heritage. The country has a rich artistic tradition and the Sri Lankan lifestyle is reflected in the cuisine, festivals, and sports.

South Indian influences are visible along with aspects from the colonial times from the Portuguese, Dutch and British periods.

Recent population statistics show that 74.8% are Sinhalese, 9.2% are Sri Lankan Moors, 11.2% are Sri Lankan Tamil, and 4.2% are Indian Tamil. The remaining less than 1% comprise minority immigrant backgrounds.

Religion is heavily weighted towards Buddhism at 70.2% of the population with Hinduism 12.6%, Islam 9.7%, and Christianity 7.4% making up the remaining population.

3.6 Economy

3.6.1 General

Sri Lanka has mostly experienced recent strong economic growth rates as the country continues to work hard at shrugging off the malaise generated from nearly thirty years of economic uncertainty arising as a direct result of the civil war. However, in GDP per capita terms, it is now ahead of other countries in the South Asian region.

Sri Lanka's most dynamic industries now are food processing, textiles and apparel, food and beverages, telecommunications, and insurance and banking. Tourism is a growth sector as the island gains acceptance as a destination post the civil war.

However, in 2001, Sri Lanka faced bankruptcy, with debt reaching 101% of GDP. The impending currency crisis was averted after the country reached a hasty ceasefire agreement with the LTTE and brokered substantial foreign loans.

From 2004, the government has concentrated on mass production of goods for domestic consumption and the central bank has not intervened in controlling the economy by printing more currency since late 2006. The level of state intervention in the economy is nevertheless generally still considered to be high.

Sri Lanka continues to depend heavily on foreign assistance and in recent years China has become a significant fund provider for infrastructure projects.

The Government provides employment for 13% of the work force and continues to follow state enterprise oriented policies. Privatization of such enterprises has stopped and reversed, with several new state enterprises launched

3.6.2 Recent Data

The economy ended 2012 with an overall positive balance of USD 151m versus a USD 1,061m deficit in FY2011.

The following snapshot relates to predominately 2011 data collated in late 2012 and assumes a population of 20.5 million people.



GDP (Purchasing Power Parity)	USD 116.5 billion
GDP Growth (2011)	8.2%
GDP Growth (5yr compound annual)	6.5%
GDP (per capita)	USD 5,674
Unemployment	4.2%
Inflation (Consumer Price Index)	6.7%
Foreign Direct Investment Inflow	USD 300.0 million
Public Debt	78.5% of GDP

Preliminary statistics from the International Monetary Fund (IMF) suggests that these metrics continued to increase during 2012.

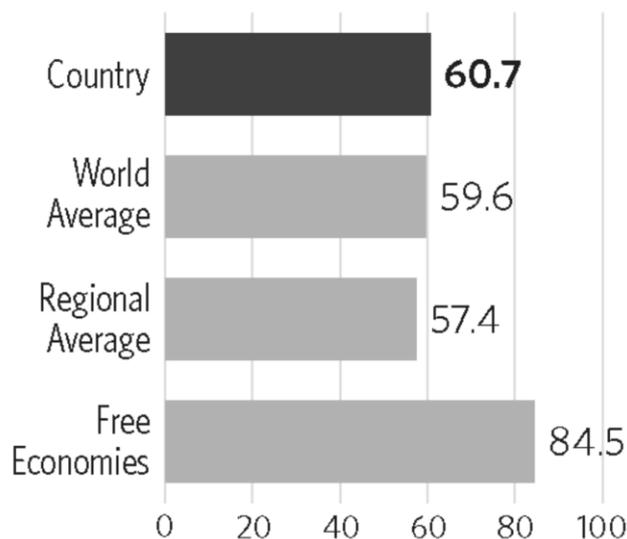
3.6.3 International Economic Relativity

Since 1995, The Wall Street Journal and The Heritage Foundation have tracked the extent of economic freedom around the world with an instrument referred to as the Index of Economic Freedom. The Index has created 10 benchmarks that gauge the economic success of 185 countries across the globe using the economic freedom theories promulgated by economist Adam Smith in the late 18th century.

According to the 2013 Index of Economic Freedom, Sri Lanka has an economic freedom score is 60.7, making its economy the 81st freest (out of 185) in the 2013 Index. The country score is 2.4 points higher than last year, reflecting improvements in half of the 10 economic freedoms including fiscal freedom, investment freedom, and the control of government spending.

Sri Lanka is ranked 13th out of 41 countries in the Asia–Pacific region, and its score is above the world and regional averages (Figure 3). As a means of comparison, Australia was overall third behind Singapore and Hong Kong with an overall score of 82.6.

Figure 3 – Country comparisons in the 2013 Index of Economic Freedom



Source – The Heritage Foundation



The country recorded significant score gains for the third consecutive year, and with the third largest score improvement in the 2013 Index, Sri Lanka has regained the rank of “moderately free” that it last held in 2005. Notable reforms have eased foreign exchange controls and reduced both individual and corporate marginal income tax rates to below 30%.

According to the Index of Freedom report, there is an opinion that –

“Substantial challenges remain in the struggle to promote stable long-term economic development, and lingering institutional weaknesses call for much greater commitment to reform, particularly in two areas. Sri Lanka continues to score below the world average in freedom from corruption and the protection of property rights, and marginal reforms in these critical areas have failed to generate much improvement.” page 407 “2013 Index of Freedom” The Heritage Foundation

3.7 Infrastructure

3.7.1 Roads

The total length of Sri Lankan roads exceeds 11,000km and most are sealed. The government has launched several key highway projects to bolster the economy and national transport network and ease Colombo's traffic congestion.

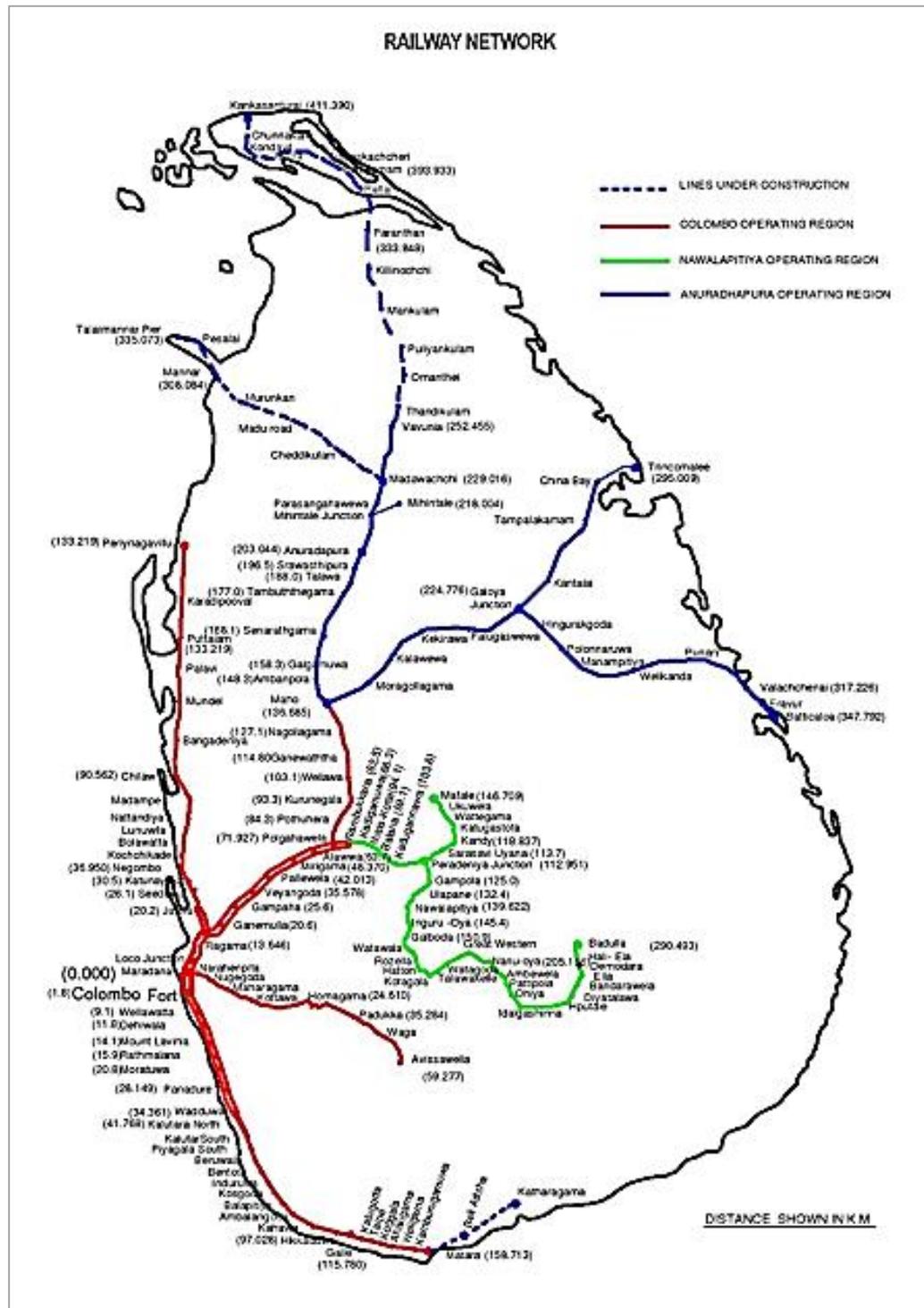
The Road Development Authority (government sponsored) has been involved in several large-scale projects in an attempt to improve the overall road network. Sri Lanka's commercial and economic centers, primarily the capitals of the nine provinces are connected by the "A-Grade" roads which are categorically organized and marked. Furthermore, "B-Grade" roads, also paved and marked, connect district capitals within provinces.

3.7.2 Rail and Bus

Sri Lankan cities and towns are connected by railways operated by the state and the bus network is operated by the Sri Lanka Transport Board which is also a government run organization charged with the responsibility of coordinating bus services across the entire island. Figure 4 shows the current and future railway lines.



Figure 4 – Sri Lankan railway network



Source – Sri Lankan Railway Information Portal



3.7.3 Energy

The energy policy is governed by the Ministry of Power and Energy, while the production and retailing of electricity is carried out by the Ceylon Electrical Board.

Energy in Sri Lanka is generated by hydroelectric power schemes and by diesel and gas power generation in plants built during the 1980s and 1990s.

The Sri Lankan Government and many individual environmental lobby groups have been focusing on eco-friendly solutions to energy development and the country is undergoing changes to enforce stricter environmental policies on industry.

3.7.4 Communications

Sri Lanka’s telecommunications sector has had to contend with a developing market post the civil war and there are a range of major initiatives in place that should boost the building of national infrastructure and open the market to more competition.

The fact that Sri Lanka Telecom lost its monopoly in a number of key areas earlier on led the way and since then the market has progressively been opened up to more and more competition. The presence of foreign investors has been a positive factor in the growth in the market. In the meantime, a mobile penetration of just over 90% coming into 2012 suggests there is more room for growth in that market segment; fixed-line subscriber growth is stagnant, with little chance of revival; and broadband internet is finally starting to grow strongly from a low base.

3.7.5 Shipping

The Sri Lanka Ports Authority was set up by an Act of Parliament in 1979 and administers and operates all specified commercial Ports in Sri Lanka that now include Colombo, Galle, Trincomalee, Kankasanturai and Point Pedru.

The Port of Colombo is the major port in the country and a government policy of regional development sees ongoing development activity at the Ports of Galle, Trincomalee, Kankasanthurai, Point Pedru and a new Port at Hambantota in the southern province.

3.8 Country Risk Profile

Since 1997, the Fraser Institute has conducted an annual survey (Fraser Survey) of metal mining and exploration companies to assess how mineral endowments and public policy factors such as taxation and regulation affect their exploration investment.

Sri Lanka is not covered in the most recent 2012-2013 edition.

3.9 Taxation

3.9.1 General

The tax year in Sri Lanka runs from April 1 to March 31 and the related income tax for each year of assessment is computed on a current year basis. However, the Sri Lanka Revenue Authorities do allow flexibility in calculating the income tax payable based on that entity’s accounting period in cases where the entity in question is a



subsidiary or branch of a non-resident group, or on a case-by-case basis with regard to resident companies. This type of arrangement generally applies to overseas groups which have a December 31 accounting year end.

Sri Lanka has a self-assessment system where tax is collected on certain types of income (e.g. interest, dividends, specified fees, management fees, rent on commercial premises etc.) under a pay-as-you-earn scheme on employment income and self-assessment quarterly payments.

While most of the above taxes are administered by Department of Inland Revenue, in some cases, this power is devolved to provincial councils by virtue of the 13th Amendment to the Constitution.

3.9.2 Liability to Taxation

The basis of liability to taxation is determined by a person’s tax residence. Accordingly, while residents are taxed on worldwide income, non-residents are only taxed in Sri Lanka on Sri Lankan sourced income.

The government of Sri Lanka encourages foreign investment and in doing so many fiscal incentives are available to eligible businesses.

3.9.3 Indirect Taxes

Sri Lanka’s tax system also includes various forms of indirect taxes, including value added tax, an economic service charge, stamp duty, provincial council turnover tax, excise duty, customs duty, port and airport development levy, debit tax and a share transaction levy.

3.9.4 Double Tax Agreements

Foreign source income of residents is taxed in accordance with the normal provisions of the Act and where tax is paid in a foreign jurisdiction; a tax credit may be available where a Double Tax Agreement (DTA) exists between Sri Lanka and that overseas jurisdiction.

Australia has a comprehensive DTA with Sri Lanka that was first signed in late 1989 and became law in Sri Lanka in time for the 1992/93 tax year.

3.9.5 World Bank Commentary

According to the World Bank, Sri Lanka’s tax administration has been weakened by the coexistence of parallel regimes and the existence of legal provisions enabling the Board of Investment (BOI) to override Inland Revenue and Customs laws in granting tax concessions and the country’s limited experience with modern taxes.

Proposed administrative measures to strengthen tax administration could include establishing a well-integrated revenue administration; the establishment of a separate tax audit unit for carrying out tax audits; and for the large taxpayer unit of the Inland Revenue Department to proactively pursue potential revenue.



Table 1 – Key Sri Lankan taxes and tax rates showing recent trends and changes

Category	Tax rate in 2010/11	Tax rate in 2011/12
Companies with taxable income not exceeding Rs5m (other than a unit trust mutual fund, venture capital company, holding company or subsidiary of a group company)	15%	12%
Existing or new venture capital companies not qualified for tax exemption	20%	12%
All other companies: Quoted “public” for the first five years of assessment from the year of assessment which it becomes a quoted company	33.3%	28%
Remaining companies not covered by those above	35%	28%
Withholding tax		5% to 20%
Value added tax (VAT)		12%
Stamp Duty on transactions		sliding scale
Economic service charge (levied quarterly)		0.1% to 1%
Unlisted share transfer or assignment stamp duty		Rs5/Rs1,000
Nation building tax		2%
Customs duty on imports		variable
Ports and airport development levy on imports		variable

Source – modified after PricewaterhouseCoopers Ltd. (2012)

4 Sri Lankan Mineral Industry

4.1 Overview

Sri Lanka has a variety of industrial minerals, which includes ball clay, kaolin, and other clays; calcite; dolomite; feldspar; gemstones; graphite; limestone; mica; mineral sands; phosphate rock; quartz; and silica sand.

The country’s mineral industry produces cement, gemstones and jewellery, non-metallic minerals and petroleum products. No metals or crude oil is produced and all petroleum is imported for refining.

All minerals with the exception of graphite are mined in quarries or surficial pits by open-cast methods.



4.2 Ownership

The existing mines in the mineral industry are predominantly privately owned except for government owned and operated mines at Eppawala Apatite Mine (phosphate rock), Pulmoddai Mineral Sands and the Kahatagaha/Kolongaha Graphite Mines.

4.3 Governing Regulations

The development of mineral resources is governed by the Mines & Minerals Act No.33 of 1992, the Mines & Minerals (Amended) Act No.66 of 2009 and the Mining (Licensing) Regulations No. 794/23 of 1993 and revisions thereafter.

4.4 Tenure

There exist five types of licenses namely Exploration, Mining, Trading, Export and Transport that are issued under the Mines & Minerals Act No. 33 of 1992.

4.5 Exploration Licences

An Exploration license grants the license-holder the exclusive right to explore for all mineral categories authorized by the license.

4.6 Mining Licences

There are two categories of Mining Licences namely artisanal and industrial. There is a procedural standard in place for the transition from exploration licence to a mining licence should exploration activities be successful.

Artisanal

An Artisanal Licence grants the license-holder the exclusive right to mine, process and trade/ export in all minerals specified in the license within an area not exceeding ten hectares or to a depth not exceeding 25m.

Industrial

An Industrial Licence grants exclusive right to explore for, mine, process and trade in all minerals mined within the area of a specified license. There are three categories of Industrial Mining Licenses and these appear to be based on production volumes and blasting methods.

4.7 Trading Licences

A trading license shall grant the non-exclusive right to purchase, store, process, trade in and, with the special authorization of the Director of the Geological Survey and Mines Bureau (GSMB), to export minerals in respect of which the license is issued.

4.8 Export Licences

All exploration, mining and trading licensees shall obtain the special authorisation of the Director of the GSMB to export minerals in respect of which the license is issued.



4.9 Transport Licences

License to transport mineral-bearing substances or minerals shall be issued for such quantity and period and for such minerals as may be specified in such license. All exploration, mining and trading licenses shall require a transport license to transport mineral-bearing substances or minerals.

4.10 Reserved Mineral Licence

License to explore, for, mine, process and trade in reserved minerals may be granted with the approval of the Minister. The author has been unable to gain a satisfactory understanding as to the definition of reserved minerals used in this instance.

4.11 Royalties

The GSMB has the right to demand royalties. According to the most recent publically available Annual Report of the GSMB 453.6mRs (approximately USD 3.5m) was collected in royalties with no breakdown of sectors or minerals involved in that total.



5 Graphite

5.1 Overview

Graphite is one of three forms of naturally occurring carbon, the others being charcoal and diamond. It is a black (to grey), lustrous mineral that crystallises in the hexagonal system, is soft (H = 1–2) and has a specific gravity of 2.1 to 2.2. It is opaque and dark steel to iron black in colour, with a metallic lustre. The term graphite comes from the Greek word “to write” and the terms Plumbago and black lead are antiquated names for graphite due to its lead-like appearance.

Natural graphite predominantly forms from the metamorphism of organic carbon or carbonaceous rocks and is found in three commercial varieties: crystalline flake, microcrystalline (or amorphous), and crystalline vein (or lump).

The carbon atoms are arranged in a layered lattice structure ordered in hexagonal and rhombohedral form. A low coefficient of friction between the planes allows them to slide over each other and gives graphite its lubricating properties. All graphite is compressible and malleable, absorbent, and chemically inert.

Graphite is an excellent conductor of heat and electricity and is highly refractory given its high melting point of 3650°C. Thermal oxidation of natural graphite begins at about 300°C, and it is commonly stable at lower temperatures. Natural graphite is also typically resistant to chemical degradation, thermal shock and shrinkage.

It has been declared a strategic mineral by both the USA and the European Union due to the scarcity of natural graphite and its unique physical and chemical properties. The growing importance of graphite in high technology and green energy applications underpins its strategic status especially given that more than 70% of global production comes from China (Figure 6).

Table 2 – Graphite, its applications and those who produce it

	Crystalline flake	Natural Micro-crystalline/ amorphous	Crystalline vein/lump	Exfoliated/ expanded	Treated Colloidal	Synthetic
Applications	Batteries Carbon pans Carbon brushes Catalysts Coatings Crucibles Foil Flame retardants Friction materials Fuel cells Lubricants Pencils Plastics + resins	Carbon additives Coatings Friction materials Lubricants Pencils Refractories	Batteries Lubricants	Batteries Coverings Foil Flame retardants Gaskets Insulation Lubricants Paint Seals	Batteries Carbon resistance film Catalysts Conductive suspensions Lubricants Metal alloys Mould release agents	Batteries Carbon additives Electrodes Fuel cells Heating systems
Producers	China India Brazil Canada Mexico Norway Zimbabwe Madagascar	Austria China Czech Republic North Korea Mexico	Sri Lanka	India Switzerland	India Ukraine	Austria Japan Switzerland USA

Source – Crossley (2000)



5.2 History

It would appear that graphite was already used by the 4th millennium B.C. A Neolithic culture of South-eastern Europe that was primarily located along the lower course of the Danube River in what is now Romania and Bulgaria used it to create a ceramic paint to decorate pottery.

At some time prior to 1565 a large and significant graphite deposit was discovered on the approach to Grey Knotts in Borrowdale parish, Cumbria, England. The local farmers first found it very useful for marking sheep.

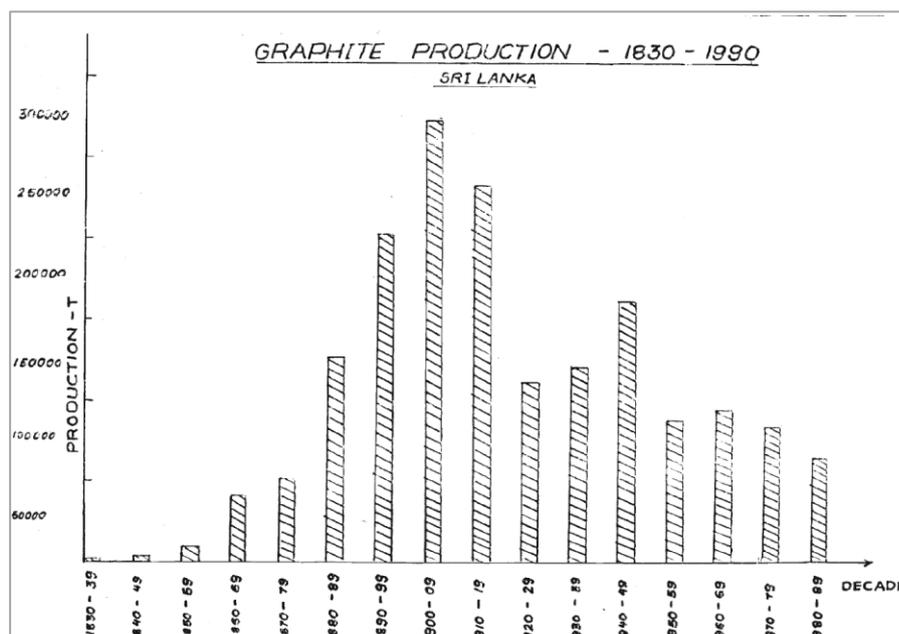
During the reign of Elizabeth 1 (1533–1603), Borrowdale graphite was used as a refractory material to line molds for cannon balls, resulting in rounder, smoother balls that could be fired farther and thereby contributing to the strength of the English navy. Production was strictly controlled by the Crown due to its military importance.

5.3 Sri Lanka’s place in the Graphite Industry

The first occurrence of graphite in Sri Lanka was reported in 1675 by the Dutch Governor Rycloff Van Goens. However, it was not until the British colonial period that graphite became an important component of the local mining and export industries.

Graphite is one of the main minerals mined in and exported by Sri Lanka over the last 170 years and has ranked as an important export commodity similar to tea, rubber and coconut. Current production levels are very low and are approximately 20% of what was produced in the peak production years of the last decade of the 18th Century and first 20 years of the last century (Figure 5).

Figure 5 – Sri Lankan graphite production by decade (1830-1990)



Source – Dinalankara (1991)



Sri Lanka has been a well-known natural graphite supplier to the world since 1820. This reputation was predominantly due to the extremely high purity of the product being generally above 95 % carbon as graphite. The principal types of graphite produced are the crystalline flake/needle and amorphous varieties. It is interesting to note that the grade of other mines of the time was approximately 40% carbon as graphite.

The period 1900-1920 saw the Sri Lankan graphite industry operating at peak levels in response, for the most part, to heavy demand created by the military activities of World War 1. The highest recorded export tonnage of 33,411 tonnes was achieved in 1916 which was equivalent to 35% of the world’s production for that time. The ability to export with limited processing at this time was due to the extremely superior purity of the run-of-mine production and the low mining costs given the significant production from shallow pits.

There had been around 3000 pits/mines during these boom years with over 90% of them confined to under-developed shallow pits and adits. Many of these were illegal operations that were forced to close prior to the 1960s.

The local prospectors and landholders discovered a large number of deposits, particularly in the south-west of the country with an overwhelmingly large number only being mined to a very limited depth (mostly to the local water table). It was not uncommon for local landowners to discover graphite while developing water wells on their properties.

Current annual production is approximately 5,000 to 6,000 tonnes from two mine complexes situated at Bogala (privately owned) and Kahatagaha/Kolongaha (a government enterprise) (Figure 9).

5.4 Properties and Uses

Natural graphite production ranges from amorphous to jumbo flake natural crystalline graphite based on the level of carbon purity.

The end use depends on the type of graphite product manufactured where the high-tech solar and battery industries require graphite with large flake sizes containing the highest level of carbon available while the familiar HB pencil would comprise the cheaper amorphous graphite.

5.5 Supply and Deposit Types

Flake graphite is the most widely mined variety, and generally has better conductivity and oxidation resistance than amorphous graphite.

Amorphous graphite is a misnomer and is not really amorphous at all – it is, in fact, highly crystalline but the individual crystals are only visible under a microscope. The concentration of carbon as graphite is usually more than 70%.

Vein graphite is the rarest form of graphite, and is only found in significant amounts in Sri Lanka. It is highly crystalline and with carbon concentrations of more than 97% as graphite and cannot be purified further.

Flake and crystalline graphite is graded according to carbon content and particle size, whereas amorphous graphite is classified mainly on the basis of its carbon content.

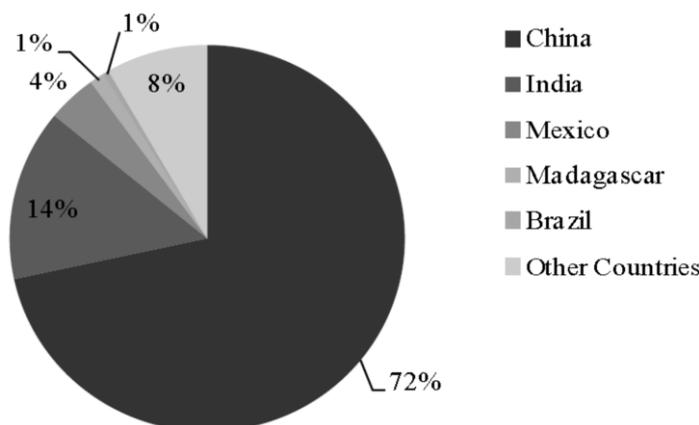


Table 3 – Characteristics summary of the different forms of graphite

	Flake	Vein	Amorphous
Description	Crystalline flakes; coarse >150 µm; fine <150 µm	Coarse crystals Mostly >4 cm	Microcrystalline <70 µm
Origin	Syngenetic; regional metamorphism	Epigenetic; regional metamorphism	Syngenetic; contact and / or regional metamorphism
Ore	5 - 30% graphite; strata-bound, tabular or lenses	98%+ graphite; veins and fractures	Seams, often folded and faulted
Product grade	75 - 97% graphite	98 - 99.9% graphite	60 - 90% graphite
Main uses	Refractories, brake linings, lubricants and batteries	Carbon brushes, brake linings and lubricants	Refractories, steel industry, paint and batteries
Major producers	China, Brazil, India, Madagascar, Germany, Norway, Canada and Zimbabwe	Sri Lanka.	China, S Korea, Czechoslovakia, Austria and N Korea

Source – Mitchell (1993)

Figure 6 - Global Graphite Reserves



Source - USGS

5.5.1 Flake

Flake graphite is the most important commercial form of graphite and refers to graphite that occurs as thin disseminated flakes in metamorphic rocks.

Most of the world’s production of flake graphite comes from deposits of disseminated graphite in regionally metamorphosed rocks of Precambrian age. Marble, gneiss and schist are the most common host rocks and in many cases have been intruded by pegmatites that can host graphite accumulations. The graphite



was formed from organic material or bituminous and coaly materials in the original sediments and therefore deposits tend to be large and may be up to 50m thick and in excess of several kilometres in length

Mined flake graphite deposits commonly have grades of 10% to 12% graphite but grades of up to 60% have been reported in Madagascar. Madagascar has the largest known resources of high-grade flake graphite in the world.

5.5.2 Amorphous

Amorphous graphite has a massive microcrystalline structure, generally derived from thermally metamorphosed coal seams or carbonaceous sedimentary rocks.

Mexico and South Korea are important sources of amorphous graphite. Contact metasomatic or hydrothermal deposits are mined in Canada and the USA. Such deposits are generally small and of relatively low grade and account for only a minor proportion of global production.

5.5.3 Vein

Crystalline vein graphite consists of coarse, platy or needle-like crystals in veins, mainly in Precambrian igneous and metamorphic rocks.

The largest known deposits of crystalline vein graphite occur in Sri Lanka but this contribution is small in terms of global production as outlined earlier.

5.6 Price

Finished graphite comes in a range of specifications. The two fundamental characteristics that determine the concentrate price are the flake size, measured in nanometres (nm) or mesh; and the carbon purity, as a percentage.

Most sales are negotiated between the buyer and the seller as there is a range of purities and flake sizes. Table 4 gives a range of estimated prices for a range of different products. “Mesh” is the number of openings per linear inch of a screen - 400 mesh is equivalent to a particle size of approximately 37 microns ($37 \times 10^{-6}\text{m}$).

Table 4 – Graphite price estimates

Graphite Product	Price (US\$) per tonne
99% to 99.9% C, +50 mesh	\$4,500-\$6,000
94% to 97% C, +80 mesh CIF	\$2,500 - \$3,000
90% C, +80 mesh	\$2,000 - \$2,500
94% to 97% C, +100-80 mesh	\$2,200 - \$2,500
90% C, +100-80 mesh	\$1,500 - \$2,000
85% to 87% C, +100-80 mesh	\$1,500 - \$1,900
94% to 97% C, -100 mesh	\$2,000 - \$2,400
90% C, -100 mesh	\$1,400 - \$1,800
Amorphous Powder 80% to 85% C	\$600 - \$800
Synthetic 99.95% C2	\$7,000 - \$20,000

Source – Industrial Minerals (2012)



6 Exploration Models

Graphite deposits of commercial interest occur widely in regionally or thermally metamorphosed sedimentary rocks and in hydrothermal and metasomatic deposits. Five deposit types have been identified –

1. Early magmatic deposits (rare)
2. Deposits formed by concentration and crystallisation of carbon (from coal or carbonaceous sedimentary rocks) during regional or contact metamorphism
3. Vein deposits
4. Contact metasomatic (skarn) deposits
5. Residual deposits.

Exploration for high grade graphite deposits is a highly focussed geological search that would generally involve comprehensive small-scale lithological and structural mapping of the licence areas at 1:5,000 or 1:10,000 scale in conjunction with ground or aerial geophysical surveys to identify target areas.

Orientated diamond drilling of target areas would obtain the necessary information to complete interpretations of any graphite veins encountered and assaying of the resultant core would generate quantitative data to aid in the preparation of a mineral resource.

6.1 Geophysics

Graphite is both polarizable and conductive, has a low density and low magnetic susceptibility compared to surrounding metamorphic or igneous rocks. It is these characteristics that provide the opportunity to use electrical methods as highly effective exploration tools to locate deposits.

6.1.1 Electromagnetic (EM) Surveys

EM methods are proving to have the right combination of deep penetration, sensitivity, and spatial and conductance discrimination to detect graphite deposits.

Graphite’s high conductivity lends itself particularly well to location via EM surveys and these surveys can be completed using ground based systems, airborne systems and/or a combination of both techniques.

There is no single technical characteristic that identifies an EM system as the best for a particular exploration search focussed specifically on locating graphite deposits. Instead, the electronic and mechanical attributes of the system work together to provide an integrated solution i.e. the EM system with the most powerful transmitter is not necessarily the most appropriate for targeted exploration.

6.1.2 Ground Surveys

Time-domain electromagnetic (TEM) surveys involve induction of EM fields in the sub-surface via a square or rectangular transmitter loop which has no electrical connection with the earth. In turn, the sub-surface EM fields induce secondary EM



fields in a receiver coil and a receiver attached to this coil measures a transient decay which is diagnostic of ground conditions.

Due to the physics of the technique it is inherently better at detecting conductors in resistive environments rather than resistors in conductive environments. The depth of penetration is governed by the coil separation and orientation.

Unlike conventional resistivity techniques, no ground contact is required. This eliminates direct electrical coupling problems and allows much more rapid data acquisition.

6.1.3 Aerial Surveys

The general objective of aerial surveys is to conduct a rapid and relatively low-cost search for conductors located in bed-rock and often under a cover of overburden. This method can be applied in most geological environments except where the country rock is highly conductive or where overburden is both thick and conductive.

It is equally well suited and applied to general geologic mapping and can aid a regionally geological mapping initiative.

There are a number of airborne electromagnetic systems that are being used successfully for graphite exploration, including HELITEM (time domain), DIGHEM (frequency domain) and the VREM system. Each system has its unique strengths.

6.1.4 Induced Polarisation (IP) / Resistivity

IP (and resistivity) has been used in the past in gold exploration to map coincident graphitic zones that can be important geological markers to gold bearing structures. IP is the capacitance effect, or chargeability, exhibited by electrically conductive materials. Generally, both IP and resistivity measurements are taken simultaneously during the survey. Survey depth is determined by electrode spacing.

Time-domain IP is undertaken by pulsing an electric current into the earth at one or two second intervals through metal electrodes. Conductive minerals in the ground will discharge the stored electrical energy during the pulse cycle. The decay rate of the discharge is measured by the IP receiver. The decay voltage will be zero if there are no polarizable materials present.

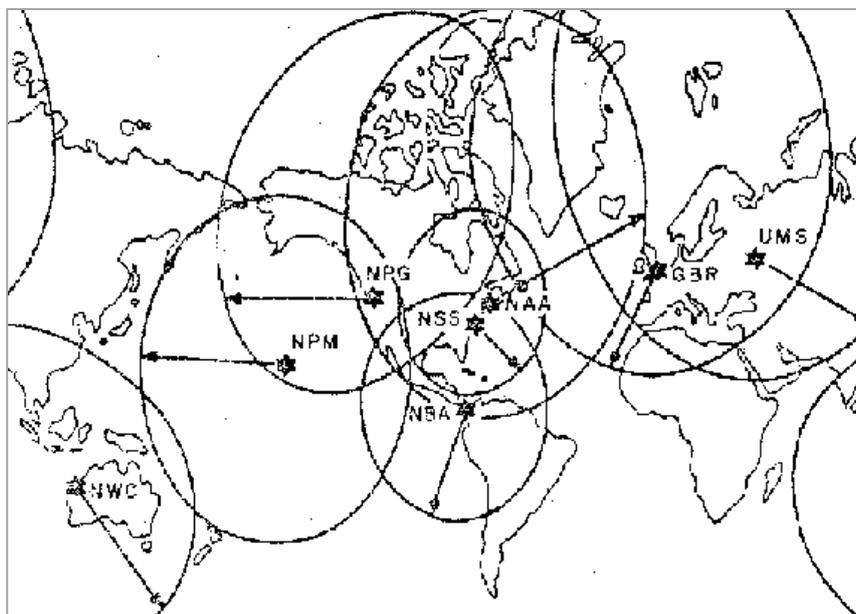
Conductive overburden is difficult to deal with and can often mask the chargeability of the underlying strata.

6.1.5 Very Low Frequency Methods (VLF)

Governments with naval forces have established a grid of tall, high-powered transmitters of up to 1000 watts, which broadcast a signal field in the 15 to 28 kHz frequency range. These broadcast fields propagate thousands of kilometres over the Earth’s surface and are essentially uniform in the atmosphere (Figure 7).



Figure 7 – Location and ranges of VLF EM transmitting stations and estimated ranges



Source - GeoExplo Ltd

VLF methods of geophysics utilise these radio communication signals to determine electrical properties of near surface soils and shallow bedrock. The technique is especially useful for mapping steeply dipping structures such as faults, fracture zones and areas of mineralisation.

The signals penetrate into the ground to depths of several hundred feet due to their power. The EM flux crowds into zones of higher conductivity and rarefies in zones of higher resistivity.

A VLF receiver tuned to the frequency of a VLF transmitter, traversed across the earth’s surface, will exhibit high signals over conductive water-bearing fracture zones and low strength signals over the resistive portions of the rock mass.

Sri Lanka’s geological agencies and private operators have used this method in the past to aid in guiding exploration targeting (Wijayananda 1987). There is no information or case studies available to gauge the success of this older and now essentially redundant technique.



7 Mineral Processing

Graphite is mined by both open pit and underground methods and usually requires beneficiation to produce a saleable product.

In Sri Lanka, this may be carried out by hand-picking the pieces of gangue (rock) and hand-screening the product or by crushing the rock and floating out the graphite in a more commercial scale plant.

Beneficiation processes for graphite may vary from a complex four-stage flotation at European and U.S. mills to the simple hand sorting and screening described above of high-grade ore at the Sri Lanka operations.

7.1 Beneficiation

Generally speaking, there are two ways of obtaining a commercial concentrate or product:

- repeated regrinding and floating (up to seven times) to purify the concentrate,
- acid leaching (dissolving) the gangue with hydrofluoric acid (for a silicate gangue) or hydrochloric acid (for a carbonate gangue). This is a chemically aggressive and difficult process and will not be covered further in this document.

High grade ores can typically contain the highest proportion of coarse flakes. Often this type of ore is sluiced to a washing plant where it is de-slimed by removing the clay fractions and then subjected to a simple flotation to produce a rougher concentrate with 60% - 70% carbon as graphite.

This rougher concentrate is transported to a refining operation where further grinding and flotation is undertaken to produce >85% carbon as graphite. Screening is used to produce a variety of marketable flake products containing 75% - 90% carbon as graphite.

7.2 Flotation

Beneficiation by flotation encounters the difficulty that graphite is very soft and marks or coats the particles of waste (gangue). This often allows the "marked" gangue particles float off with the graphite, yielding impure concentrates. Certain soft graphite ores, such as those found in Madagascar, need no primary crushing and grinding which enhances production of a high quality product.

The incoming graphite products and concentrates are ground before being classified (sized or screened) with the coarser flake size fractions carefully preserved.

7.3 Concentrates

Some standard blends with a certain flake size distribution and carbon content can be prepared from the different fractions obtained. Custom blends can also be made for individual customers who require a specific flake size distribution and carbon content. The concentrate can be ground more freely if flake size is unimportant.



Typical fine products include a powder for use as a slurry in the oil drilling industry, for use as coatings for foundry molds, and as a carbon raiser used in the steel industry to increase the carbon content of the steel.

7.4 Environment

Environmental impacts from graphite mills predominantly consist of air pollution including fine air-borne particulate exposure of workers and soil contamination resulting from powder spillages where there can be heavy metal contamination of the affected soil by impurities that may be present in the concentrates.

7.5 Ore Processing - Bogala Mine

At the privately owned Bogala graphite mine the graphite occurs as a variety of fracture filling where the particle size within the vein can vary from microcrystalline to coarse and flaky in nature and accompanied by rock particles of hard silicates (mostly quartz) and softer carbonates as calcite.

Run of mine ore can therefore be a mixture of this exceptionally pure graphite, mineral inclusions and fragments of the host or country rock.

For the most part, the carbon content of run of mine ore at Bogala is in the range of 85% - 87% carbon as graphite. Processing subsequently increases the grade to in excess of 99% carbon as graphite.

7.5.1 Processing Flowsheet

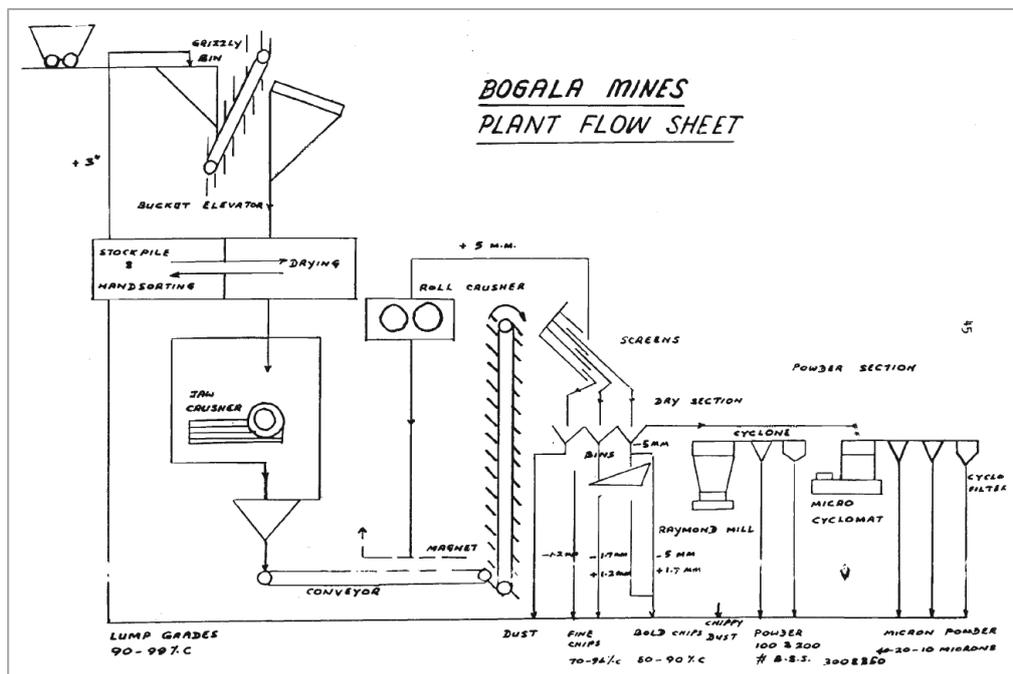
Processing at Bogala is completed in three stages:

- Stage 1: 90% carbon and above is separated by using visual methods,
- Stage 2: 70% - 90% carbon grades achieved using density methods, and
- Stage 3: 70% carbon and below separated by physical methods.
-

Refer Figure 8.



Figure 8 – Bogala Mines plant flowsheet



Source – Ramawickrema (1991)

7.6 Graphite Analysis

Determination of carbon content as graphite can be completed using several proven techniques. The following introduces the reader to the terminology and provides an awareness of the differences and relative advantages of each method.

7.6.1 Loss on Ignition (LOI)

LOI strongly heats) a sample at a specified temperature, allowing volatile substances to escape, until its mass ceases to change. This may be done in air, or in some other reactive or inert atmosphere. The simple test typically places a few grams in a crucible, determining its mass, placing it in a temperature-controlled furnace for a set time, cooling it in a controlled atmosphere, and re-determining the mass.

7.6.2 Double Loss on Ignition (DLOI)

DLOI is the usual LOI procedure including an additional step to bum off volatiles. This inclusion makes the method more accurate than the basic LOI procedure.

It is not very accurate for low level determinations as the final assay is determined from a weight difference.

7.6.3 LECO Combustion Analysis (LECO)

LECO analysis is performed on a small sample and is therefore less accurate for samples containing high graphitic carbon. The technique is often used for low-level determinations only.



8 Sri Lankan Geology

8.1 Overview

Approximately 90% of the island of Sri Lanka consists of Precambrian metamorphic rocks. This metamorphic terrain is further sub-divided into the Vijayan Complex, the Highland Series and the South West Group (Figure 9).

Important Note – This nomenclature is now superseded for the subdivision of the Sri Lankan Precambrian metamorphic complexes. This now dated geological system has been used throughout this document to be consistent with the historic literature that has been used to provide much of the information contained in this report.

The significant changes now see the South West Group included as part of the Highland Series and the western Vijayan Series renamed as the Wannu Complex. The actual date of this transition is not known.

8.1.1 Vijayan Series

The Vijayan Complex is composed of rocks which are found on either side of the Highland Series and are sub-divided into Eastern and Western Units. The rocks of this sub-division are mainly granites, hornblende-biotite gneisses, migmatites and calc-silicate gneisses formed under amphibolite facies conditions.

The structure of this geological sub-division is somewhat complicated when compared to the relatively simplistic structural characteristics of the South-West Group and the Highland Series.

8.1.2 Highland Series

The Highland Series is a SW-NE trending belt of rocks predominantly made up of quartzites, metamorphosed limestones, gneiss, graphitic schists, pelitic granulites and gneisses and charnockitic gneisses of granulite to upper amphibolite facies metamorphic grade.

The precursor rocks appear to be of a meta-sedimentary origin with the exception of the charnockitic gneisses where a precursor is most probably meta-igneous in origin.

8.1.3 South West Group

The rocks of the South West Group are low-pressure granulite facies meta-sedimentary rocks consisting of scapolite-wollastonite gneisses, cordierite gneisses, granulites, garnet-biotite gneisses and charnockitic gneisses.

8.2 General Structural Framework

Complex structural geological features are present in the Vijayan Complex while simple tectonic features are common in the Highland and the South-West groups.

The Highland Series display a NE-SW regional structural trend with significant regional-scale folding observed. The folds in the NE region are parallel, occasionally



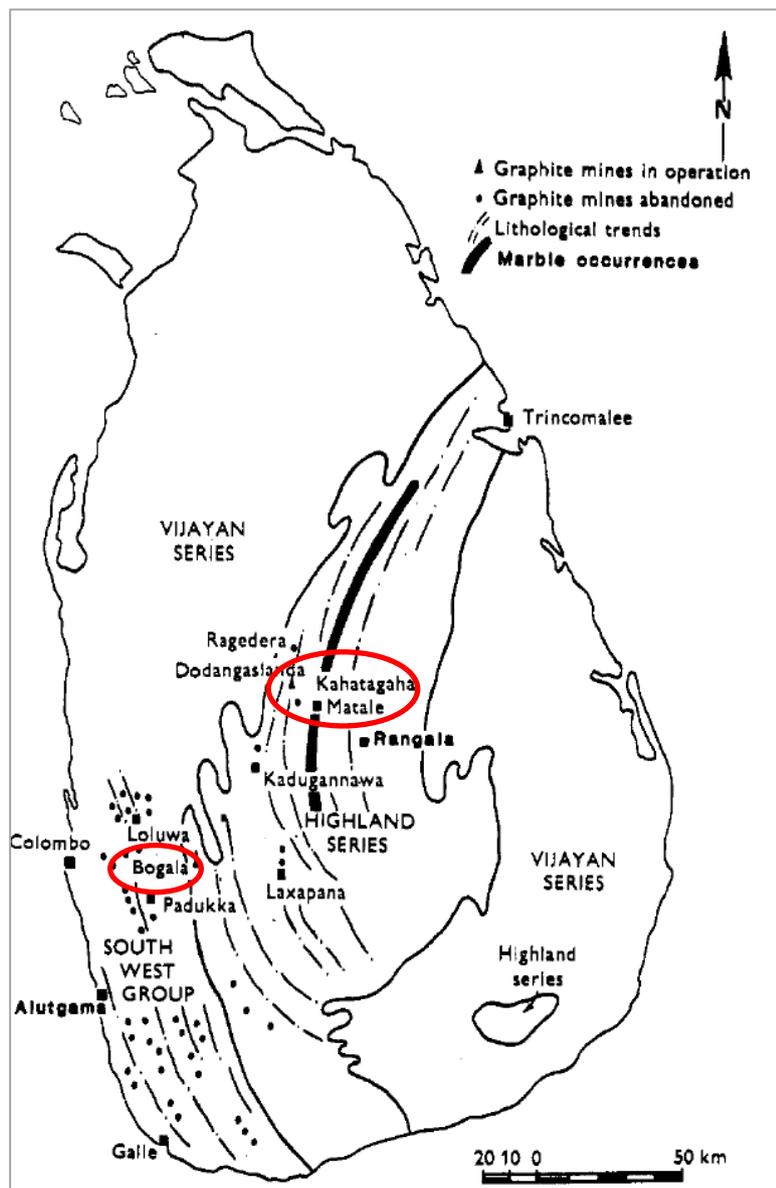
recumbent and frequently overturned to the east. In the central highland areas there are double plunging synforms and antiforms in a recurrent theme.

In the South West Group the structural fabric is dominated by a series of parallel tight folds trending NW-SE to NNW-SSE and they are either upright or overturned to the west.

Regional lineaments have largely been developed in and around the central highland and most of them exhibit general NW-SE and NE-SW trends

Lesser scale fractures are abundant in the metasediments where most are joints developed during the regional folding episode.

Figure 9 – Techno-stratigraphic map of Sri Lanka



Source – Katz (1987)



8.3 Geological Setting

All graphite occurrences in Sri Lanka are confined to the Precambrian meta-sedimentary belts of the Highland Series and the South West Group. The gneissic rocks observed in these areas reflect the sandstone to pelitic precursor nature of the units in conjunction with recognisable charnockitic rocks and limestone sequences. Research into global graphite deposits suggests that this type of meta-sedimentary sequence is common to graphite accumulation where pelitic gneisses appear to be the most prominent host rock.

The most common rock types associated with graphite deposits are quartzite, charnockitic gneisses and pelitic gneisses consisting of garnet, biotite and sillimanite with or without cordierite. There may be disseminated flake graphite within the host sequence.

8.3.1 Structure

The vast majority of the graphite deposits are confined to tightly folded antiformal structures where many have experienced further complex deformation including the development of local flexures and observed refolding of precursor structures.

These antiforms may be overturned or upright with horizontal to sub-horizontal plunges. Graphite bearing domes are common occurrences in the Highland Group with a few occurrences observed in the South West Group.

Domal or double plunging folds can contain graphite deposits and are generally N-S trending, upright and in close proximity to tightly folded structures. It is unusual to find graphite deposits in the synforms with rare examples found at Siyambalapitiya, Bogala, Rangala and Arnbalangoda. Coincidentally, the synforms containing graphite also exhibit horizontal to sub-horizontal plunges and exist in close proximity to the graphite bearing antiforms and domes.

8.3.2 Graphite Veins

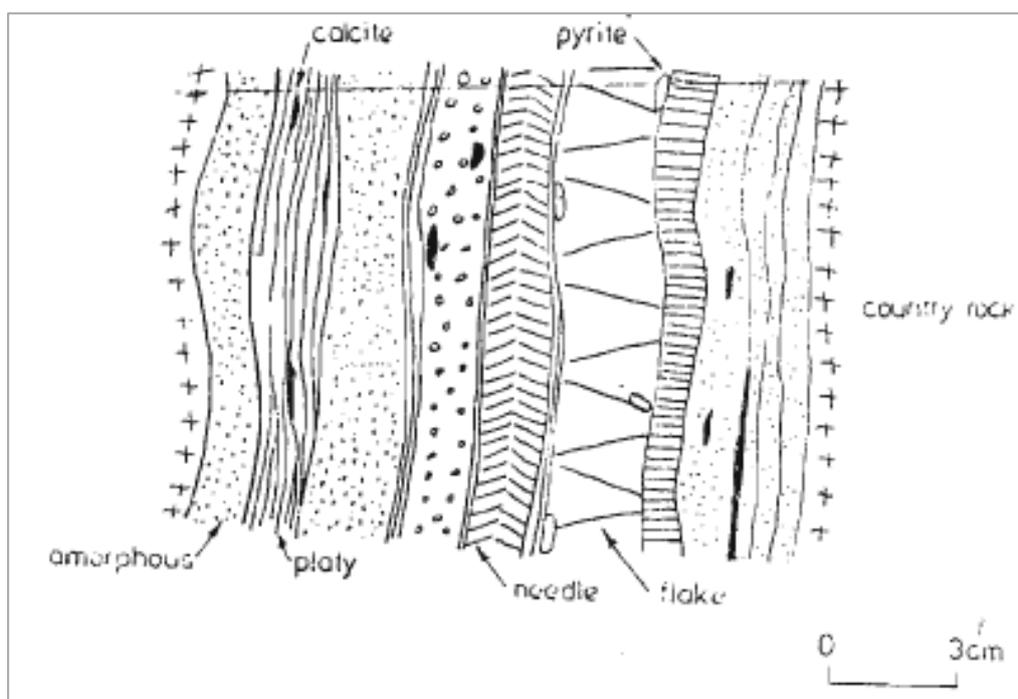
Sri Lankan vein deposits comprise two main structural types that are either normal or oblique to the axial plane of the folded structures covered in the previous section. Most antiforms are observed in a N-S orientation and the preferred orientations of the veins are orientated NW-SE, NE- SW and E- W. The presence of true N-S veins, sub-parallel to the axial planar direction is rare.

The dip of the veins is sub-vertical with strike lengths in the range of 100-350m and vein widths varying from 10mm to 500mm. The depth extent of the veining is the predominant dimension of the deposit and in the well-developed mines veins are exploited to depths in excess of 500m.

In a single deposit, there may be a series of several parallel vein sets but not all are mineable due to width constraints. A single vein is generally made up of a series of thin 20-100mm bands of graphite running parallel to each other (Figures 10 & 11).



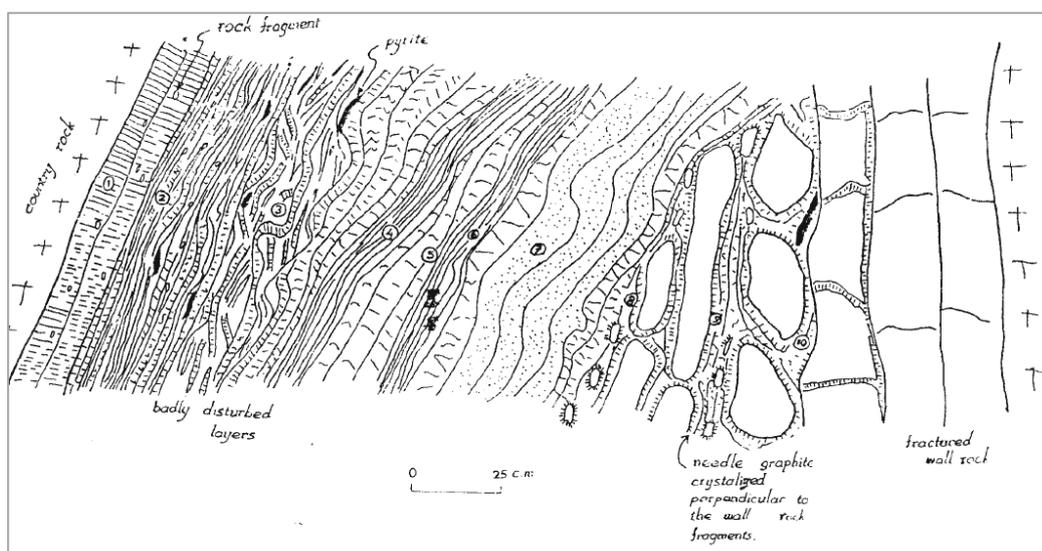
Figure 10 – Typical thin graphite vein showing general observed composition



Source – Dinalankara (1991)

The purity of the graphite ore is dictated by the inclusions of gangue minerals and wall rock fragments. This contamination by the wall rocks is most pronounced in graphite vein sets in faulted zones.

Figure 11 – Large vein from the Bogala mine showing different graphite morphology



Source – Dinalankara (1991)



Major gangue minerals are silicates, carbonates and sulphides with an average contribution of quartz (60%), iron minerals (20%), calcite and dolomite (10%), feldspar minerals (6%) copper minerals (2%), mica (1%), and others (1%).

Iron minerals are magnetite, hematite, pyrite and pyrrhotite while the copper minerals include chalcopyrite with lesser malachite and azurite. Tourmaline may occasionally be present and pentlandite may sometimes be associated with the sulphide minerals.

Thin veins or lenses of pure quartz, calcite/dolomite, pyrite or quartz/feldspar pegmatite are quite common.

8.3.3 Vein Characteristics

Vein graphite is texturally classified into the amorphous, needle, flake and platy types and generally two or more morphologies are found in each locality.

In 1991, Bogala mine produced approximately 65% of its production as amorphous, 20% as coarse needle, 10% as flake and 5% as platy graphite. At the same time the highest fraction produced at the Kahatagaha/Kolongaha mines, was of the needle variety.

Amorphous graphite is composed of fine grained, equi-granular and well compacted aggregates that microscopically manifest as finely crystallised hexagonal flakes compacted together to form a bee-hive like structure.

The needle variety is generally fibrous in texture and made up of long thin needle shaped fibres that always crystallises perpendicular to any surface.

Flake graphite is medium to coarse grained and generally found in a “book form” like morphology. Thin veins of graphite occasionally show well developed zoning from the wall to the centre of the vein comprising successive layers of amorphous – needle - coarse needle - flake variety.



9 Graphite Mining in Sri Lanka

9.1 Historical mining

Graphite in Sri Lanka is thought to have been known since ancient times. However it was not until 1675 that it was first mentioned in print and only by the mid-19th century that it was exploited on a sizeable scale when the first market opened for graphite to be used as stove-black.

The use and demand for graphite steadily increased with industrialism but it was not until the British colonial period that graphite became an important component of the local mining and export industries.

With higher global demand, several large, low-grade deposits were discovered in various parts of the world which provided serious competition to the large number of operators working the small graphite pits of Sri Lanka.

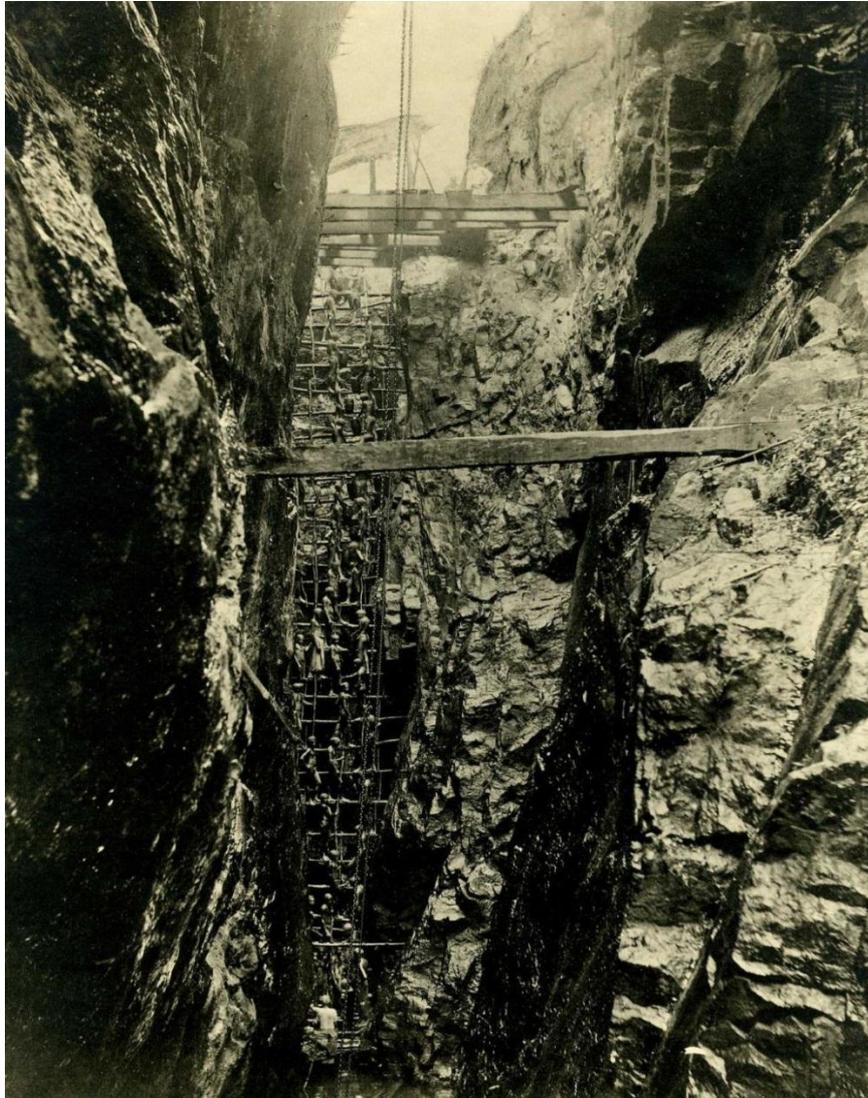
Sri Lanka’s fragmented industry of small operators did not respond through amalgamation and lagged far behind their competitors in terms of mine technology. The inefficiency of the sector meant that the country was slowly squeezed out of production opportunities and as a result only the three largest producers survived the sharp drop in demand after World War 2.

Despite possessing a superior quality product with unique physical properties the sector’s current production levels are very low and are approximately 20% of what was produced in the peak production years of the last decade of the 18th Century and first 20 years of the last century

Two Sri Lankan operations are currently producing export quality graphite products. The first at Kahatagaha/Kolongaha is a state owned and operated enterprise while the second at Bogala is owned and operated by a subsidiary company of a major international European metallurgical group.



Plate 1 – Historic Ragedara surface vein graphite mine in 1891 (note workers on support timbers)



Source – Macmillan (1928) / H D De Mel and Co archives

9.2 Current Mining Operations

9.2.1 Bogala Mines

The Bogala graphite mine (Bogala) is approximately 104 km northeast of Colombo at an elevation of 150m above sea level (Figure 9). Annual rainfall is highly variable and can exceed 3m per year and the mine is considered a “wet mine” by international standards.

The mine is currently operated by Bogala Graphite Lanka Ltd (BGL), a wholly owned subsidiary of Graphit Kropfmuehl AG (GK). GK is a majority controlled, publicly listed subsidiary of Advanced Metallurgical Group N.V. that first invested in Bogala by acquiring a 20% interest in BGL in 1999.



Total combined production output of graphite from Sri Lankan graphite mines in 2012 was 3,357 tonnes of carbon as graphite. Actual production for each of the operations was not disclosed but it is assumed that Bogala produced the majority of this export quality product.

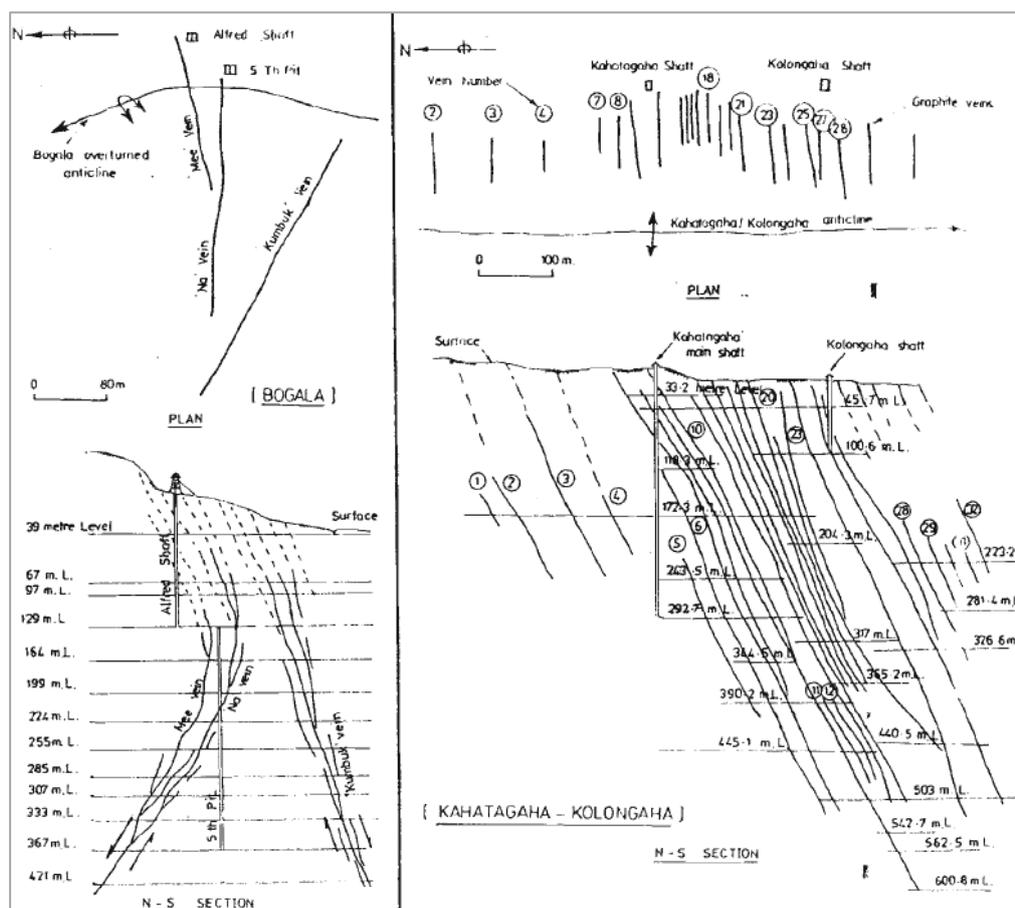
There are multiple shafts at surface as the operation consolidated three separate mines in 1947. Ore is obtained using a cut and fill technique and hauled to the surface via haulage shaft.

Bogala is approximately 14kms northeast of the initial focus areas of MRL (refer section 10.3.1).

Mineralisation

The graphite mineralisation is located within the granulite - amphibolite metamorphic facies of the Highland Series where the rock units of the immediate area are quartz feldspar pelitic gneisses, quartzites and charnockites containing three major and several minor sub-vertical graphite veins (Figure 12 – Left Hand Side). Each vein is made up of a number of parallel graphite sheets oriented parallel to the vein.

Figure 12 – Sections through the Bogala and Kahatagaha/Kolongaha mines



Source – Dinalankara (1991)



The mineralisation appears unrelated to rock type. An occasional association of the graphite veins and a silicified gneiss is likely to be related to silicification of the fracture systems rather than of genetic origin.

The orientations of the veins are strongly controlled by two major regional lineations and are very irregular in length (130m to 300m), varying in thickness from approximately 0.3m to several metres (average 1.0m). Graphite quality is not consistent across all veins (Plates 2 & 3).

Structure

The graphite occurs in narrow and long, rather irregular veins. The general attitude, as mentioned above, conforms to the major rupture direction of rocks in the vicinity, but in detail there is much deviation from the average in both strike and dip. There is no systematic change in the attitude of the veins with increasing depth.

Closer examination reveals that the veins are somewhat irregular in fine detail where surfaces are undulating with changes in dip of 20-30 degrees possible within a few metres. More importantly from an exploration, evaluation and mining perspective, widths may vary from a scale of centimetres to tens of centimetres within a span of 5 to 10 metres. More importantly, independent of width they may terminate unexpectedly.

There is little doubt that a pre-existing fault or fracture system localised the graphite mineralisation given the attitude of the veins to regional lineations. However, the structure occupied by the vein system of Bogala mine may not be overly significant in a regional sense as it cannot be located on aerial photographs.

There are three dominant directions exhibited by the veins and the graphite mineralisation shows no distinct preference for one orientation over another. Two of these direction are parallel to the two major regional lineations and the third E-W fracture system appears to have developed between them (Figure 12 – Left Hand Side).

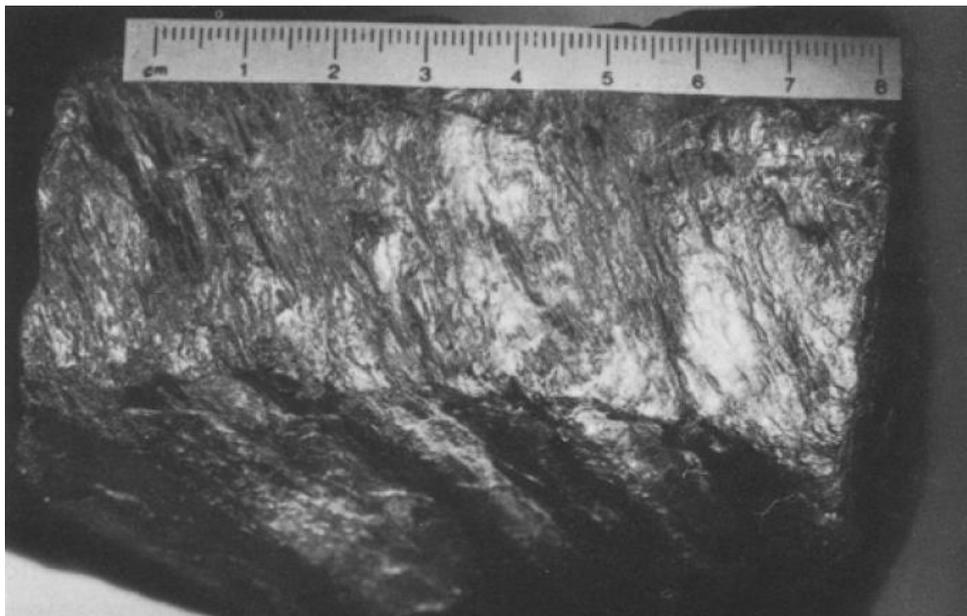


Plate 2 – Bogala vein photograph taken over 40 years ago which shows a distinct parallel sheet structure within the vein with coarse perpendicular graphite crystals.



Source – Erdosh (1970)

Plate 3 – Needle or flake graphite from the Bogala Mine



Source – Katz (1987)



9.2.2 Kahatagaha/Kolongaha (K/K) Mining Operations

There is less data available for this government-owned enterprise than the privately owned Bogala Mines.

Kahatagaha Mines are located approximately 90km from the capital of Colombo in the North Western Province of Sri Lanka at Maduragoda, Dodangaslanda in the Kurunegala District (Figure 9). It is situated at an elevation of approximately 220m above sea level in hilly terrain on approximately 41 hectares of freehold title.

The operation is managed by Kahatagaha Graphite Lanka Limited (KGLL) and is a fully government-owned public limited liability company overseen by the Ministry of Industrial Development for the major shareholder, the Secretary to the Treasury.

Mining commenced on site in 1872 and by the end of the 1990s had produced in excess of 300,000 tonnes of carbon as graphite. The present mining complex is the result of a merger of three separate operations. The third mine, not included in the current name, was Walakatahena.

Mining

The Kahatagaha graphite mines are in excess of 610m below the surface making them the deepest underground operation in Sri Lanka. The underground operations are accessed by two shafts - the first at Kahatagaha is approximately 345m and the second at Kolongaha is in excess of 100m. The shaft bottom is accessed from the working faces by a series of winzes powered by air powered hoists.

The mine is considered to be “relatively dry” by international standards and the water inflow is minor in comparison to the Bogala operation.

Mineralisation

The mineralisation is entirely of the vein type with an east-west orientation and a southerly dip. The vein pattern is very different to that of Bogala (Figure 12 – Right Hand Side).

There are more than 100 veins or veinlets of which 32 have been mined or explored by 1987. The vein system can be considered quite regular although all veins do not develop continuously with depth while others develop at lower levels.

Length of the veins varies between 20m and 150m with an average strike length of 60m. Vein thickness averages approximately 0.3m with a maximum thickness approaching 1.0m.

Export Products

KGLL exports 100% of the products produced to major clients in the U.S.A., United Kingdom, Japan, Australia, India and Pakistan.



Table 5 – KGLL recognised product grades

KL	+99%C
KHL	97-99%C
KBL	97-99%C
KL	97-99%C
KL	95-97%C
KL	92-95%C
KC	90-92%C
FLAKE	90-95%C

Source KGLL

Table 6 – KGLL standard particle sizes

+10mm	:	Lumps
1.7-5mm	:	Bold Chips
0.5-1.7mm	:	Fine Chips
-0.5	:	Chippy Dust
-10+60 mesh	:	Flakes
-40+100 mesh	:	Flakes Type Powder
-200 mesh	:	Powder

Source KGLL

Table 7 – Ash composition of +99%C KL product

SiO	49.30%
FeO	47.57%
MgO	0.69%
CaO	0.93%
Al ₂ O ₃	0.74%
K ₂ O	0.31%
Na ₂ O	0.14%
CuO	0.12%

Source KGLL



10 Graphite Exploration Projects – Sri Lanka

10.1 Introduction

Mongolian Resources Limited (MRL) was invited by a third party to review a potential transaction to acquire 45 exploration licences (45km²) of prospective high-grade vein graphite tenements applied for by a local Sri Lankan business. Interest was gauged via an Information Memorandum (IM) in the form of a PowerPoint presentation.

Terry Burns, Principal Consultant and Director of Warbrooke-Burns & Associates Pty Ltd (W-BPL) was engaged by MRL to undertake a site visit to the projects over the period 26th -30th March 2013 to provide geoscientific expertise into an analysis of the technical merits of the properties for the occurrence of high-grade vein graphite mineralisation.

A second site visit was undertaken by W-BPL over the period 16th – 26th April 2013 for the expressed purpose of obtaining the information required to produce an Independent Geologists Report (IGR) for inclusion into a Public Disclosure Prospectus and Notice of Meeting.

10.2 Supreme Group of Sri Lanka Transaction

On the 9th April 2013, MRL announced that it had reached agreed terms with a privately owned Sri Lankan company with respect to an acquisition of 45 grids (45km²) of graphite exploration licences in Sri Lanka. Subsequently, on 12th April 2013, MRL confirmed to the ASX that it had executed a Heads of Agreement with the Supreme Group and had paid a deposit required to secure access to the transaction.

The basic terms of the acquisition are:

1. Payment of a refundable USD 100,000 deposit at the time of entering into a Heads of Agreement (complete as at 12/05/13).
2. Upon completion of documentation and transaction finalisation; an additional USD 400,000 to be paid; and 5,000,000 vendor shares in MRL to be issued. These securities will be subject to escrow for a period of 1 year from the time of issue.
3. Issue of a further 5,000,000 vendor shares in MRL on conversion of any exploration permits to a mining licence, and
4. Payment of USD 500,000 at the time of commencement of commercial mining activities.

10.3 Graphite Exploration Projects

The 45 exploration grids (1 grid = 1km²) are located within the Precambrian South West Group (refer section 8.1 & 8.1.3) where considerable historic mining of high-grade vein graphite has been undertaken in the past. Most grids have obvious evidence of past activity although the local vegetation regrowth of this equatorial region has successfully obscured many of the shafts and pits to a casual search.



Records of graphite mining operations are essentially non-existent in Sri Lanka as there has not been a requirement to report activities to a local government agency or national regulatory body primarily due to the significant historic nature of the legal and illegal mining activities.

The age of the workings appear to date back as far as the 1880s and most mines in the southern regions around Galle appear to have ceased operation in the period up until the 1930s according to local villagers and surrounding landowners. Several of the larger operations in the northern areas near Kegalle have been mined in the living memory of local landowners and the author discussed first-hand accounts about several underground operations that closed in 1957 and another that may have continued into the 1960s.

The tenements have been aggregated into three projects (Figure 13) based on a logical geographical allocation into:

- Warakapola Project (25 grids or 25km²) Gampaha & Kegalle Districts
- Palinda Nuwara Project (10 grids or 10km²) Kalutara District
- Hikkaduwa Project (10 grids or 10km²) Galle District

Technical reports have been completed on each of the three project areas by the private consulting arm of the Geological Survey and Mines Bureau (GSMB), GSMB Technical Services (Pvt) Ltd (GSMB Tech) as a part requirement for the granting of new exploration permits. The significant on-ground exploratory investigations were undertaken during November 2012.

It would appear from the findings of GSMB Tech that, for the most part, only very primitive mining methods had been used during the peak of the Sri Lankan graphite industry due to the lack of access to technology and appropriately skilled mining professionals.

Most of the operations are very shallow having been developed in the weathered rock and topsoil to produce large quantities of graphite with as small an outlay as possible in a short period of time. This “boom and bust” approach appears to have had the effect of sterilising deeper underground mineralisation in the area and thereby having the effect of conserving this now economically attractive, high quality resource for a future time.



Figure 13 – Sri Lankan project location diagram



Source – Mongolian Resources

10.3.1 Gampaha & Kegalle Districts (Warakapola Project)

Introduction

The project is approximately 50kms, in a straight line, northeast of Colombo via the village of Pasyala and is easily accessed by sealed roads in a standard road vehicle. Some narrow unsealed tracks in an around the licences may require an off-road vehicle following periods of heavy rainfall.

This project is the largest of the three projects investigated and the 25 grids (25km²) is divided into five areas of at least two contiguous tenements (Figure 14).

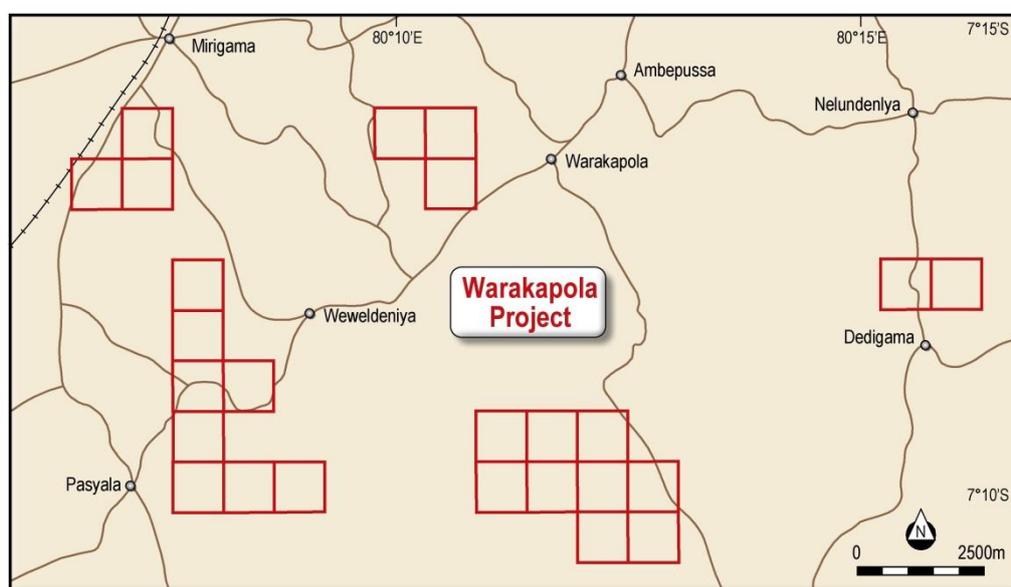


The largest group of tenements comprising nine grids (9km²) due south of Warakapola has been identified by MRL as the preferred location for exploration activities to commence due to the favourable regional geology, the presence of significant scale historic workings and the size of the footprint provided by the contiguous nature of the tenement grouping. This site is approximately 14km as the crow flies from the Bogala Mining Operation.

Ownership

The leases will be held in the name of MRL Graphite (Pvt) Ltd following the completion of the acquisition and the transfer of the titles from Supreme Solutions (Pvt) Ltd.

Figure 14 – Map of east-central Sri Lanka showing tenement locations



Source – Mongolian Resources

Geology and Observations

Reconnaissance fieldwork by GSMB Tech identified these grids as highly prospective for graphite mineralisation based on the structural framework of the region, the rock types observed and the presence of historic mine workings. Meetings with local landowners and elderly villagers was undertaken to augment the physical observance of past mining with anecdotal stories that were first-hand experiences or passed on to them second-hand by prior generations of their family.

The permits cover structurally complex zones of regional scale folding and faulting with the central 12 licences being located over, or immediately adjacent to, the interpreted axial plane of tightly folded and steeply dipping quartzo-feldspathic gneisses (Plate 4). Oblique, perpendicular and cross-cutting faults/shears further enhance the prospectivity of some grids for vein graphite mineralisation using the exploration models outlined earlier in the report.



Plate 4 – Quartzo-feldspathic gneiss at Pandeniya

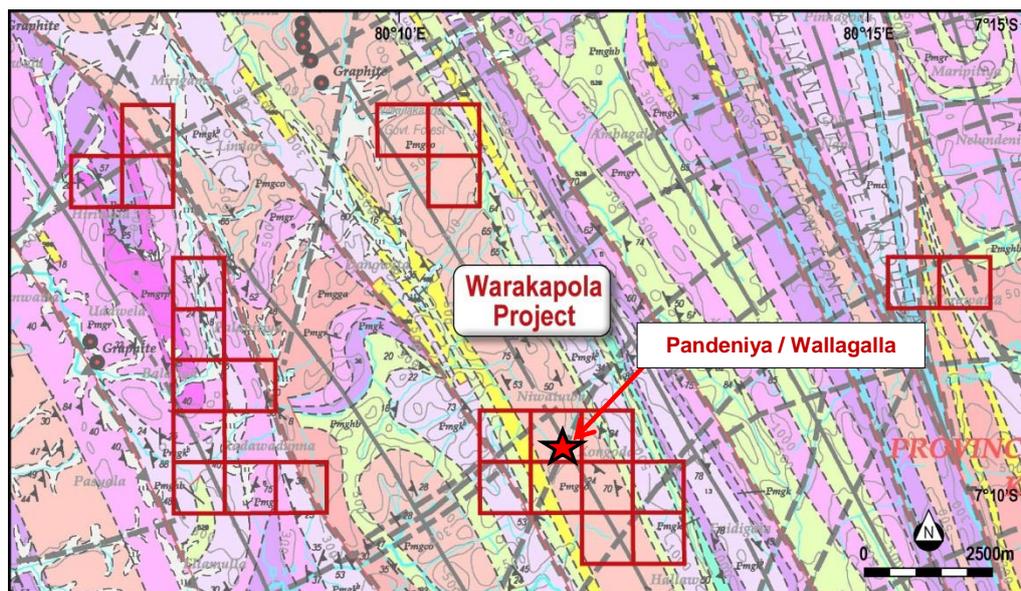


Source – Warbrooke-Burns & Associates

The author visited four of the six areas (8 grids in detail) in the time available and inspected past mining activities at each of the areas covered. The northernmost two areas were left out of a busy schedule to ensure that appropriate time was spent at the remaining projects that contained significant historic workings.

MRL has considered all available data and has decided, after careful consideration, to concentrate initial activities in Grid 10 with particular focus on the historic mines of Pandeniya and Wallagalla (Figure 15).

Figure 15 – 1:100,000 geological mapping and Gampaha & Kegalle tenement locations



Source – GSMB mapping / Mongolian Resources (Legend Appendix A)



Historic Mining Activity

The author spent considerable time inspecting historic mine workings and undertook discussions with local villagers with first-hand experiences at Pandeniya and second-hand or anecdotal experiences at Wallagalla.

Pandeniya

The graphite vein/s were discovered when graphite was observed during the cutting of a small trench around a recently planted rubber tree.

Two collapsed shafts (Plates 5 & 6) were observed at this site in conjunction with remnant concrete slabs for the sorting of run-of-mine ore adjacent to the shaft collars. Several concrete plinths that held steam or diesel powered engines for haulage purposes and a waste dump were also located.

The elderly local landowner’s father and second partner owned and operated the mine as an illegal operation from 1949-1957 and produced approximately one tonne per week for the entire life of mine (>400 tonnes of pure vein graphite). The gentleman interviewed is 76 years of age and was involved with the transport of the sorted product to market. He was not allowed into the mine as his father felt it too dangerous for his son.

Blasthole traces were observed in rocks surrounding the house yard and it was confirmed that crude explosives (dynamite?) were used later in the life of the mine.

The mine reached a depth of 36 feet (10-12m) and a single drive at the shaft bottom connected the two shafts before continuing for an unknown distance in a westerly direction away from the shafts.

The run-of-mine ore was hand sorted and the waste discarded together with the development waste rock (Plate 5). Plate 7 shows the remnant vein graphite waste that was discarded.

Plate 5 – Panoramic view of Pandeniya showing lower shaft and run-of-mine waste dump



Source – Warbrooke-Burns & Associates



Plate 6 – Pandeniya lower shaft showing collapsed collar



Source – Warbrooke-Burns & Associates

Plate 7 – Pandeniya mine and hand sorting waste rock showing remnant vein graphite on rock faces



Source – Warbrooke-Burns & Associates

Wallagalla

The historic Wallagalla mine is approximately 400m to the north-west and on the other side of a ridge line from the Pandeniya mine discussed earlier. There are numerous shafts and ruined infrastructure and local anecdotes suggest that this legal mine may have operated as recently as the 1960s.

Discussions were held with an elderly gentleman who lives at the top of the hill approximately 40m above the main Wallagalla adit that has been developed into the hillside below (Plate 8). Several large collapsed shafts and a developed well over



another open shaft can be observed across the hill top in the vicinity of his house (Plate 9).

The size of this mine is significantly larger than that at Pandeniya and the ruins of an explosive magazine have been located on the site.

Plate 10 shows an open mineshaft that was developed as a water well approximately 20 years ago. The well is not used due to contamination by naturally floating graphite that has entered the water column from the mine below.

Plate 8 – Backfilled horizontal adit at Wallagalla



Source – Warbrooke-Burns & Associates

Plate 9 – Large collapsed shaft at Wallagalla



Source – Warbrooke-Burns & Associates



Plate 10 – Graphite contaminated old mineshaft/well developed at Wallagalla



Source – Warbrooke-Burns & Associates

Plate 11 - Large accumulation of graphite bearing waste fill near Wallagalla adit



Source – Warbrooke-Burns & Associates



Budgets and Work Programs

A preliminary budget and work programme of approximately Australian Dollars (AUD) 542,000 has been prepared by MRL for all direct “on ground” exploration and associated activity costs on this priority project for the period October 2013 to September 2014 (inclusive) and includes:

- the establishment of survey control,
- detailed geological mapping at 1:5,000 and 1:10,000 scales,
- the refurbishment of historical workings at Pandeniya and Wallagalla,
- geophysical surveys,
- diamond drilling, and
- “in country” management support.

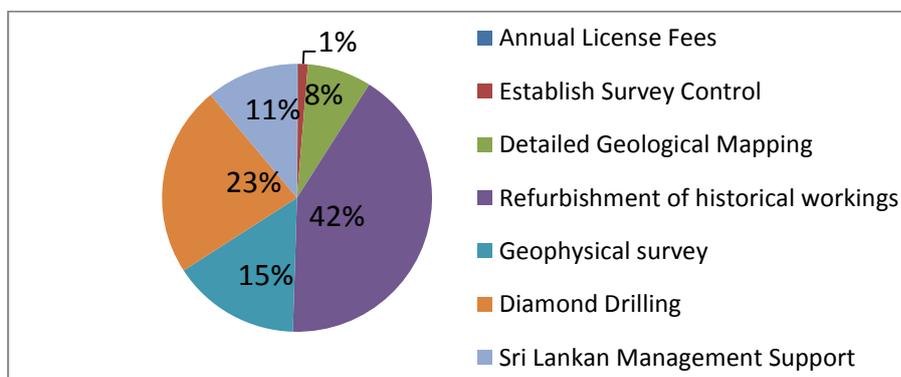
The compilation was costed in Sri Lankan Rupees and converted to AUD using the exchange rate shown on the following table (Table 8). The first exploration and mining investigations will be concentrated into two adjacent projects - Pandeniya and Wallagalla (refer section 10.3.1).

Table 8 – Exploration activity and expenditure by month - Gampaha & Kegalle

Exchange Rate	AUD \$1 =	120	LKR												
Sri Lanka Exploration Budget				Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14
				AUD											
Gampaha & Kegalle Districts (25 Grids)															
Annual License Fees				-	-	-	-	-	-	-	-	-	-	767	-
Establish Survey Control				2,083	2,083	2,083	-	-	-	-	-	-	-	-	-
Detailed Geological Mapping				10,417	10,417	10,417	10,417	-	-	-	-	-	-	-	-
Refurbishment of historical workings															
Pandeniya				22,500	22,500	22,500	22,500	-	-	-	-	-	-	-	-
Wallagala				-	-	22,500	22,500	22,500	22,500	22,500	22,500	-	-	-	-
Geophysical survey				-	-	20,833	20,833	20,833	20,833	-	-	-	-	-	-
Diamond Drilling				-	-	-	-	-	-	-	25,000	25,000	25,000	25,000	25,000
Sri Lankan Management Support															
Geology Support				2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083	2,083
Mining Support				2,917	2,917	2,917	2,917	2,917	2,917	2,917	2,917	2,917	2,917	2,917	2,917
Sub-Total				40,000	40,000	83,333	81,250	48,333	48,333	27,500	52,500	30,000	30,000	30,767	30,000

Source – Mongolian Resources

Figure 16 – Breakdown of activity by type and percentage of total expenditure - Gampaha & Kegalle



Source – Mongolian Resources



10.3.2 Kalutara District (Palinda Nuwara Project)

Introduction

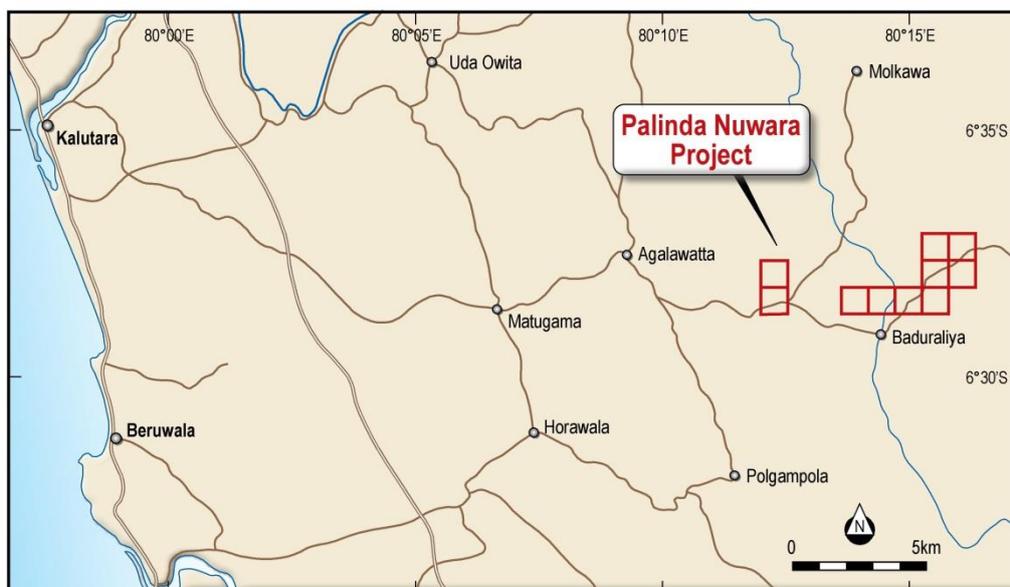
The project is approximately 60kms, in a straight line, south-southeast of Colombo via the village of Baduraliya and is accessed by sealed roads in a standard road vehicle. Some narrow unsealed tracks in an around the licences may require an off-road vehicle following periods of heavy rainfall.

This project is the second largest of the three projects investigated and the 10 grids (10km²) two areas of contiguous tenements (Figure 17).

Ownership

The leases will be held in the name of MRL Graphite (Pvt) Ltd following the completion of the acquisition and the transfer of the titles from Supreme Solutions (Pvt) Ltd.

Figure 17 – Map of south-central Sri Lanka showing tenement locations



Source – Mongolian Resources

Geology and Observations

Only the north-western tenements were investigated during the fieldwork due to time constraints and prohibitive weather conditions.

Regional mapping and interpretation suggest that the area comprising this project is composed of tightly folded quartzo-feldspathic gneisses that have been sheared sub-parallel to and possibly along the axial plane of the folds (Figure 18). Further large-scale shears appear to define major regional lithological contacts and major oblique to perpendicular fault/shears crosscut the meta-sedimentary units. Of particular



interest is the smaller scale “parasitic fold” and coincident cross-cutting shear/s in the extreme western extent of the licence area.

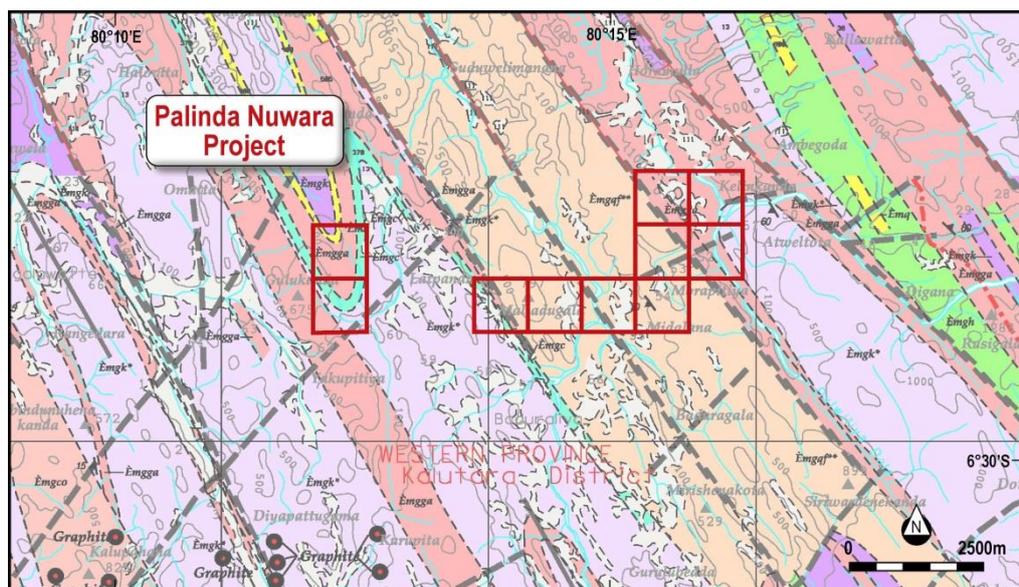
Plate 12 from the western site visited shows a blocky to more massive gneissic unit exhibiting narrow vein development and containing fine graphite.

Plate 12 – Blocky quartzo-feldspathic gneiss showing micro vein development containing graphite



Source – Warbrooke-Burns & Associates

Figure 18 - 1:100,000 geological mapping and Kalutara tenement locations



Source – GSMB mapping / Mongolian Resources (Legend Appendix A)



Historic Mining Operations

This area was located on the side of a major change in slope and the buildings located at the foot of the hill showed concrete hardstands seen elsewhere for the sorting of run-of-mine ore.

A large overgrown access shaft (Plate 13) was discovered a short distance uphill from the sorting site while several smaller or narrow ventilation shafts (Plate 14) continued in a near linear arrangement on the higher ground above and away from the access shaft.

No obvious waste dumps were observed but dense vegetation and rugged topography provides for ease of waste disposal and concealment. It is difficult to ascertain the scale of this operation in this location.

Plate 13 – Access shaft



Source – Warbrooke-Burns & Associates

Plate 14 – Narrow ventilation shaft on the high ground above access shaft



Source – Warbrooke-Burns & Associates



Budgets and Work Programs

A preliminary budget and work programme of approximately AUD 55,000 has been prepared by MRL for all direct “on ground” exploration and associated activity costs for the period October 2013 to September 2014 (inclusive) and includes:

- the establishment of survey control,
- detailed geological mapping at 1:5,000 and 1:10,000 scales,
- geophysical surveys, and
- “in country” management support.

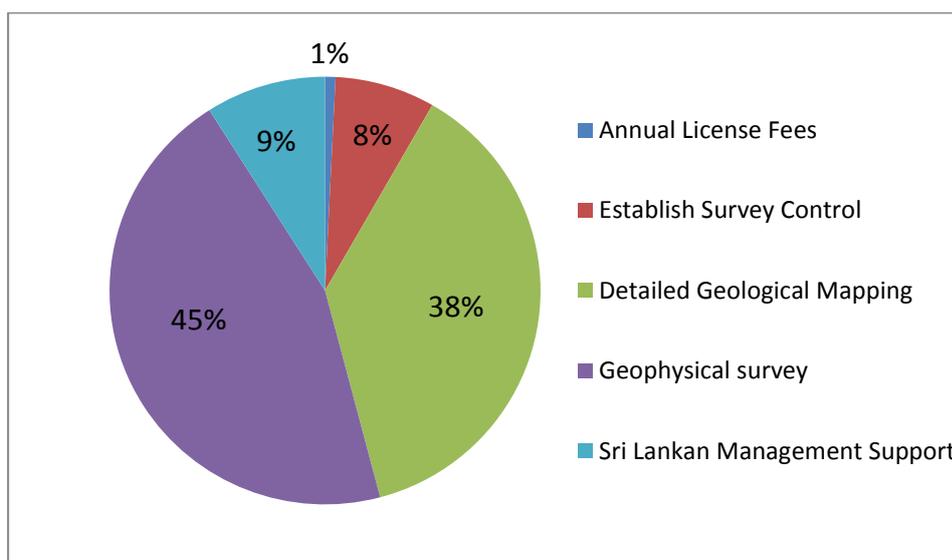
The compilation was costed in Sri Lankan Rupees and converted to AUD using the exchange rate shown on the following table (Table 9).

Table 9 – Exploration activity and expenditure by month - Kalutara

Exchange Rate	AUD \$1 =	120	LKR												
Sri Lanka Exploration Budget															
				Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14
				AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD
Kalutara District (10 Grids)															
Annual License Fees				-	-	-	-	-	-	-	-	-	-	433	-
Establish Survey Control				-	-	-	2,083	2,083	-	-	-	-	-	-	-
Detailed Geological Mapping				-	-	-	-	10,417	10,417	-	-	-	-	-	-
Refurbishment of historical workings				-	-	-	-	-	-	-	-	-	-	-	-
Geophysical survey				-	-	-	-	-	8,333	8,333	8,333	-	-	-	-
Sri Lankan Management Support				-	-	-	-	-	-	-	-	-	-	-	-
Geology Support				417	417	417	417	417	417	417	417	417	417	417	417
Sub-Total				417	417	417	2,500	12,917	19,167	8,750	8,750	417	417	850	417

Source – Mongolian Resources

Figure 19 – Breakdown of activity by type and percentage of total expenditure - Kalutara



Source – Mongolian Resources



10.3.3 Galle District (Hikkaduwa Project)

Introduction

The project is approximately 15kms, in a straight line, northwest of the southern coastal town of Galle via the village of Gonapinuwala and is accessed by sealed roads in a standard road vehicle. Some narrow unsealed tracks in an around the licence area may require an off-road vehicle following periods of heavy rainfall.

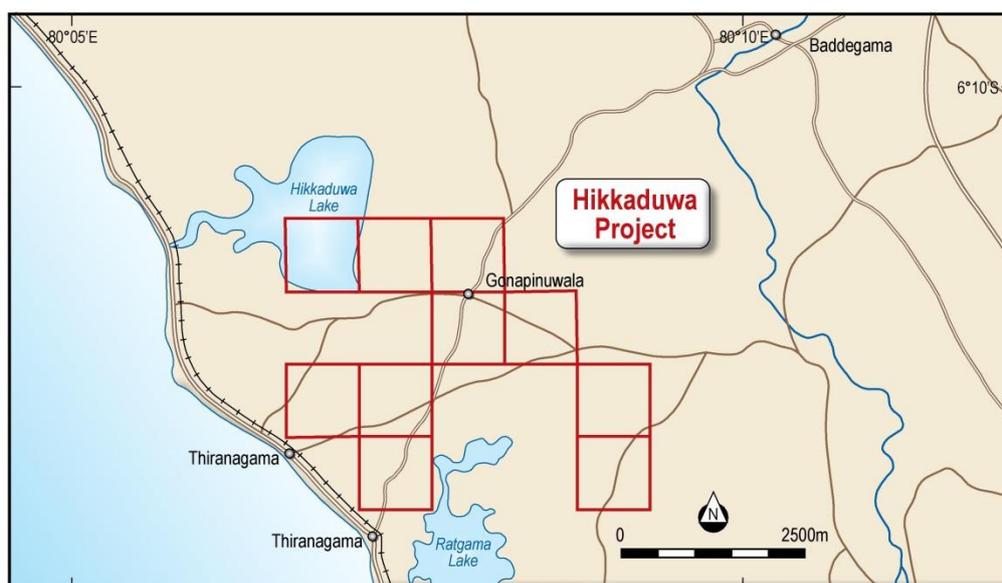
The newly constructed Southern Lanka Express Highway or Southern Expressway, as it is now known, provides for fast access to this project area and has reduced the trip south to Galle by several hours by avoiding the traditional coastal route.

This project is the smallest of the three projects investigated and the ten grids (10km²) is composed of a single area of joined but barely contiguous tenements (Figure 20).

Ownership

The leases will be held in the name of MRL Graphite (Pvt) Ltd following the completion of the acquisition and the transfer of the titles from Supreme Solutions (Pvt) Ltd.

Figure 20 – Map of southern Sri Lanka showing tenement locations



Source – Mongolian Resources

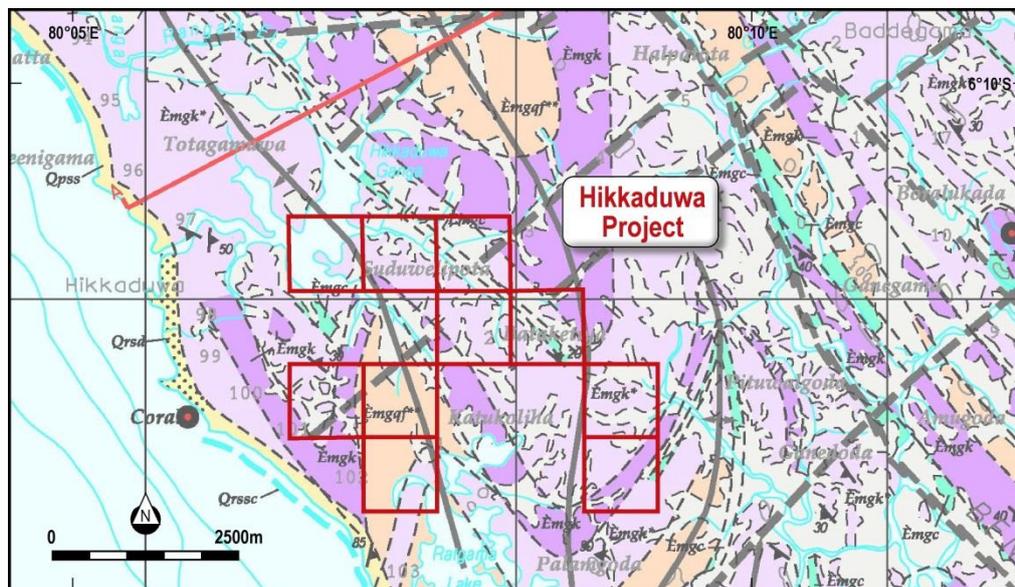
Geology and Observations

The project area is on a moderately flat coastal plain and was more densely populated than most of the areas visited during the fieldwork phase of this report.

Outcrop and other rock exposures were non-existent in the areas visited. The regional mapping and interpretation suggests multiple axial planar regions of folds transgress the grids with several oblique to perpendicular and regionally significant shears/faults cross-cutting the units (Figure 21).



Figure 21 - 1:100,000 geological mapping and Galle tenement locations



Source – GSMB mapping / Mongolian Resources (Legend Appendix A)

Historic Mining Operations

Several sizeable operations were observed during this phase of the fieldwork and all were collapsed most probably as a direct result of the near-surface water table in the area (Plate 15). Local anecdotal evidence suggests that mining activity ceased in this area by the 1930s.

In one location, significant abandoned civils comprising large concrete plinths (Plate 16) indicate that the operations were sizeable and potentially operating for a reasonable length of time prior to closure during the most significant period of depressed prices.

The property access roads in the area have been sheeted with local mine waste containing sizeable pieces of graphite bearing rock (Plate 17)

Plate 15 – Overgrown collapsed shaft collar



Source – Warbrooke-Burns & Associates



Plate 16 – Concrete plinths adjacent to a back-filled shaft complex



Source – Warbrooke-Burns & Associates

Plate 17 – Amorphous graphite rubble on the property’s access road



Source – Warbrooke-Burns & Associates



Budgets and Work Programs

A preliminary budget and work programme of approximately AUD 34,000 has been prepared by MRL for all direct “on ground” exploration and associated activity costs for the period October 2013 to September 2014 (inclusive) and includes:

- the establishment of survey control,
- detailed geological mapping at 1:5,000 and 1:10,000 scales,
- geophysical surveys, and
- “in country” management support.

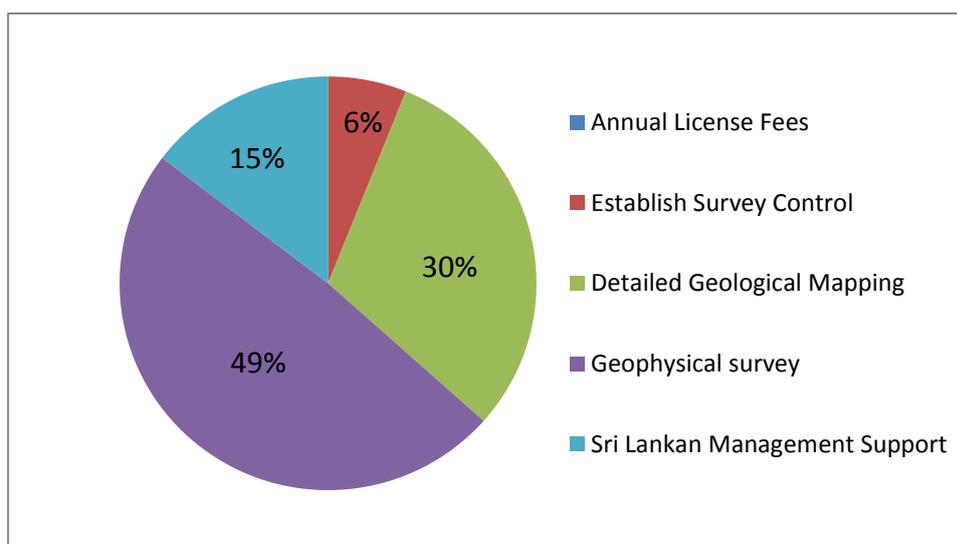
The compilation was costed in Sri Lankan Rupees and converted to AUD using the exchange rate shown on the following table (Table 10).

Table 10 – Exploration activity and expenditure by month - Galle

Exchange Rate AUD \$1 = 120 LKR												
Sri Lanka Exploration Budget												
	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14
	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD
Galle District (10 Grids)												
Annual License Fees	-	-	-	-	-	-	-	-	-	-	-	-
Establish Survey Control	-	-	-	-	-	2,083	-	-	-	-	-	-
Detailed Geological Mapping	-	-	-	-	-	-	10,417	-	-	-	-	-
Refurbishment of historical workings	-	-	-	-	-	-	-	-	-	-	-	-
Geophysical survey	-	-	-	-	-	-	-	-	8,333	8,333	-	-
Sri Lankan Management Support	-	-	-	-	-	-	-	-	-	-	-	-
Geology Support	417	417	417	417	417	417	417	417	417	417	417	417
Sub-Total	417	417	417	417	417	2,500	10,833	417	8,750	8,750	417	417

Source – Mongolian Resources

Figure 22 – Breakdown of activity by type and percentage of total expenditure - Galle



Source – Mongolian Resources



11 Work Program & Budget Summary

A preliminary budget and work programme of approximately AUD 632,000 has been prepared by MRL for all direct “on ground” exploration and associated activity costs for the period October 2013 to September 2014 (inclusive).

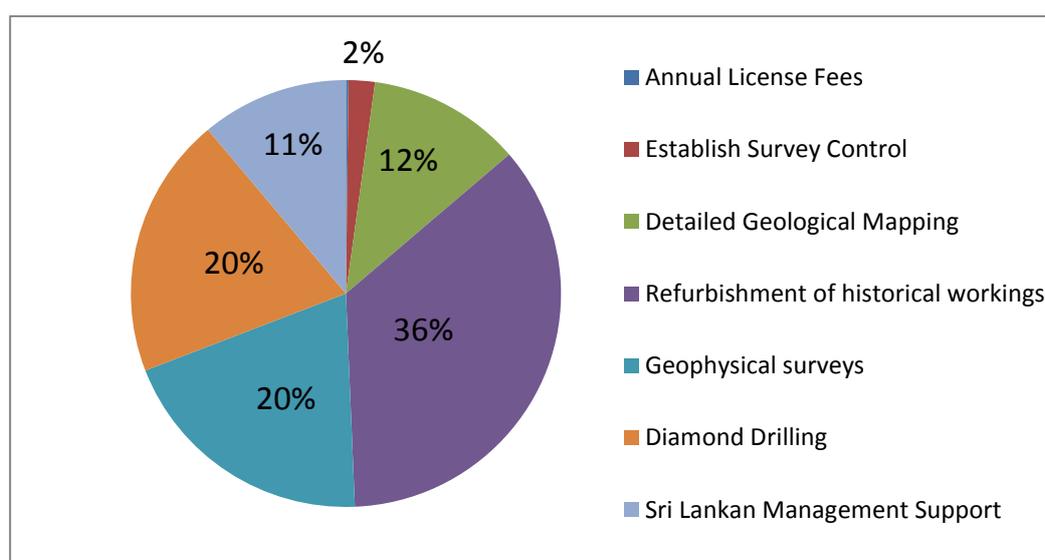
The following table and figures summarise the exploration expenditure as previously outlined in sections 10.3.1, 10.3.2, and 10.3.3.

Table 11 – Summary of total exploration activity and expenditure by month

Exchange Rate		AUD \$1 = 120 LKR												
Sri Lanka Exploration Budget														
	Oct-13	Nov-13	Dec-13	Jan-14	Feb-14	Mar-14	Apr-14	May-14	Jun-14	Jul-14	Aug-14	Sep-14		
	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	AUD	
All Districts (45 Grids)														
Annual License Fees	-	-	-	-	-	-	-	-	-	-	-	-	1,200	-
Establish Survey Control	2,083	2,083	2,083	2,083	2,083	2,083	-	-	-	-	-	-	-	-
Detailed Geological Mapping	10,417	10,417	10,417	10,417	10,417	10,417	10,417	-	-	-	-	-	-	-
Refurbishment of historical workings	22,500	22,500	45,000	45,000	22,500	22,500	22,500	22,500	-	-	-	-	-	-
Geophysical surveys	-	-	20,833	20,833	20,833	29,167	8,333	8,333	8,333	8,333	-	-	-	-
Diamond Drilling	-	-	-	-	-	-	-	25,000	25,000	25,000	25,000	25,000	25,000	25,000
Sri Lankan Management Support	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833	5,833
TOTAL	40,833	40,833	84,167	84,167	61,667	70,000	47,083	61,667	39,167	39,167	32,033	30,833	30,833	30,833

Source – Mongolian Resources

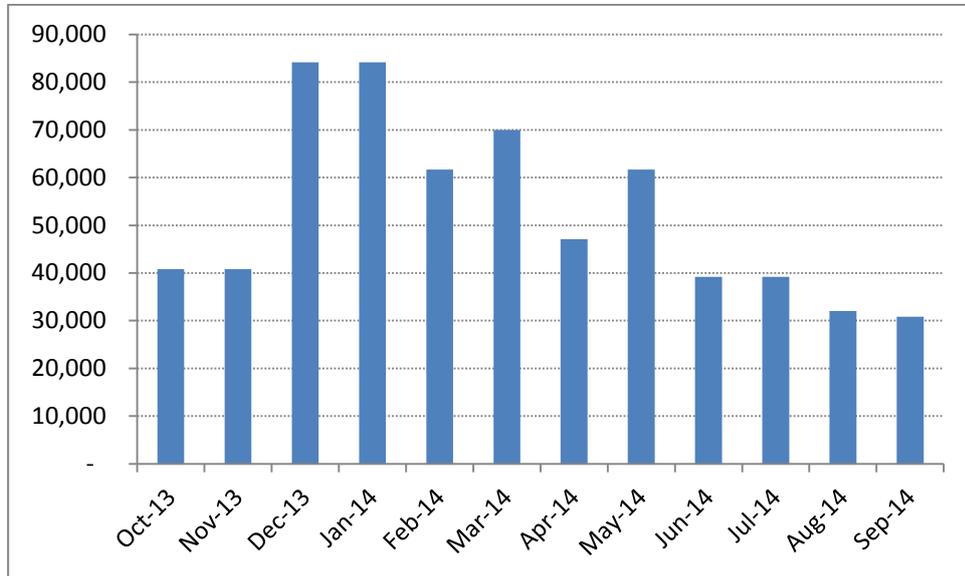
Figure 23 – Breakdown of activity by type and percentage of total expenditure – Sri Lanka



Source – Mongolian Resources



Figure 24 – Monthly exploration expenditure – Sri Lanka (AUD)



Source – Mongolian Resources



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13 Appendices

Appendix 1 – Geological legend : Sri Lanka

EXPLANATION OF SYMBOLS SUPERFICIAL DEPOSITS	EXPLANATION OF LINE AND STRUCTURAL SYMBOLS
<p>L Laterite: discontinuous caps and sandy lateritic gravel</p>	<p>--- Approximate or inferred geological boundary or contact</p> <p>--- Geological boundary, between superficial deposits and soil formations</p> <p>--- Shear zone, inferred from air photographs</p> <p>↕ Axial trace of antiform, and plunge</p> <p>↕ Axial trace of synform, and plunge</p> <p>↪ Overturned antiform</p> <p>↪ Overturned synform</p> <p>65 Strike and dip of foliation (generally parallel to compositional layering)</p> <p>230/15 Azimuth and plunge of lineation</p> <p>⊕ Vertical foliation</p> <p>--- Fault, fracture or major joint, from air photographs</p> <p>● Mineral occurrence</p> <p>/// Extent of principal gemming area</p>
<p>QUATERNARY-RECENT AND PLEISTOCENE DEPOSITS</p> <p>Alluvium: sand, silt or clay and/or lagoonal and estuarine deposits including lake and marsh deposits</p> <p>Alluvium Stiff brown or blue-grey organic rich clay 'paddy clay'</p> <p>Qrsb Beach sand: etc. indicate older Holocene beach ridges and dunes</p> <p>Qrsd Dune sand</p> <p>Qrsc Beach rock: planer beds of calcareous cemented beach sand of past and present shore lines; often including heavy minerals</p> <p>Qps* Grey and white sand: unconsolidated beach sand and, in-part, dune sand</p> <p>Qps Unconsolidated brown and grey coastal sand: grey and white sand</p>	<p>+++ Railway</p> <p>15 6 Road (Distance marker; kilometres, miles)</p> <p>--- Provincial Boundary</p> <p>--- District Boundary</p> <p>--- Drainage</p> <p>○ Paddy Field</p> <p>—500— Contour</p>
<p>PROTEROZOIC METAMORPHIC ROCKS Lithologies of the Highland Complex (no stratigraphic order implied)</p> <p>Emgga Garnet-sillimanite-biotite ± graphite pelitic schist or gneiss</p> <p>Emgco Garnet-sillimanite-biotite ± cordierite-graphite pelitic schist or gneiss</p> <p>Emq Quartzite</p> <p>Emgc Calc-gneiss: scapolite and wollastonite-bearing in places</p> <p>Emgj** Garnet-bearing quartzofeldspathic rock: often >20% garnet</p> <p>Emgk* Charnockitic gneiss and charnockitic biotite gneiss: extensive sequences of charnockitic-looking grey gneiss usually lacking hypersthene, orthopyroxene-bearing mafic layers; may include some paragneiss though commonly with boudinaged</p> <p>Emgk Charnockite: green greasy appearance with scattered hypersthene</p> <p>Emgrhb Hornblende granite and gneiss (often >20% coarse grained-hornblende)</p> <p>Emgbh Biotite-hornblende gneiss: massive to compositionally layered, dark grey gneiss with >20% quartz and garnet; tonalitic in composition</p> <p>Emgbb Hornblende-biotite gneiss: compositionally layered grey gneiss (stipple indicates local charnockitization)</p> <p>Emgr Granitic gneiss or granitoid gneiss</p> <p>Emgh Hornblende gneiss or amphibolite; pyroxenite; mafic ortho gneiss, quartz generally <10%; diorite to gabbro composition (may contain clino & ortho pyroxene).</p>	

Source – GSMB



Appendix 2 – Tenement details

Grid No.	Holder	Interest	Grant Date	Expiry Date	Area	District	Province
131218	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
130218	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
129221	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
144222	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
143222	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
129222	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
129220	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
129219	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
128224	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
138217	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
137217	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
138218	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
137218	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
136218	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
135218	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
137219	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
136219	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
135219	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
134224	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
134225	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
133225	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kegalle	Sabaragamuwa
128225	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Gampaha	Western
129218	MRL Graphite (Pvt) Ltd	100%	04/06/2013	03/06/2013	1Km ²	Gampaha	Western
130220	MRL Graphite (Pvt) Ltd	100%	04/06/2013	03/06/2013	1Km ²	Gampaha	Western
127224	MRL Graphite (Pvt) Ltd	100%	04/06/2013	03/06/2013	1Km ²	Gampaha	Western
143147	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
142147	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
141147	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
140147	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
137147	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
144148	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western



143148	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
137148	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
144149	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
143149	MRL Graphite (Pvt) Ltd	100%	03/05/2013	02/05/2015	1Km ²	Kalutara	Western
131102	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
128102	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
131103	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
128103	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
127105	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
130104	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
129104	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
128105	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
129105	MRL Graphite (Pvt) Ltd	100%	15/05/2013	14/05/2013	1Km ²	Galle	Southern
127103	MRL Graphite (Pvt) Ltd	100%	04/06/2013	03/06/2013	1Km ²	Galle	Southern

Source – Mongolian Resources, GSMB

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