ACN 119 057 457

AUSTRALIAN SECURITIES EXCHANGE ANNOUNCEMENT **7th November 2012**

Fission's maiden overseas expansion with acquisition of three Cambodian gold and base metals exploration licenses

Overview

- Maiden overseas expansion by Fission Energy Ltd (ASX: **FIS**) ("**Fission**")
- **Fission** has signed two conditional agreements with Cambodian companies, Angkor Thmorpich Resources Co Ltd ("**ATR**") and Wild Bull Resources Co., Ltd ("**WBR**") to acquire a 100% interest in three Exploration Licenses (ELs) covering a total area of 430km^2 in the largely unexplored western region of Cambodia (the conditional agreement with **ATR** is hereinafter called the "Agreement").
- Cambodia is considered one of the "last frontiers" in Asia for mineral explorers. High-grade copper assays have already been returned from the Dontret License with outcropping copper mineralisation identified at Sroyang. Elevated gold assays returned from the Pailin license;
- The Consideration will be :-

  (a) 50 million **Fission** ordinary fully paid shares (35 million to **ATR** and 15 million to **WBR**),

  (b) US$200,000 payable by **Fission** to **ATR**,

  (c) an 0.50% Royalty (Cu, Au, Ag) payable to **ATR;** and

  (d) a further 85 million ordinary fully paid shares to be issued to **ATR** on the delineation by **Fission** of a commercially viable JORC Resource following a Definitive Feasibility Study on any of the three ELs.
- The acquisition by **Fission** of the three ELs under the Agreement is conditional upon a number of conditions precedent being satisfied by 2 April 2013 including:

  (a) **Fission** obtaining shareholder approval for the transaction (if required), and

  (b) **Fission** being satisfied with the results of its due diligence review (which may take up to 3 months) and which may include at **Fission**'s election, reconnaissance exploration and possibly drilling of any or all of the three ELs.
- A more detailed summary of the terms and conditions of the agreement is set out in Annexure 2.

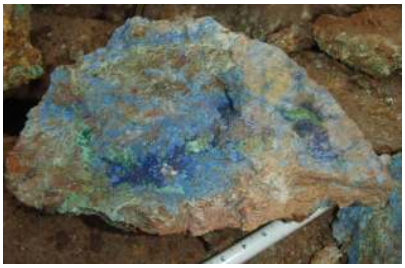
WA and Cambodian assets

The proposed acquisition is the first overseas expansion by Perth-based **Fission**.

The Company is continuing with metallurgical testwork at the Mt Thirsty Co-Ni Joint Venture (50:50 Joint Venture with **Barra Resources Ltd**; ASX: **BAR**) situated 20 kilometres northwest of Norseman (Western Australia). Preliminary metallurgical testwork undertaken this year has been encouraging and we intend to update the market in the near term following the receipt of an interim report from Perth based consultants RMD STEM.

PROJECT DETAILS

Dontret License



- On the Dontret License (202 km^2), outcropping "skarn style" copper mineralisation has been identified returning grades of up to 8.6% Cu, 1.31% Zn and 25.6 g/t Ag from rock chip samples.
- Shallow open cut mining by artisanal miners has exposed mineralisation up to 20 metres wide, averaging 1.66% Cu over 8.47 metres and striking for more than 100 metres. No modern exploration has been undertaken and mineralisation remains open in all directions.
- Exploration (mapping, sampling costeaning) to commence immediately after (and subject to) completion of the Agreement and will initially target areas of known copper and gold mineralisation at both Dontret and Sroyang.

Pailin License

- The Pailin License (34km^2) is situated west of the Dontret License in a similar geological terrain to Dontret. The tenement is considered prospective for base metals and gold with peak gold assays of up to 4.1 g/t from surface rock chip samples.

Sroyang License

- The Sroyang License (194km^2) also contains outcropping copper mineralisation with associated alteration exposed in costeans and outcrop.

LOCATION AND ACCESS

FIGURE 1: Dontret, Sroyang and Pailin Tenement location.

Dontret License

The Dontret License (Figure 1) is located in Ratanakmondol and Samlot Districts and covers an area of 202 square kilometres.

The exploration license was approved on July 21, 2011 and is valid for two years. The tenement is located in Battambang Province (western Cambodia) approximately 250 km NW of Phnom Penh. The Dontret License is accessible through the National Road #5.

Pailin License

The Pailin License (Figure 1) was granted on 21 June 2011 and is valid for two years. The tenement is located in the Phnum Kai area, Pailin City, Pailin Province.

The Exploration License covers an area of approximately 34 square kilometres and is also accessible via the National Road #5.

Sroyang License

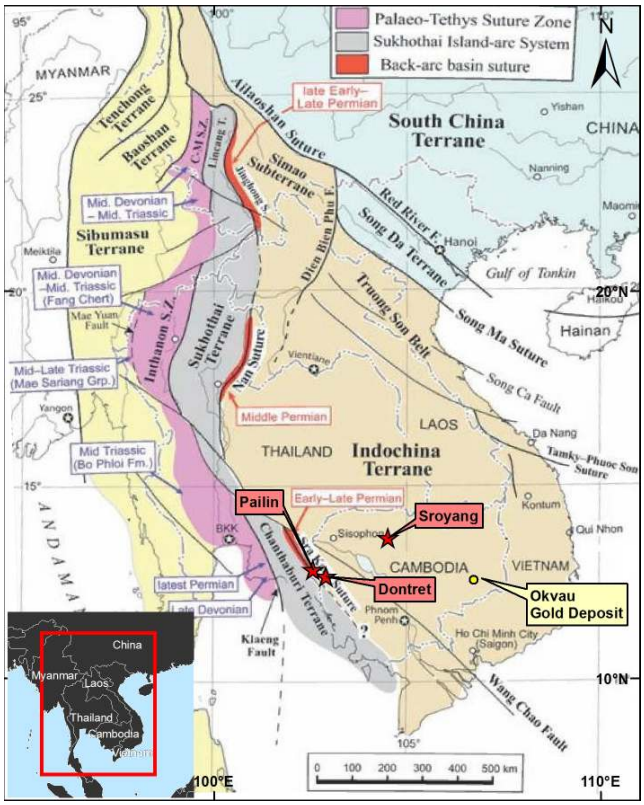


FIGURE 2: Dontret, Sroyang and Pailin geological setting.

The Sroyang License (Figure 1) was granted on 21 June 2011 for two years and is located in the Sroyang area, Kuleaen District, Preah Vihear Province. The Exploration License covers an area of approximately 194 square kilometres and is considered prospective for copper, based upon previous trenching that exposed surficial copper oxides in the form of azurite, malachite and chalcocite over widths of in excess of 5 metres.

Geological Setting

The Pailin and Dontret (Figure 2) licenses occupy the margin of a major regional lineament known as the Wang Chao Fault within the Chanihaburi Terrane.

It is possible that this fault has contributed towards the metamorphism and mineralisation of sediments including sandstones and limestones. This is supported by the presence of potential skarn style mineralisation at Dontret.

[1]GEOLOGY – Dontret License

The topography of the Samlot District is generally flat to gently rolling. Rocks in the flat lying regions are mostly sediments and fine-medium grained undifferentiated sandstones and siltstones which show some degree of metamorphism (Figure 3). Limestone units are distributed on the northern, eastern and western part of the visited prospect area. The local topographic highs generally reflect silicified structures probably associated with mineral bearing fluids that made the altered rocks more resistant to weathering as compared with the unaltered host rocks.

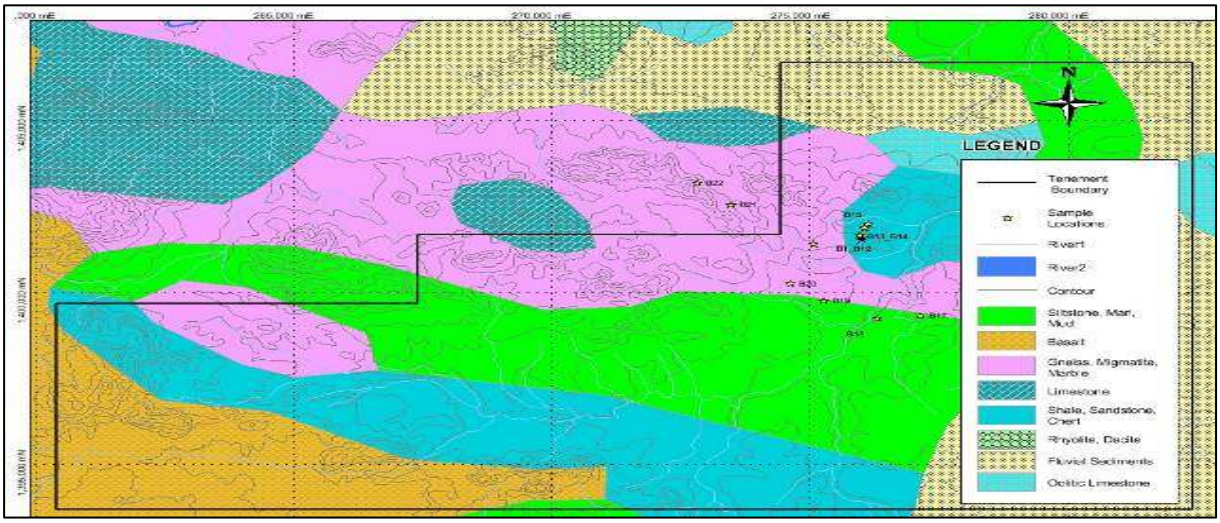


FIGURE 3: Regional geology - Angkor Thmorpich Resources Tenement

[1] The geology and other technical descriptions in this ASX Announcement draw largely from a geological report by Mr Michael Leu, B.Sc. (Hons), MAIG (2012) Review of Copper Mineralisation, Angkor Thmorpich Resources (ATR) tenement in Dontret Area, Ratanakmondol and Samlot Districts in Battambang, Kingdom of Cambodia.

ARTISANAL MINING - Dontret License

Local villagers discovered outcropping copper mineralisation (Figure 4) several years ago in an area previously covered in forest that has since been cleared for farming purposes.

In 2011, artisanal miners established a pilot copper processing plant onsite to extract copper and silver, producing approximately 5 tons of copper concentrate (95-98 % copper). Production ceased early in 2012 and around 400-500 tons of copper ore remain stockpiled (Figure 5, 6 & 7).

FIGURE 4: **Initial discovery outcrop. Villagers notified ATR personnel of mineral-bearing outcrop - altered phyllite with patches of malachite and azurite. Site of a small open-cut subsequently excavated by artisanal miners.**

FIGURE 5: **Solvent extraction vats for copper carbonate ore.**

FIGURE 6: **Copper carbonate ore, azurite and minor malachite, from ROM.**

FIGURE 7: Sawn copper bar produced in processing plant.

MINERALISATION – Dontret License

Copper mineralisation (Figure 8, 9) occurs in linear east-west striking shear zones that appear to be associated with silicified, linear and conical hills that each extend for several hundred metres suggesting that copper mineralisation may be part of a large fluidised alteration system with potential for repetitions of copper mineralisation.

FIGURE 8: Artisanal open cut excavations at the Dontret License.

The iron-rich copper mineralisation is likely to be responsive to an airborne magnetic survey which is planned in the near term after (and subject to) completion of the Agreement.

FIGURE 9: Sample site B120, contact aplitic dyke and sample B119 which assayed 4.78% Cu, 0.14% Zn and 0.7ppm Ag over the 0.5 metre interval sampled. The dyke was sampled over 0.5 metres to assess disseminated mineralisation in the 'footwall'. The dyke contained 2.6 times more Cu that what was regarded as the main mineralised zone.

Magnetics/radiometrics should be able to map hydrothermal fluid conduits and identify priority exploration target areas with responses similar to the main area of known copper mineralisation.

FIGURE 10: Linear hills on the Dontret License area that may represent iron enriched lithologies.

The high concentration of Fe and Mn in the samples examined to date indicates potential skarn-style mineralisation.

TABLE 1: Rock chip results from artisanal open cut workings at the Dontret License

Sample No.	Category	Cu	Zn	Ag
		%	%	Ppm
B102	Primary	0.0005	0.0027	0.6
B106	Primary	0.0011	0.0022	<0.5
B107	Primary	0.0282	0.0129	<0.5
B115A	Primary	1.2606	0.0879	0.8
B115B	Primary	0.8426	0.2989	5.7
B115C	Primary	3.3385	0.6437	8.6
B115D	Primary	1.7567	0.2376	5.7
B115E	Primary	2.5792	0.2693	2.7
B115F	Primary	2.6710	0.869	6.2
B115G	Primary	0.8147	0.319	3.6
B115H	Primary	0.1521	0.1016	<0.5
B114	Primary	8.6646	1.3058	25.6
B118A	Primary	0.7484	0.4158	0.9
B119	Primary	1.8377	0.1985	10.2
B120	Primary	4.7751	0.1427	0.7
B121A	Primary	0.3527	0.2310	8
B121B	Primary	0.2145	0.0488	6
B131A	Primary	0.0209	0.0042	<0.5
B131B	Primary	0.0061	0.0031	<0.5
B131C	Primary	0.0078	0.0030	<0.5
B133	Primary	0.0153	0.0021	1.6
B110	Primary	0.4455	0.2307	4.3
B131A	SS	0.0217	0.0049	<0.5
B106	REP	0.0011	0.0023	<0.5
B120	REP	4.7758	0.1443	0.7

The shear structure of the main mineralised body strikes broadly east west, dips 75° north and hosts highly fractionated feldspar-quartz dykes/pegmatites, some at least 8 metres wide. The shear zone is potentially a deep tapping structure exploited by both felsic dykes and copper-bearing fluids.

Felsic dykes suggest there may be a blind pluton at depth, a potential source of the copper-bearing fluids. Some of these dykes are juxtaposed with the copper mineralised shear structure and indicate the mineralisation is possibly of magmatic origin.

Two rock chip channel samples of dykes assayed 1.26% and 4.78% Cu and it is possible their igneous texture is conducive to permeation by Cu-rich hydrothermal fluids.

Rock chip sampling of the main mineralised structure (Table 1) strikes (B115A – B115H) returned elevated Cu over at least 33.5 metres width with the principal mineralised zone returning 8.47 metres @ 1.66% Cu. The best result included B118A located 25 metres south of the main shear zone which returned 8.66% Cu, 1.31% Zn and 25.6 g/t Ag.

Copper mineralisation was also exposed in several places over 106 metres of strike, the limit of testing by the artisanal miners. The elevated structure hosting the copper mineralisation continues under cover to the east and consequently it is considered likely that mineralisation will extend beyond that currently exposed along 106 metres of strike.

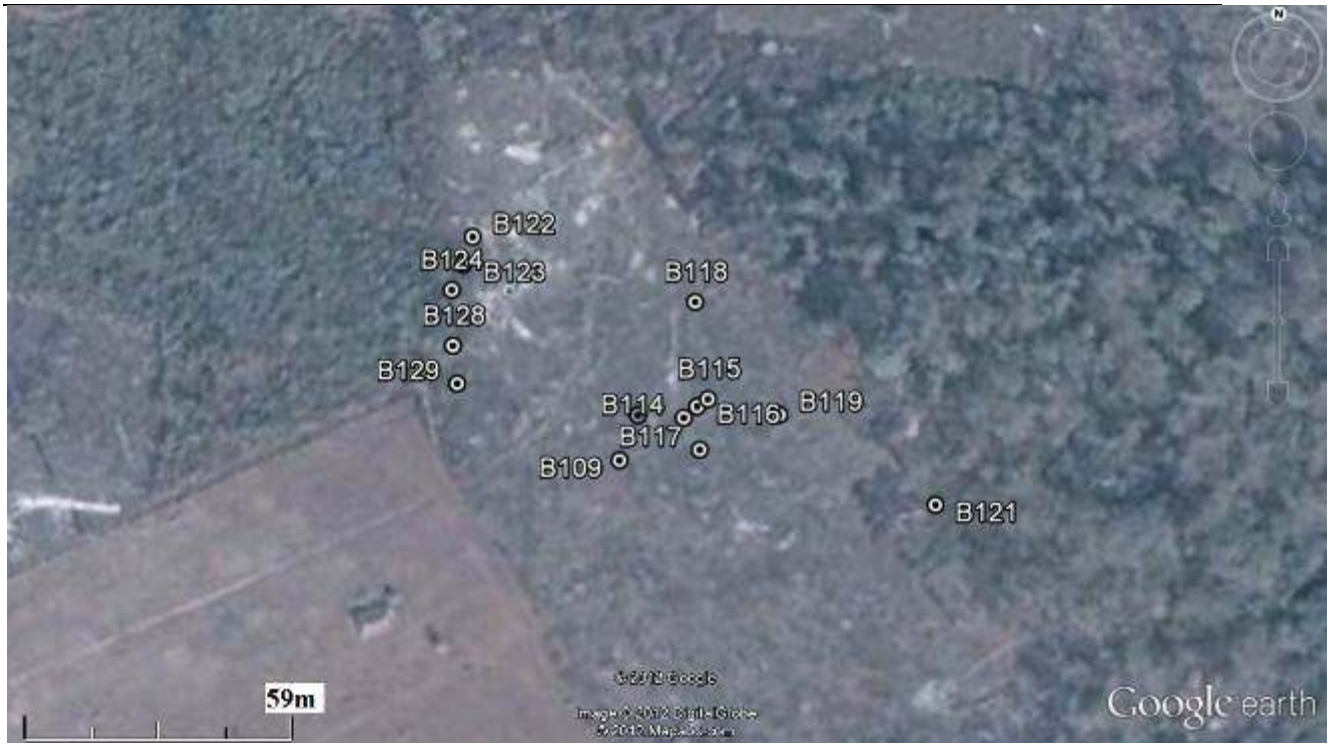


FIGURE 11: GPS (Garmin 60CSX) Points plotted on satellite image: Sampled and mapped features. Refer to Table 2 for co-ordinates, Zone 48 P UTM, WGS84.

MINERALISATION – Pailin License

Whilst no significant prior exploration has been carried out, a reported prior sampling programme from several years ago tested four samples from this licence area and produced gold assays up to 4.1 g/t and silver assays of up to 2.1 g/t.

MINERALISATION – Sroyang License

There is limited detailed information on the geology and mineralisation on the Sroyang license. However costeans dug within the past five years by **ATR** have revealed surficial copper mineralisation in the form of azurite, malachite and chalcocite over widths of in excess of 5 metres.

Figures 12 and 13 reveal azurite and malachite within the costean (Figure 12) and in veins (Figure 13) with associated phyllitic alteration, similar to that observed on the Dontret License.

FIGURE 12: Close up of azurite and malachite mineralisation within costeans at the Sroyang License.

FIGURE 13: Azurite and malachite within steeply dipping vein in costean at the Sroyang License

EXPLORATION PROGRAM (Dontret, Sroyang & Pailin)

Surface Sampling – Mapping - Costeans

- More detailed mapping, rock chip sampling and costeaning is planned by **Fission** to target areas of known mineralisation to determine grades, strike, dip and width of mineralised zones.

- The artisanal workings at Dontret, the outcropping copper mineralisation discovered on the Sroyang license and the outcropping gold mineralisation on the Pailin license are potential exploration targets for the Company.

Drilling

- Subject to completion of the Agreement and further results, it is proposed to follow up better defined areas of mineralisation at depth and along strike and drill test for the presence of a possible copper enriched supergene zone (chalcocite etc.) and confirm the copper content of the generally lower grade primary, hypogene mineralisation.

- Follow up drilling is also proposed based on the results of further geophysics and regional sampling.

Reconnaissance Geochemical Sampling

- The first phase of exploration following completion of the Agreement will involve the assay of more than 111 BLEG and 100 stream sediment samples from the Dontret and Svrang licenses that were collected by consultant geologist, Jadee G Ammugauan.

- Close spaced soil and stream sampling will be undertaken following analysis of these results.

- Further, systematic costeaning and channel sampling across strike and vertically along mineralised structures is required to determine the width and grade.

Airborne Geophysics

- Iron-rich copper mineralisation is likely to be responsive to airborne magnetic, and radiometrics are likely to highlight the presence of any intrusives and alteration.

- Airborne Geophysics will be aimed at to mapping hydrothermal fluid conduits that will be targeted for follow up drilling.

- As detailed earlier in this announcement there are numerous silicified linear and conical hills (that extend for several hundred metres and may be indicative of iron-copper enrichment) that should also be delineated by the airborne geophysics.

APPROXIMATE TIMETABLE

The parties, subject to satisfaction of the conditions precedent, are aiming to achieve settlement of the acquisition by mid April 2013. Full details on the approximate timetable and conditions precedent are set out in Annexure 2.

Guy T Le Page
Director

The interpretations and conclusions reached in this report are based on current geological theory and the best evidence available to the authors at the time of writing. It is the nature of all scientific conclusions that they are founded on an assessment of probabilities and, however high these probabilities might be, they make no claim for complete certainty. Any economic decisions that might be taken on the basis of interpretations or conclusions contained in this report will therefore carry an element of risk. The information in this announcement, insofar as it relates to Mineral Exploration activities, is based on information compiled Guy T Le Page, who is a member of the Australian Institute of Mining and Metallurgy, and has more than five years experience in the field of activity being reported on. Mr Le Page has sufficient experience which is relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking to qualify as Competent Persons as defined in the 2004 Edition of the 'Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves. Mr Le Page consents to the inclusion in the report of the matters based on their information in the form and context in which it appears. It should not be assumed that the reported Exploration Results will result, with further exploration, in the definition of a Mineral Resource.

Annexure 1

CAMBODIAN MINING INDUSTRY

Cambodia has vastly undeveloped mineral resources with very limited modern exploration and therefore remains largely under-explored.

Minerals identified so far include gold, antimony, bauxite, chromium, copper, lead, manganese, molybdenum, silver, tin, tungsten, and zinc. Iron deposits, minor gold, coal, copper and manganese have been reported in the Kampong Thom area. Deposits of bauxite discovered in the early 1960s (Mondolkiri Province) remain undeveloped.

Companies actively exploring in Cambodia include (Figure 1):

- **Oz Minerals Ltd** (ASX: **OZL**) (assets acquired by **Renaissance Minerals Ltd**, ASX: **RNS**)
- **Southern Gold Ltd** (ASX **SAU**)
- **Indochine Mining Limited** (ASX: **IDC**)
- **Jogmec** (Japan)

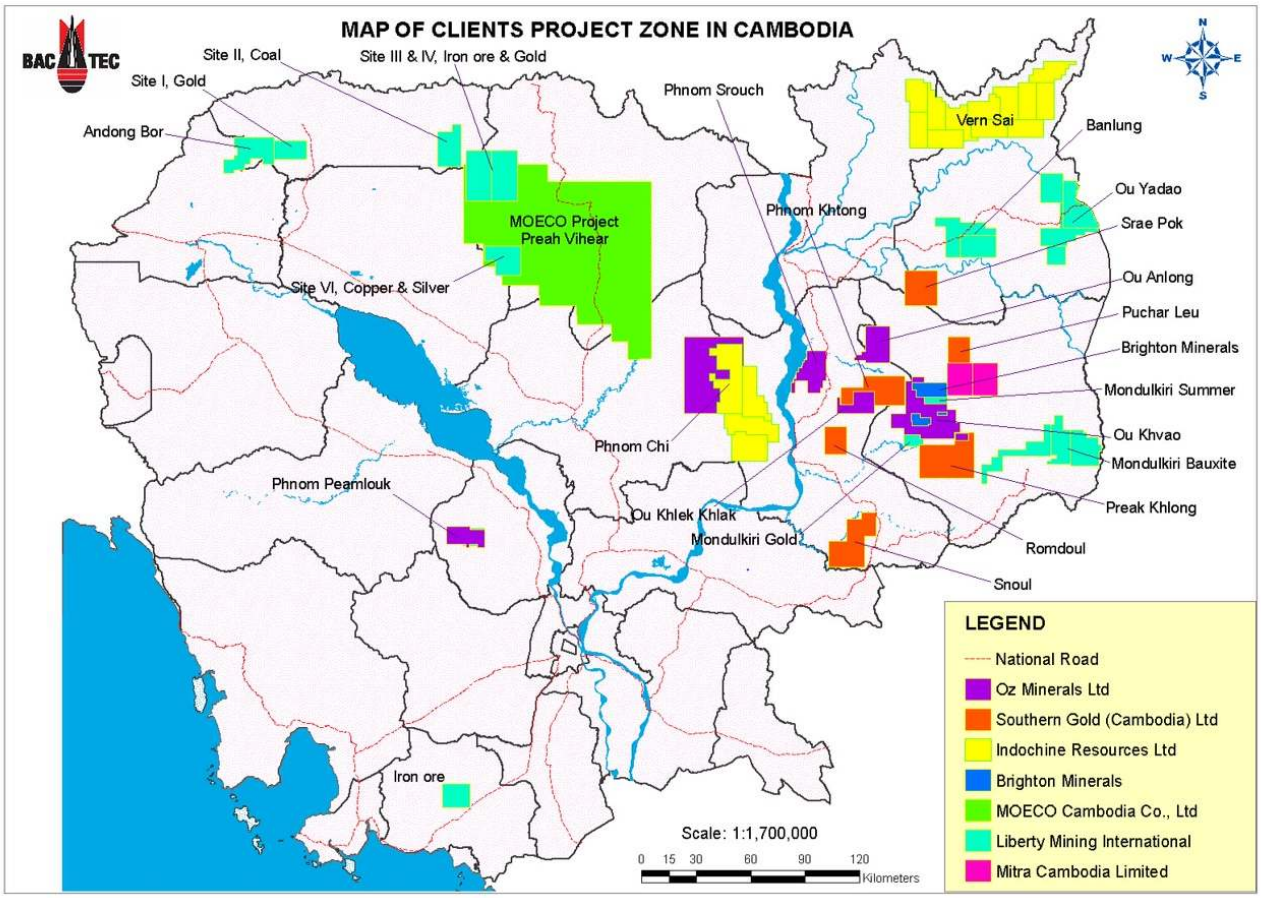


Figure 1: Location of Tenements held by resource companies operating in Cambodia

Regional Geology

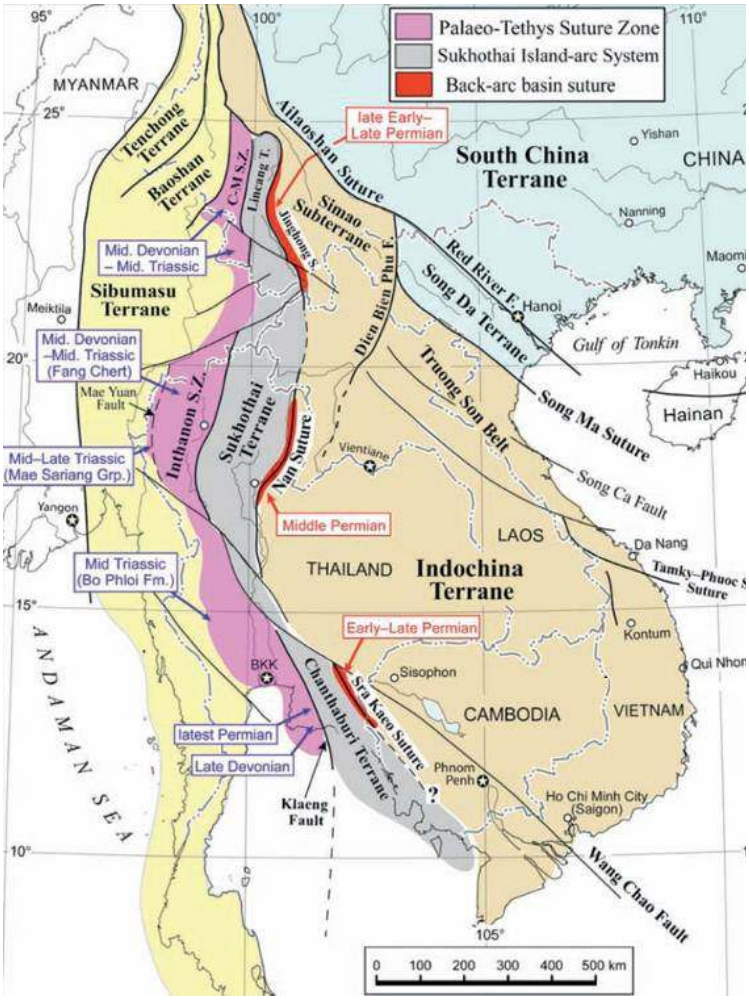


Figure 2: Geology of Cambodia.

Most of Cambodia (Figure 2) is part of a stable, continental tectonic plate known as the Kontum Massif that is mostly covered by a sequence of Triassic-Jurassic sandstones and siltstones of the Khorat Basin.

The Permo-Carboniferous Truongson and Loei Fold Belts bound the Kontum Massif to the north and west respectively. These fold belts contain arc type volcano-sedimentary sequences including andesitic volcanics and limestones.

The Kontum Massif and the Khorat Basin sediments have been intruded by a suite of small to medium sized dioritic to granitic plugs. The range of composition suggests a fractionating magma source. Most of the intrusives have large irregular hornfels halos indicating that the roof zones of the plugs are only partially exposed. Several hornfels areas without apparent intrusives indicate the presence of plugs at a shallow depth below the current erosion surface.

Annexure 2 - Acquisition Terms & Timetable

Consideration

- At completion of the Agreement, **ATR** to transfer to **Fission** the three Exploration Licenses (Dontret, Sroyang and Pailin) and all data and information relating to them (**Transfer Interest**) for the following consideration to be issued/paid to **ATR (or nominees)**:
  - 35 million fully paid ordinary shares in **Fission**; and
  - Payment by **Fission** to **ATR** of US$200,000.
- **WBR** has granted to **Fission** an option ("the Option") to acquire the rights of **WBR** to a 60% Joint Venture interest in the Dontret Exploration Licence. If Fission exercises the Option Fission will issue to WBR or its nominees 15 million ordinary fully paid shares in **Fission**.
- **Fission** will also issue the following Performance Shares to **ATR (or nominees)**:
  - 85 Million fully paid ordinary shares in **Fission** to be issued as soon as the Board of **Fission** determines it to be commercially viable to mine any JORC mineral resource located on any of the three Exploration Licenses at Dontret, Pailin or Sravang following completion of and based upon a Definitive Feasibility Study of that resource.
- A royalty will be paid to **ATR (or nominees)** of 0.5% of gross receipts (less government royalties and charges) of **Fission** from the sale of all copper (Cu), gold (Au) or silver (Ag) produced by **Fission** from Mining Licenses granted over any area the subject of the Exploration Licenses.
- **Fission** proposes to exercise the Option prior to completion of the Agreement.
- In consequence, at completion of the Agreement, **Fission** will own a 100% legal and beneficial interest in the three Exploration Licenses free of all encumbrances.
- The initial shareholding of **ATR or its nominees** in **Fission** post acquisition of the Transfer Interest will be 35 million fully paid ordinary shares.

Warranties

- **ATR** will provide all reasonable warranties required by **Fission**'s lawyers including warranties that both at the date of signing the formal contract and at completion of the Agreement:
  - **ATR** owns the Exploration Licenses free from all encumbrances other than the Option.
  - The Exploration Licenses are in good standing and not liable for forfeiture.
  - **ATR** has complied with all laws and regulations related to the Exploration Licenses and there are no obligations or liabilities related to any prior activities of **ATR** or any other persons or companies including but not limited to any unpaid financial obligations or any environmental obligations.
- **ATR** will deliver to **Fission** at completion of the Agreement all things necessary to transfer 100% ownership of the Exploration Licenses free from encumbrances.

Board

- On completion of the Agreement, **ATR** will be entitled to appoint one Director to the Board of Directors of **Fission**, and a second Director upon the issuance of the Performance Shares.

Sale of Exploration Licences

- If before **ATR** is entitled to receive the Performance Shares Fission shall sell all or any of the Exploration Licenses, ATR shall be entitled to receive a proportion of the sale price calculated on the following formula:
- Share = 40% of net sale proceeds x 85,000,000

  120,000,000

Non-Competition

- Neither **ATR** nor its Directors will acquire any interest in any Exploration or Mining Licenses (other than those already granted or issued at the date of the Agreement) within a 50 kilometre radius of the boundary of any Memorandum of Understanding, Exploration or Mining Licenses held by **Fission** without the prior approval of **Fission**.

Conditions Precedent

The sale by **ATR** and the purchase by **Fission** of the Transfer Interest is subject to each of the following being completed in accordance with the timetable below and the Agreement being unconditional by 2 April 2013 (or such later date as the Parties may agree):

- **Formal Contract –** the Parties agreeing and executing a formal contract incorporating the terms in the Agreement.
- **Due Diligence –** Both Parties completing due diligence to their satisfaction.
- **Approvals – Fission** Board approval and Shareholder approval.
- **Cambodian Regulatory Approvals –** all necessary regulatory approvals in Cambodia and Australia are obtained enabling transfer of the Transfer Interest to **Fission**
- **Australian Regulatory Approvals –** all necessary approvals or waivers as required under ASX Listing Rules and the Corporations Act and regulations related to the acquisition by Fission of the Transfer Interest, the issue/payment of the consideration and the issue of Performance Shares to **ATR.**
- **No Material Change –** There is no material change to the Exploration Licenses.
- **Escrow – ATR** agreeing to escrow the initial 35 million ordinary fully paid shares in **Fission** for a period of 12 months from the date of issue.

Completion Obligations

- On completion of the Agreement, which will take place in Cambodia, **ATR** will sign and provide all necessary executed documents and transfers, and do all other things necessary to transfer free from encumbrances the Transfer Interest including the Exploration Licenses to **Fission**.
- On completion of the Agreement, **Fission** will issue to **ATR** 35 million fully paid ordinary shares in **Fission**.

Approximate Timetable

By 21 November 2012

- Receipt of all **Fission** and **ATR** Board approvals.

By 21 December 2012

- Lodgement of all necessary applications for regulatory approvals or waivers in Australia and Cambodia in respect to the transfer of the Exploration Licenses to **Fission** and the provision of the Consideration and the Performance Shares to **ATR.**
- Signing of Formal Contract incorporating the terms in this Agreement.

By 31 January 2013:

- Completion of all Due Diligence enquiries by both Parties.

By 28 February 2013:

- Shareholders meeting for **Fission** convened if required.

By 2 April 2013

- Agreement Unconditional.

By 16 April 2013

- Completion of sale and purchase of Transfer Interest.