

31 July 2012

## **Report on Activities for the Quarter ended 30 June 2012**

### **Highlights**

#### **Africa: Morocco – Tarfaya Offshore Block**

- Processing of the 677 km<sup>2</sup> Assaka 3D seismic survey over the Company's primary prospects Trident, TMA, and Assaka within the Tarfaya Block, offshore Morocco was been awarded to CGG Veritas.
- CGG Veritas commenced the Assaka 3D processing programme in early June with expected completion by late October 2012.
- Seismic AVO analysis by Schlumberger-WesternGeco has been completed on selected reprocessed 2D seismic lines through the "flat spot" anomaly identified in the mid Tan-Tan Formation. Based upon this work the results are indicative of high porosity and hydrocarbons in the shallower Cretaceous sandstones.
- Rock properties utilised for the AVO analysis are to be used to further evaluate prospective intervals in the Cretaceous and work will begin on the Jurassic carbonate sections.
- Mapping has begun on rollover anticlines in Triassic grabens underlying the Jurassic section. Preliminary results indicate the structures add additional prospectivity to the Tarfaya block. The Tertiary and Triassic age sections will be further evaluated in the coming months.
- Preliminary organic geochemical analysis of outcrop samples taken during the November 2011 Field Trip has identified both Jurassic and Cretaceous source rocks capable of generating two distinct families of oils. These results are being compared to the oils at the Cap Juby discovery adjacent to the Tarfaya block.
- Macquarie Capital (Europe) has been engaged to act in the capacity of financial advisor to Tangiers in respect to its proposed farm-out of the Tarfaya Block. During the quarter Macquarie opened a physical data room in London to provide potential farminee partners access to all seismic data, Independent Resource and Competent Person's Reports, and all available well data relating to the Tarfaya Block. Tangiers gave management presentations to potential farminee partners in London during the month of June.
- Presentations were received well by potential farminees and the process is expected to be completed during the second half of 2012.

#### **Australia: WA-442-P and NT/P81 Exploration Permits (Turtle and Barnett)**

- ISIS Petroleum Consultants (ISIS) opened a physical data room in Perth for the purpose of securing farminee partner(s) to promote the future 3D seismic acquisition and exploration drilling programmes within the WA-442-P and NT/P81 Bonaparte Basin Permit Areas, offshore Northern Australia.

- The primary focus is on the 14 Early Carboniferous age Milligans Fan oil play leads and the ~7 TCF Early Carboniferous to Devonian Nova and Super Nova deep gas prospects, with a secondary focus on the future shallower Carboniferous to Permian Turtle Barnett oil development programme.
- ISIS has estimated the combined mean unrisks oil-in-place (STOIIP) for the 14 Milligans leads is 683 million barrels of oil with a high side case of almost 1.5 Billion barrels of oil-in-place.
- Gross unrisks mean Milligans Prospective Resources are estimated to be 218 million barrels of oil with the high side case being 505 million barrels of oil.
- ISIS has previously provided a Competent Person's Report on the Nova prospect, which indicated the mean undiscovered, unrisks gas initially in place to be 6.93 trillion cubic feet of gas with an unrisks prospective gas resource of 3.46 trillion cubic feet of gas.
- Tangiers published a paper in the May, 2012 APPEA Journal entitled "New Play Type, Southern Bonaparte Basin-Petrel Sub Basin-WA-442-P and NT/P81 Exploration Permits". A poster and talk were also given at the APPEA conference on the new play type.
- The ISIS data room and presentations for the farm-out have been received well and the process is expected to be completed in the second half of 2012.
- An environmental study has commenced in advance of the seismic acquisition over the WA-442-P and NT/P81 permits. It is anticipated that this study should be completed by the end of the third quarter 2012.
- Tenders have gone out for seismic acquisition vessels to shoot a ~650 square kilometre survey over the prospect areas. It is anticipated a decision will be made by the end of the third quarter 2012.

### **Tarfaya Offshore Block – Morocco (75% and Operator)**

The Tarfaya Block, offshore Morocco, is comprised of 8 contiguous permits covering an area of 15,041 square kilometres (approximately 3.7 million acres) and is situated approximately 600 kilometres southwest of Morocco's capital Rabat, inshore from the Canary Islands on Morocco's Atlantic Margin. The Block contains multiple prospects and leads within the Jurassic and Cretaceous sediments as well as emerging potential within the Tertiary and Triassic Formations.

The company has recently awarded the 677 km<sup>2</sup> Assaka 3D seismic processing project to CGG Veritas. The processing programme commenced in early June with completion expected in late October.

The Assaka 3D survey encompasses three of the Tarfaya Block's primary prospects, Trident, TMA, and Assaka, which have been independently assessed by ISIS and NSAI to have a combined best estimate unrisks prospective resource of 758 million barrels of oil. The four primary prospects certified thus far by ISIS and NSAI within the Tarfaya Block now all have been covered with 3D seismic. The La Dam prospect with a best estimate unrisks prospective resource of 110 million barrels of oil has previously been covered by a 580 km<sup>2</sup> 3D seismic survey acquired in 2006 and reprocessed in 2011.

The Company continues to focus exploration efforts towards maturing multiple leads identified within the shallower Lower Cretaceous Sands and Upper Jurassic dolomite horizons. Leads have also been identified in the underlying Triassic section as well.

Schlumberger-WesternGeco has completed seismic AVO analysis on selected reprocessed 2D seismic lines through the "flat spot" anomaly identified in the mid Tan-Tan Formation.

Results of the 2D simultaneous inversion work on the lines indicate that there are zones of high porosity and hydrocarbon indicators at two levels within the Cretaceous.

Rock properties utilised for the AVO analysis are to be incorporated into further simulation evaluation of the Cretaceous Sands. The Jurassic carbonates will be examined for AVO anomalies as a continuation of this work within the next quarter.

Once the Cretaceous mapping programme is complete and prospects confirmed they will be submitted to an independent petroleum consultant in order to provide a prospective resource estimate. Attention will then shift to evaluating the potential of the Tertiary and Triassic age sections.

Macquarie Capital (Europe) has been engaged to manage the farm-out process for Tarfaya. The objective is to secure potential farminee partner(s) and thus expedite the Tarfaya Block exploration programme, specifically regarding the commencement of an exploration drilling campaign during 2013.

A physical dataroom was opened in London during the quarter with management presentations provided during June. The potential farminee partner(s) have been provided access to all seismic data, Independent Resource and Competent Person's Reports, and all available well data relating to the Tarfaya Block. Macquarie also serves in the capacity of financial advisor for the project.

#### **WA-442-P (Turtle) and NT/P81 (Barnett) (90% and Operator)**

These two contiguous permits encompass 3900 square kilometres and are located in the southern, shallow Federal waters offshore northern Western Australia and Northern Territory, approximately 320 kilometres southwest of Darwin.

Situated southeast of the producing Blacktip gas field, these two permits offer multiple play types. Tangiers has identified an exciting new deeper gas play concept within the Early Paleozoic interval, outstanding oil plays in the Early Carboniferous Milligans Fans, and the Carboniferous to Permian undeveloped Turtle and Barnett oil fields with the Messner and East Barnett oil leads in the same interval.

The deeper gas play consists of two very large structures, Nova and Super Nova with closures estimated at 450 square kilometres and 550 square kilometres, respectively. These structures are believed to be located within Devonian aged sediments below the mapped Top Bonaparte horizon and underlie the Turtle and Barnett oil fields.

An independent evaluation and CPR prepared by ISIS on the upper portion of the Nova prospect alone provides a mean unrisked gas-in-place estimate of 6.93 trillion cubic feet of gas with an unrisked prospective resource of 3.46 trillion cubic feet of gas.

This new play type for the southern Bonaparte Basin was published in a technical article in the May, 2012 APPEA Journal. A poster session and presentation was also given at the APPEA conference in May.

Significant oil potential has also been identified within the Early-Mid Carboniferous Milligans Fan oil play with 14 leads having been mapped, 8 of which are structural with 6 being a combination structural/stratigraphic in nature. A CPR prepared by ISIS Petroleum Consultants on the Milligans Fan oil play assesses the combined mean unrisked oil-in-place at 683 million barrels with a high side of 1,489 million barrels.

The mean unrisked prospective resources are estimated to be 218 million barrels of oil with an upside case of 505 million barrels of oil. The Milligans interval has been intersected in previous wells within the WA-442-P and NT/P81 Permit Areas with Turtle-2 and Barnett-2 having flowed oil and gas on drill stem tests of the Milligans sands. This serves to confirm the presence of an active petroleum system at this horizon.

The shallower undeveloped Turtle and Barnett oil fields were discovered in 1984 and 1985, respectively. Multiple oil bearing reservoirs have been encountered within the Carboniferous to Permian Keyling, Treachery, Kuriyippi, Tanmurra and Milligans formations. Three zones tested oil within the Barnett-2 well having flowed up to 921 barrels of oil per day on jet pump from the Early Permian Lower Treachery Sandstone. The crude was of excellent quality at 38.6° API gravity. Engineering and reservoir studies have been undertaken to assess suitable development concepts.

ISIS Petroleum Consultants (ISIS) opened a physical data room in Perth during the quarter for the purpose of securing farminee partner(s) to promote expanded future 3D seismic acquisition and exploration drilling programmes within the WA-442-P and NT/P81 Bonaparte Basin Permit Areas, offshore Northern Australia. The primary focus is on the 14 Milligans Fan oil play leads and the Nova and Super Nova deep gas prospects with the secondary focus on the future Turtle Barnett oil development programme. The process has been well received and is expected to be completed in the second half of 2012.

As part of its work commitments and in order to further delineate the prospects and drill targets, Tangiers is proposing to conduct a 3D seismic shoot over its block. The proposed seismic polygon will capture the Nova and Super Nova structures, the majority of the Turtle Barnett field as well as a substantial portion of the Milligans prospects.

Tenders have gone out for seismic acquisition vessels to shoot a ~650 square kilometre survey over the prospect areas. It is anticipated a decision will be made by the end of the third quarter.

An environmental study has commenced in advance of the seismic acquisition over the WA-442-P and NT/P81 permits. This study is anticipated to be completed by the end of the third quarter.

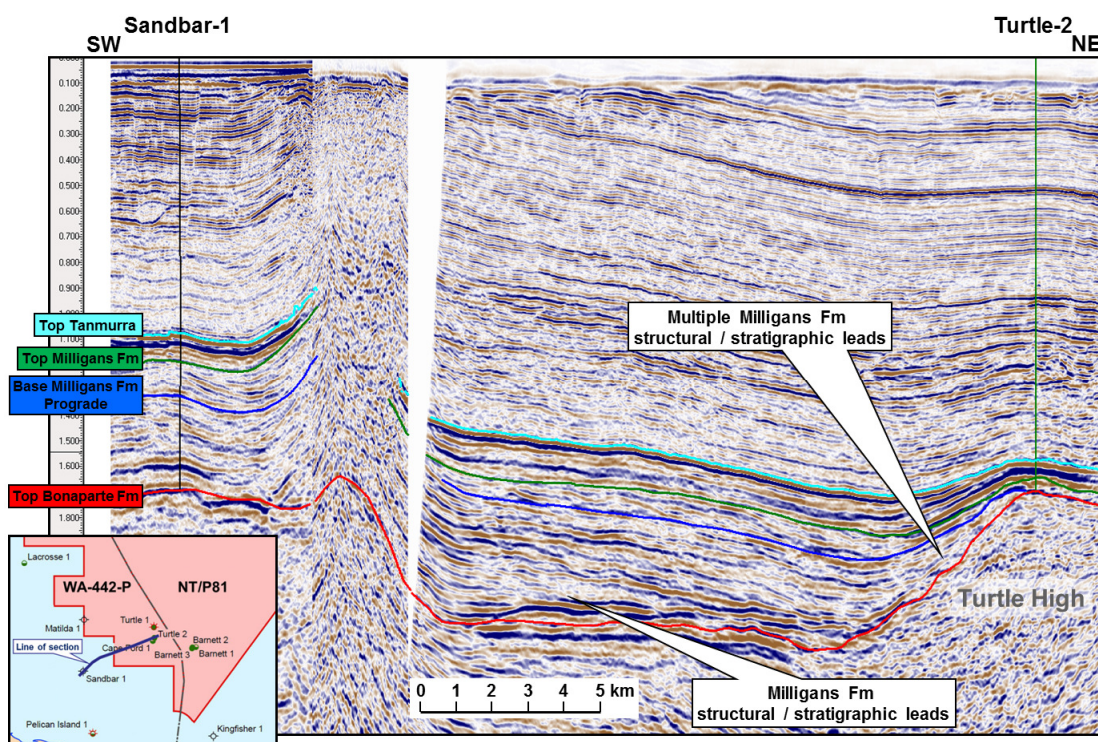


Figure 1 Seismic Line Showing Milligans Formation Play Types

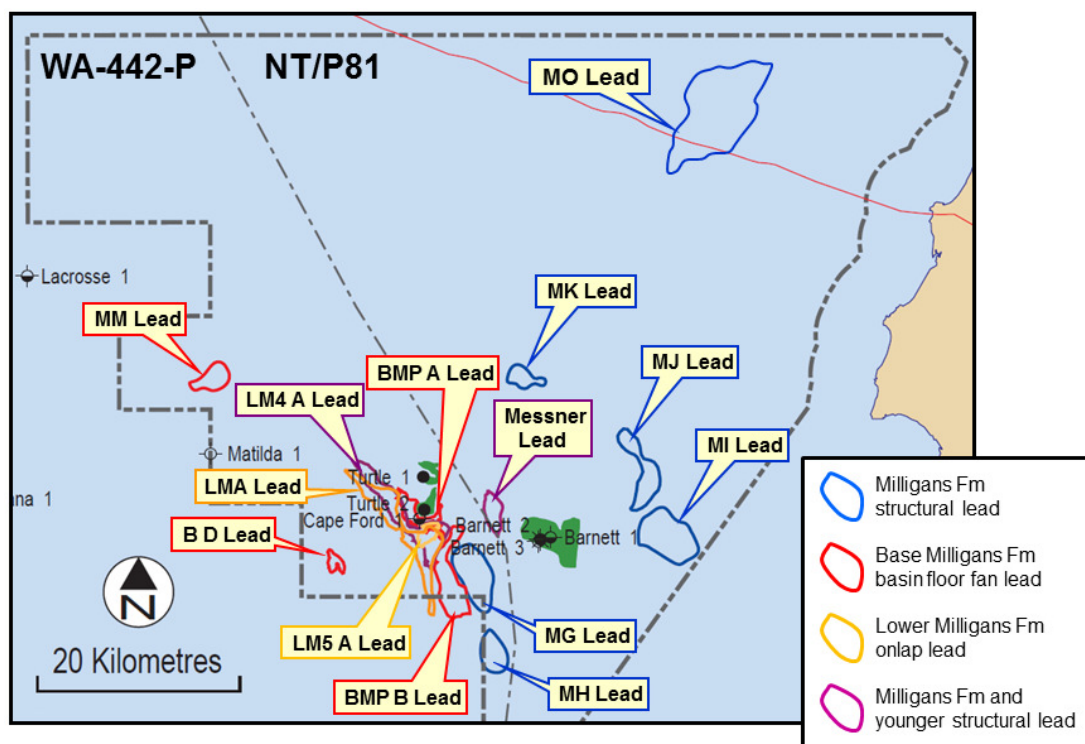


Figure 2 Milligans Formation Leads

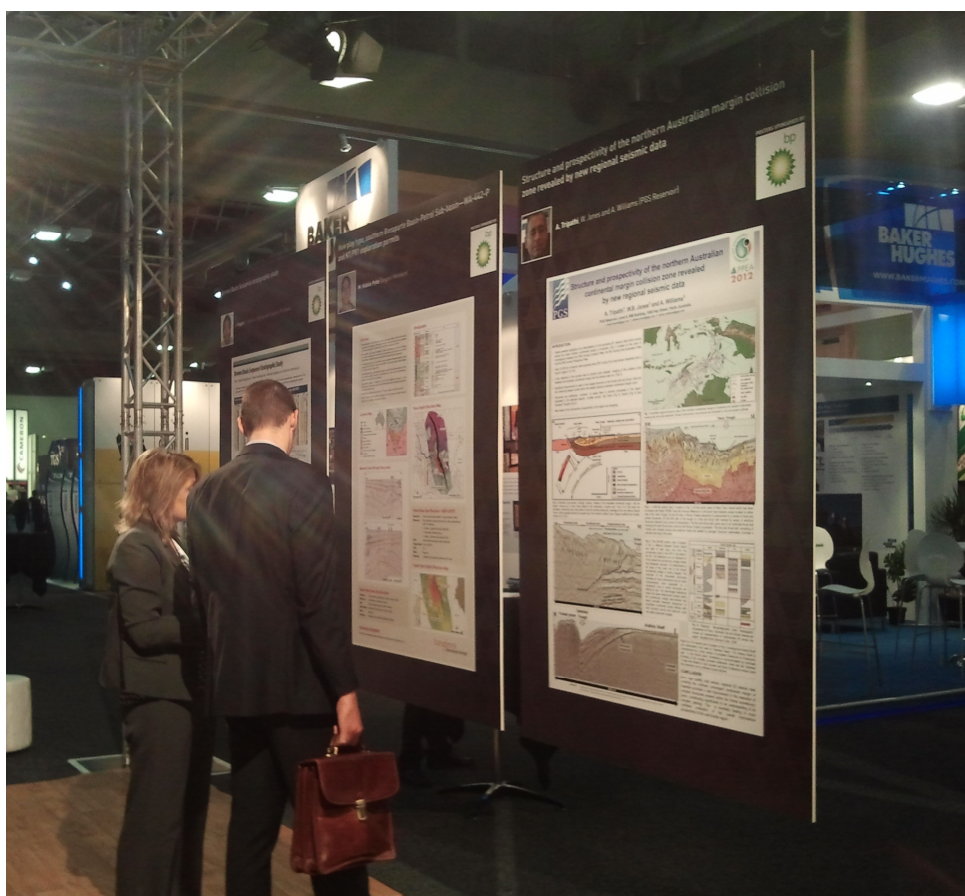
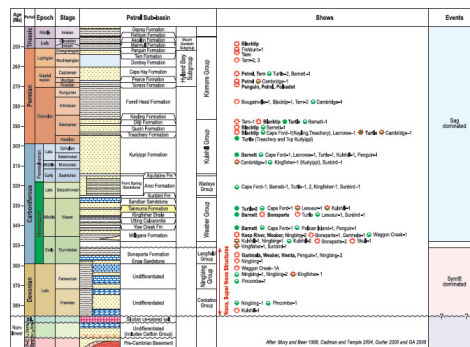


Figure 3 New Play Type Poster, May 2012 APPEA Conference

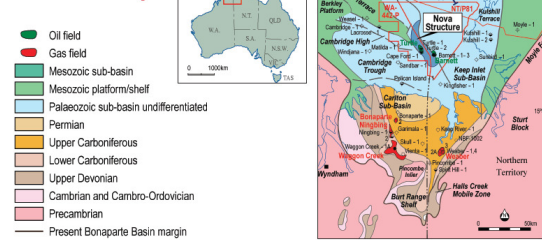
## Overview

- Re-interpretation of archived and recently reprocessed seismic data shows deeper structures with possible hydrocarbon potential underlying existing oil accumulations at Turtle and Barnett in the WA-442-P and NT/P81 Exploration Permits.
- The undrilled structures lie beneath the Early Carboniferous Tanmura Formation and contain sediments of assumed Early Carboniferous and Devonian age. Earlier interpretation indicated these were tilted fault blocks of economic basement.
- The deep gas play type is two nested 3-way dip anticlines developed against a large bounding fault to the NE. Axial trends are NW to SE and axial plane curves towards the NE from Nova to Super Nova.
- There has been both compression and lateral movement along the master fault which may continue south to the Halls Creek mobile zone. There has been incremental reactivation as recently as the Cainozoic.
- Hydrocarbon charge is believed to be from Early Palaeozoic Devonian to Early Carboniferous Larapintine, and Early Carboniferous to Permian transitional Larapintine/Gondwana source rocks.
- Independent estimates place close to 7 TCF gas in place in the Nova structure.
- New 3D seismic data acquisition is planned over the structures to better define the geology and ultimately delineate well locations.

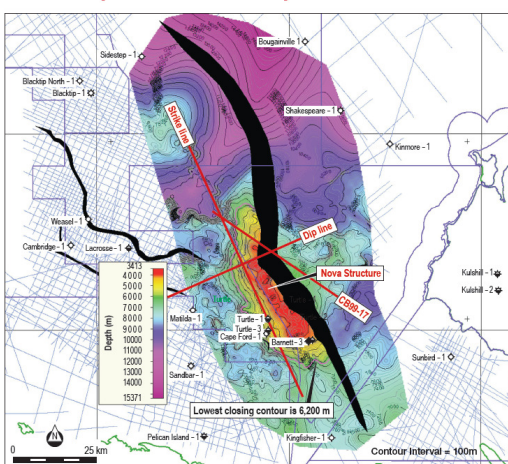
## Stratigraphy



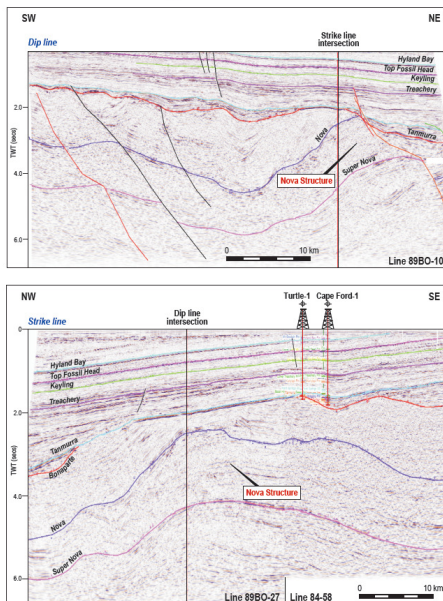
## Location Map



## Nova Depth Structure Map



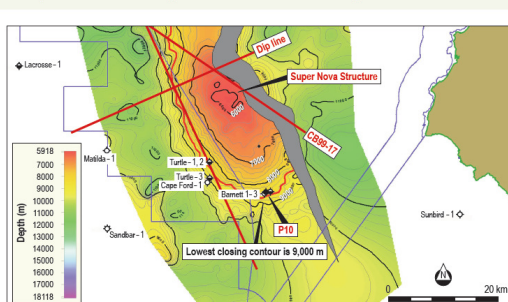
## Seismic Lines through Structures



## Nova Deep Gas Structure – GIIP 6.9TCF

- Structure:** Fault bounded major anticline, 3 way dip closure, 450km<sup>2</sup>
- Reservoir:** Four potential horizons (Late Devonian – Early Carboniferous) within the following:
- Clastics, Langfield Group (eg. Enga Sst.)
  - Carbonates, Ningbing Group
  - Clastics, Cockatoo Group (eg. Cecil Sst.)
- Seal:** Intra-formational shales and tight limestones
- Target Depth:** Crest at 3250m
- POS:** 9%
- Risks:** Reservoir
- Remarks:** Underlies Turtle, Barnett undeveloped Oil Fields

## Super Nova Depth Structure Map



## Super Nova Deep Gas Structure

- Structure:** Fault bounded major anticline, 3 way dip closure, 550km<sup>2</sup>
- Reservoir:** Late Devonian carbonates & clastics
- Seal:** Intra-formational shales and tight limestones
- Target Depth:** Underlies the Nova Prospect, crest at 5918m.
- Risks:** Reservoir
- Remarks:** Underlies Turtle, Barnett undeveloped Oil Fields

## ACKNOWLEDGEMENT

The author acknowledges Tangiers Petroleum Ltd. (Operator) and Ansbachall Pty Ltd.

tangiers petroleum limited

Figure 4 Tangiers Deep Gas Play Type Poster Presentation, APPEA May 2012.

### **ATP-587-P Cooper/Eromanga Basins, Onshore Queensland (100% and Operator)**

ATP-587-P consists of 12 Blocks to the west of the Thomson River between Stonehedge and Jundah southeast of Longreach and covers approximately 946 square kilometres. Geologically the tenement is situated within the Mesozoic Eromanga Basin with the southeast portion of the tenement being underlain by the northeastern edge of the Late Paleozoic-Triassic Cooper Basin. In addition to conventional oil and gas, the area is thought to have potential for coalbed methane gas and oil shale plays.

ATP-587-P is covered by regional seismic with detailed 2D grids over four prospects.

Consistent with prior announcements the company is currently assessing its long term plans for this permit.

## Appendix 5B

### Mining exploration entity quarterly report

Introduced 1/7/96. Origin: Appendix 8. Amended 1/7/97, 1/7/98, 30/9/2001, 01/06/10.

Name of entity

TANGIERS PETROLEUM LIMITED

ABN

80 072 964 179

Quarter ended ("current quarter")

30 June 2012

#### Consolidated statement of cash flows

Cash flows related to operating activities		Current quarter \$A'000	Year to date (6 months) \$A'000
1.1	Receipts from product sales and related debtors	-	-
1.2	Payments for (a) exploration & evaluation	(2,260)	(5,801)
	(b) development	-	-
	(c) production	-	-
	(d) administration	(209)	(688)
1.3	Dividends received	-	-
1.4	Interest and other items of a similar nature received	8	27
1.5	Interest and other costs of finance paid	-	-
1.6	Income taxes paid	-	-
1.7	Other (provide details if material)	151	76
<b>Net Operating Cash Flows</b>		<b>(2,310)</b>	<b>(6,386)</b>
<b>Cash flows related to investing activities</b>			
1.8	Payment for purchases of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	(11)	(12)
1.9	Proceeds from sale of: (a) prospects	-	-
	(b) equity investments	-	-
	(c) other fixed assets	-	-
1.10	Loans to other entities	-	-
1.11	Loans repaid by other entities	-	-
1.12	Other (USD\$1,000,000 bond reclassified as cash)	984	984
<b>Net investing cash flows</b>		<b>973</b>	<b>972</b>
1.13	Total operating and investing cash flows (carried forward)	<b>(1,337)</b>	<b>(5,414)</b>

+ See chapter 19 for defined terms.

## Appendix 5B

### Mining exploration entity quarterly report

1.13	Total operating and investing cash flows (brought forward)	(1,337)	(5,414)
	<b>Cash flows related to financing activities</b>		
1.14	Proceeds from issues of shares, options, etc.	8	5,996
1.15	Proceeds from sale of forfeited shares	-	-
1.16	Proceeds from borrowings	-	-
1.17	Repayment of borrowings	-	-
1.18	Dividends paid	-	-
1.19	Other – capital raising costs	-	(255)
	<b>Net financing cash flows</b>	8	5,741
	<b>Net increase (decrease) in cash held</b>	(1,329)	327
1.20	Cash at beginning of quarter/year to date	3,099	1,452
1.21	Exchange rate adjustments to item 1.20	70	61
1.22	<b>Cash at end of quarter</b>	1,840	1,840

### Payments to directors of the entity and associates of the directors

### Payments to related entities of the entity and associates of the related entities

		Current quarter \$A'000
1.23	Aggregate amount of payments to the parties included in item 1.2	126
1.24	Aggregate amount of loans to the parties included in item 1.10	Nil

### 1.25 Explanation necessary for an understanding of the transactions

All transactions involving Directors and associates were on normal commercial terms.

### Non-cash financing and investing activities

#### 2.1 Details of financing and investing transactions which have had a material effect on consolidated assets and liabilities but did not involve cash flows

Nil

#### 2.2 Details of outlays made by other entities to establish or increase their share in projects in which the reporting entity has an interest

Nil

+ See chapter 19 for defined terms.

### Financing facilities available

*Add notes as necessary for an understanding of the position.*

	Amount available \$A'000	Amount used \$A'000
3.1 Loan facilities	Nil	Nil
3.2 Credit standby arrangements	Nil	Nil

### Estimated cash outflows for next quarter

	\$A'000
4.1 Exploration and evaluation	1,046
4.2 Development	-
4.3 Production	-
4.4 Administration	120
<b>Total</b>	<b>1,166</b>

### Reconciliation of cash

Reconciliation of cash at the end of the quarter (as shown in the consolidated statement of cash flows) to the related items in the accounts is as follows.

	Current quarter \$A'000	Previous quarter \$A'000
5.1 Cash on hand and at bank	643	3,090
5.2 Deposits at call	203	-
5.3 Bank overdraft	-	-
5.4 Other (Moroccan accounts held)	994	9
<b>Total: cash at end of quarter (item 1.22)</b>	<b>1,840</b>	<b>3,099</b>

### Changes in interests in mining tenements

	Tenement reference	Nature of interest (note (2))	Interest at beginning of quarter	Interest at end of quarter
6.1 Interests in mining tenements relinquished, reduced or lapsed	Nil			
6.2 Interests in mining tenements acquired or increased	Nil			

+ See chapter 19 for defined terms.

## Appendix 5B

### Mining exploration entity quarterly report

#### Issued and quoted securities at end of current quarter

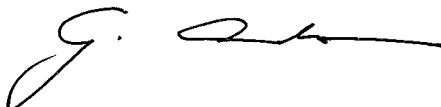
Description includes rate of interest and any redemption or conversion rights together with prices and dates.

		Total number	Number quoted	Issue price per security (see note 3) (cents)	Amount paid up per security (see note 3) (cents)
7.1	<b>Preference securities</b> (description)				
7.2	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs, redemptions				
7.3	<b>+Ordinary securities</b>	100,797,761	100,797,761		Fully paid
7.4	Changes during quarter (a) Increases through issues (b) Decreases through returns of capital, buy-backs	50,000	50,000	16 cents	Fully paid
7.5	<b>+Convertible debt securities</b> (description)				
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	<b>Options</b> (description and conversion factor)	44,149,645 1,000,000 1,000,000 6,000,000 500,000 3,274,124 3,500,000 300,000	44,149,645	Exercise price 16 cents 22 cents 22 cents 60 cents 50 cents 60 cents 70 cents 70 cents	Expiry date 31/10/13 19/7/14 14/12/14 16/12/14 2/4/15 2/4/15 2/4/15 10/4/15
7.8	Issued during quarter	500,000 3,274,124 3,500,000 300,000		50 cents 60 cents 70 cents 70 cents	2/4/15 2/4/15 2/4/15 10/4/15
7.9	Exercised during quarter	50,000	50,000	16 cents	31/10/13
7.10	Expired during quarter				
7.11	<b>Debentures</b> (totals only)				
7.12	<b>Unsecured notes</b> (totals only)				

+ See chapter 19 for defined terms.

## Compliance statement

- 1 This statement has been prepared under accounting policies which comply with accounting standards as defined in the Corporations Act or other standards acceptable to ASX (see note 4).
- 2 This statement does /does not\* (delete one) give a true and fair view of the matters disclosed.



Sign here: .....  
(Joint Company Secretary)

Date: 31 July 2012

Print name: GRAHAM DOUGLAS ANDERSON

## Notes

- 1 The quarterly report provides a basis for informing the market how the entity's activities have been financed for the past quarter and the effect on its cash position. An entity wanting to disclose additional information is encouraged to do so, in a note or notes attached to this report.
- 2 The "Nature of interest" (items 6.1 and 6.2) includes options in respect of interests in mining tenements acquired, exercised or lapsed during the reporting period. If the entity is involved in a joint venture agreement and there are conditions precedent which will change its percentage interest in a mining tenement, it should disclose the change of percentage interest and conditions precedent in the list required for items 6.1 and 6.2.
- 3 **Issued and quoted securities** The issue price and amount paid up is not required in items 7.1 and 7.3 for fully paid securities.
- 4 The definitions in, and provisions of, *AASB 1022: Accounting for Extractive Industries* and *AASB 1026: Statement of Cash Flows* apply to this report.
- 5 **Accounting Standards** ASX will accept, for example, the use of International Accounting Standards for foreign entities. If the standards used do not address a topic, the Australian standard on that topic (if any) must be complied with.

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+ See chapter 19 for defined terms.