



## QUARTERLY REPORT

*for the period ended 30 September 2010*

### HIGHLIGHTS

#### FINANCIAL

- Samson received US\$73.4 million for the sale of approximately 60% of its leasehold in Goshen County, Wyoming.
- Samson has recorded a closing pre-tax cash balance for the quarter of A\$76 million.
- Cash resources now available has enabled Samson to plan the development of its Cretaceous Niobrara and Mississippian Bakken properties and investigate expanding its interest in the Bakken.
- During the quarter the debt facility was reduced by a further A\$0.6 million (current balance is US\$10.7 million) and the cash resources available will enable the Company to be debt free when the debt facility matures in May 2011.
- Cash receipts for the quarter from sales were A\$1.6 million, compared to the prior quarter of A\$1.8 million.

#### OPERATIONAL

- Samson's net production from the North Stockyard Bakken project on September 30<sup>th</sup> was 488 BOEPD. This includes production from both the Bakken and Bluell Formations. The quarterly oil production was lower when compared to the previous quarter due to operational downtime of the Harstad #1-15H. The Gary #1-24H came online on September 23<sup>rd</sup>, 2010 and the increase in oil production from this well will be seen in the following quarter.
- Samson's third North Stockyard Bakken well, the Gary #1-24H well, was completed and put on production September 23<sup>rd</sup> with an extrapolated initial production rate of 2,780 BOEPD. The well's expected production decline is performing above expectations when compared with our other Bakken wells.
- Samson's fourth North Stockyard Bakken well, the Rodney #1-14H, finished drilling in August and is expected to be fractured stimulated in November.
- Samson's fifth North Stockyard Bakken well, the Earl #1-13H, spudded in September and was drilled to total depth with no operational difficulties. The liner has been run in preparation for hydraulic fracturing which is planned for January of 2011.
- The Diamondback prospect is scheduled to spud in Jefferson County, Texas in November.
- Acquisition of Samson's 65 square mile North Platte 3-D seismic survey planned to evaluate the Cretaceous Niobrara play in Goshen County, Wyoming is scheduled to commence November 1st, 2010.

## **DRILLING PROGRAMME 2010**

### **North Dakota – Williston Basin – North Stockyard Project (Williams County) – Mississippian Bakken oil Samson 31% Average Working Interest in 6 sections**

The Gary #1-24H well was fraced in September. Samson has a 37% working interest in this well and is its fourth Bakken well, the Rodney #1-14H, which finished drilling in August and is waiting on completion. The Earl #1-13H well (Samson 32% working interest) spudded in late September. The Harstad #2-15H well will follow the Earl #1-13H well in the drilling program.

### **Wyoming - Northern D-J Basin Hawk Springs Project (Goshen County) – Cretaceous Niobrara oil Samson 50-100% Working Interest in 55,000 acres, net 17,000 acres**

Samson anticipates drilling a new well in the Cretaceous Niobrara Formation in the first quarter of 2011 calendar year following the acquisition, processing, and interpretation of its planned 65 square mile) 3-D seismic survey. The 3-D seismic survey will help identify fracture swarms to enable Samson to properly design its horizontal wells in the correct orientation relative to the fractures. An initial vertical pilot well will also be drilled to help gather scientific information. The Constellation US-20 State #1-36 well was spud at the end of September and 40 feet of conductor casing was run to prevent the lease from expiring. A larger rig will move back to the well site soon to drill the remainder of the well and this will serve as Samson's vertical pilot well to gather the needed scientific information which will include core and extensive logging. This data will be used both in the 3D seismic processing and in the fracture stimulation design.

### **New Mexico – Western Permian Basin (Lea County) – State GC Oil and Gas Field**

#### **Samson 27% Working Interest**

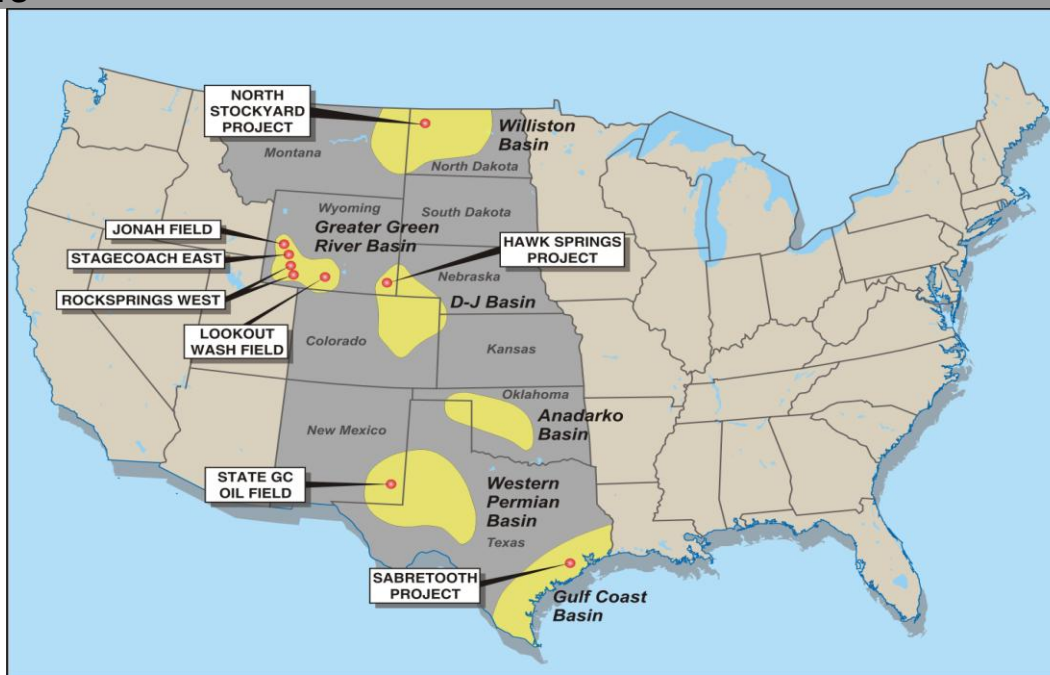
The Permian Bone Spring Formation in State GC#2 well will be fracture-stimulated in the first quarter of 2011.

### **Texas – Onshore Gulf Coast Basin**

#### **Samson 100% Working Interest**

Samson has continued to develop a suite of high quality prospects from non-propriety 2D and 3D data sets following the success in the Davis Bintliff #1 well. The Diamondback prospect will be drilled in November and significant progress is being made in leasing additional prospects in this region.

## PROJECTS



PROJECT LOCATION MAP

### TEXAS – ONSHORE GULF COAST BASIN

#### Sabretooth Project

##### *Samson 12.5% Working Interest*

The Davis Bintliff #1 well's production increased to 4.4 MMcf/D and 54 BOPD for the quarter. Cumulative production to date is approximately 2.22 Bcf and 27,072 STB.

#### Diamondback Prospect

##### *Samson 100% Working Interest*

The Diamondback #1 well is scheduled to spud in November. The well will be located in Jefferson County, Texas approximately 9.5 miles south of the town of Fannett. The well has been permitted to a depth of 8,900 feet to test a bright spot anomaly in the prolific Oligocene Marginulina Frio sand.

### NORTH DAKOTA – WILLISTON BASIN

#### North Stockyard Project

##### *Samson various Working Interests*

Samson has four producing wells and two wells waiting fracture stimulation treatment in this project: These wells are located in Williams County, North Dakota, in Township 154 N Range 99 W.

1. The Harstad #1-15H well (34.5% working interest) averaged 44 BOPD for the quarter from the Mississippian Bluell Formation.
2. The Leonard #1-23H well (10% working interest, 37.5% after non-consent penalty) averaged 74 BOPD and 45 Mcf/D during the quarter. This well was drilled as a horizontal lateral into the highly productive middle member of the Bakken Formation in Williams County, North Dakota. To date, the Leonard #1-23H well has produced approximately 68 MSTB and 78 MMcf.
3. The Gene #1-22H well (30.6% working interest) was completed as a 5,500 foot horizontal well in the middle Bakken Formation. The Gene well has produced at an average daily rate of 222 BOPD and 217 Mcf/D during the quarter and is now being placed on rod pump. The cumulative production to date is approximately 63 MSTB and 75 MMcf in less than three months. This well was completed using 15 frac stages.

4. The Gary #1-24H (37% working interest) finished drilling in mid-June in a record time of 17 days and was completed in September using 20 frac stages. The well has averaged 1068 BOPD and 1197 Mcf/D during its first full week of production and is performing as expected.
5. The Rodney #1-14H (27% working interest) was drilled in August and is currently waiting on completion scheduled to occur in November.
6. Earl #1-13H (32% working interest) well was spudded on September 28<sup>th</sup> and reached a total drilled depth of 17,342 feet on October 17<sup>th</sup>. The 4 inch liner has been run with the necessary down hole equipment to perform a 20 stage hydraulic frac.

The Harstad #2-15H well will be the sixth Bakken well in our acreage and will be the next well in the North Stockyard Project in which Samson has an interest. A spud date has not been set; however it is expected to be drilled in the first quarter of calendar 2011.

In summary Samson's net daily (after royalties) production rate at the end of month of September is set out below: it should be noted that as Gary #1-14H well was bought online in late September the well will experience the normal post- stimulation decline:

| Well           | Net Mcf/D    | Net BOPD     | Net BOED     |
|----------------|--------------|--------------|--------------|
| Harstad #1-15H | 0            | 11.0         | 11.0         |
| Leonard #1-23H | 0            | 4.8          | 4.8          |
| Gene #1-22H    | 158.9        | 59.4         | 85.9         |
| Gary #1-24H    | 412.8        | 317.7        | 386.6        |
| <b>Total</b>   | <b>571.7</b> | <b>392.9</b> | <b>488.3</b> |

#### **NEW MEXICO - WESTERN PERMIAN BASIN**

##### **State GC Oil and Gas Field**

##### ***Samson 27% Working Interest***

The State GC oil and gas field is located in Lea County, New Mexico, and includes two producing wells, which produced at an average rate of 58.1 BOPD and 95 Mcf/D. This rate is expected to be increased after the Permian Bone Spring Formation interval in the State GC#2 well is fracture stimulated in the first quarter of the 2011 calendar year.

#### **WYOMING- GREATER GREEN RIVER BASIN**

##### **Lookout Wash Field**

##### ***Samson 18.2% Working Interest***

The Lookout Wash Field is currently producing from 20 wells and is located in the Washakie Basin, which is also part of the Greater Green River Basin. This field produces principally from a stratigraphic trap of the Cretaceous Almond Bar sandstone. Geologic mapping has suggested that this unit can be developed further as a thick porous reservoir extends to the north of the existing well development. Eight new probable well locations have been determined as a result of this new mapping; however only four are carried on the Ryder Scott reserves report.

Average production during this quarter was down slightly from last quarter at a gross rate of 3.9 MMcf/D.

##### **Jonah Field**

##### ***Samson 21% Working Interest in 240 acres***

The Jonah Field is located in the northern part of the Green River Basin and is one of the largest discoveries in recent decades in continental USA and has produced in excess of 1.0 trillion cubic feet of gas since production commenced in 1992. Development of this field has resulted from the application of advanced fracture stimulation techniques. The field has undergone several iterations of development with some sections of the field currently being developed on a 10 acre well spacing. The current well spacing is around 20 acres.

The field produces from a series of stacked reservoirs within the Cretaceous Mesaverde and Lance Formations. The field is trapped between two faults forming a wedge shaped field.

Average production from the field during this quarter was at a gross rate of 2.2 MMcf/D. The rate is declining in line with the reserve production forecast.

## WYOMING DENVER-JULESBURG (D-J) BASIN

Samson sold a portion of its acreage in the Hawk Springs project for a price of US\$3,275/acre for 24,167 acres to Chesapeake Energy Corporation this quarter. Samson has received US\$73.4 million as of the date of this report. Samson could receive a final payment of approximately US\$0.8 million by November 2010 if Samson is able to cure some title defects.

Samson is conducting a 3-D seismic survey beginning November 1<sup>st</sup> covering approximately 65 square miles in Goshen County, Wyoming. Samson's retained 17,000 net acres will be seismically imaged so that fractures within the Cretaceous Niobrara Formation can be identified so that the proper well path trajectory is designed and drilled. A well trajectory perpendicular to fracturing will produce more hydrocarbons than a well trajectory parallel to the fracturing. The 3-D seismic survey will also help identify conventional-type prospects in the Cretaceous Codell, Muddy, and Dakota sands.

## PRODUCTION

September quarterly net production and estimated net revenue was lower during the quarter due to operational downtime of the Harstad #1-15H and delayed timing of the remaining Bakken wells to come on line. The Gary #1-24H came online on September 23rd, 2010 and the increase in oil production from this well is projected in the following quarter:

|                      | GAS Mcf | GAS A\$ | OIL Bbls | OIL A\$   | TOTAL A\$ |
|----------------------|---------|---------|----------|-----------|-----------|
| June 2010 Quarter *  | 163,710 | 723,551 | 14,493   | 1,119,988 | 1,843,539 |
| September Quarter ** | 161,636 | 659,458 | 11,736   | 921,060   | 1,580,518 |

In some cases revenue is yet to be received and is therefore an estimate

\*Average Exchange Rate for Jun Qtr A\$: US\$ 0.88

\*\* Average Exchange Rate for Sept Qtr A\$: US\$ 0.90

Average commodity prices:

|                        | GAS<br>US\$/Mcf | OIL US\$/Bbl |
|------------------------|-----------------|--------------|
| June 2010 Quarter      | \$3.88          | \$68.00      |
| September 2010 Quarter | \$3.67          | \$70.63      |

## FINANCIAL

### Hedges

#### *Current hedging profile*

The following hedges were in place during the quarter. A\$66,000 was received from Macquarie Bank Limited, as counterparty to the hedges as a result of the CIG and Henry Hub gas prices falling below the put value.

The mark to market value of all of the hedges at the end of the quarter was positive US\$181,631.

**Oil – Ratio Collar priced at West Texas Intermediate**

| Date                | Call/Put | Volume – barrels | Price – \$ per Barrel |
|---------------------|----------|------------------|-----------------------|
| Dec 2009 – Dec 2011 | Put      | 21,431           | 60.00                 |
| Dec 2009 – Dec 2011 | Call     | 21,431           | 102.90                |

**Natural Gas – Ratio Collar priced at Henry Hub**

| Date                | Call/Put | Volume – mmbtu | Price – \$ per MCF |
|---------------------|----------|----------------|--------------------|
| Dec 2009 – Dec 2011 | Put      | 125,149        | 4.75               |
| Dec 2009 – Dec 2011 | Call     | 125,149        | 6.15               |

**Natural Gas – Ratio Collar priced at Colorado Interstate Gas**

| Date                | Call/Put | Volume – mmbtu | Price – \$ per MCF |
|---------------------|----------|----------------|--------------------|
| Dec 2009 – Dec 2011 | Put      | 440,884        | 4.25               |
| Dec 2009 – Dec 2011 | Call     | 440,884        | 5.80               |

**Share Purchase Plan**

The final \$3.328 million proceeds from the share purchase plan were received into the company's bank account after the close of the previous quarter.

**Loan Facility**

During the quarter, the Company repaid US\$600,000 of its outstanding debt facility.

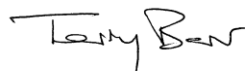
| Date              | US\$ Balance | Spot Rate (A\$:US\$) | A\$ Equivalent |
|-------------------|--------------|----------------------|----------------|
| 30 June 2010      | 11,386,248   | 0.8523               | 13,359,436     |
| 30 September 2010 | 10,786,248   | 0.9667               | 11,157,802     |

The Company's cash and current investments at 30 September 2010 were as follows:

|  |                     |
|--|---------------------|
|  | <b>A\$ ('000's)</b> |
| Cash at bank and on deposit  | : 76,160            |
| Current investments - <i>Shares in a listed company valued at market</i><br><i>(sold during the quarter)</i> | : -                 |
| <b>Total</b>   | <u>76,160</u>       |

For and on behalf of the Board of  
**SAMSON OIL & GAS LIMITED**

For further information please contact  
Denis Rakich, Company Secretary, on 08 9220 9882



**TERRY BARR**  
Managing Director

27 October 2010

*Information contained in this report relating to hydrocarbon reserves was compiled by the Managing Director of Samson Oil & Gas Ltd., T M Barr a Geologist who holds an Associateship in Applied Geology and is a fellow of the Australian Institute of Mining and Metallurgy who has 30 years relevant experience in the oil & gas industry.*

## 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

SAMSON OIL & GAS LIMITED

ABN

25 009 069 005

Quarter ended ("current quarter")

30 September 2010

### Consolidated statement of cash flows

| <b>Cash flows related to operating activities</b> |  | Current quarter<br>\$A'000           | Year to date<br>(three months)<br>\$A'000 |
|---|--|--------------------------------------|---|
| 1.1   | Receipts from product sales and related debtors  | 1,661                                | 1,661                                     |
| 1.2   | Payments for (a) exploration & evaluation<br>(b) development<br>(c) production<br>(d) administration | (764)<br>(4,522)<br>(451)<br>(1,298) | (764)<br>(4,522)<br>(451)<br>(1,298)      |
| 1.3   | Dividends received   | -                                    | -   |
| 1.4   | Interest and other items of a similar nature received  | 38                                   | 38  |
| 1.5   | Interest and other costs of finance paid   | (278)                                | (278)                                     |
| 1.6   | Income taxes paid  | -                                    | -   |
| 1.7   | Other (provide details if material)<br>Cash received from fixed forward gas swap                     | 66                                   | 66  |
| <b>Net Operating Cash Flows</b>                   |  | <b>(5,548)</b>                       | <b>(5,548)</b>                            |
| <b>Cash flows related to investing activities</b> |  |                                      |   |
| 1.8   | Payment for purchases of: (a) prospects<br>(b) equity investments<br>(c) other fixed assets          | -<br>-<br>-                          | -<br>-<br>-                               |
| 1.9   | Proceeds from sale of: (a) prospects<br>(b) equity investments<br>(c) other fixed assets             | 75,218<br>52<br>-                    | 75,218<br>52<br>-                         |
| 1.10  | Loans to other entities  | -                                    | -   |
| 1.11  | Loans repaid by other entities   | -                                    | -   |
| 1.12  | Other (provide details if material)  | -                                    | -   |
| <b>Net investing cash flows</b>                   |  | <b>75,270</b>                        | <b>75,270</b>                             |
| 1.13  | Total operating and investing cash flows (carried forward)   | 69,722                               | 69,722                                    |

|   |  |         |         |
|---|--|---------|---------|
| 1.13  | Total operating and investing cash flows (brought forward) | 69,722  | 69,722  |
| <b>Cash flows related to financing activities</b> |  |         |         |
| 1.14  | Proceeds from issues of shares, options, etc.              | 3,328   | 3,328   |
| 1.15  | Proceeds from sale of forfeited shares                     | -       | -       |
| 1.16  | Proceeds from borrowings                                   | -       | -       |
| 1.17  | Repayment of borrowings                                    | (663)   | (663)   |
| 1.18  | Dividends paid   | -       | -       |
| 1.19  | Other (provide details if material)                        | (267)   | (267)   |
| <b>Net financing cash flows</b>                   |  | 2,398   | 2,398   |
| <b>Net increase (decrease) in cash held</b>       |  | 72,120  | 72,120  |
| 1.20  | Cash at beginning of quarter/year to date                  | 6,906   | 6,906   |
| 1.21  | Exchange rate adjustments to item 1.20                     | (2,866) | (2,866) |
| 1.22  | <b>Cash at end of quarter</b>                              | 76,160  | 76,160  |

**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<br>\$A'000 |
|------|--|----------------------------|
| 1.23 | Aggregate amount of payments to the parties included in item 1.2 | 65                         |
| 1.24 | Aggregate amount of loans to the parties included in item 1.10   | -                          |

1.25 Explanation necessary for an understanding of the transactions

Monies paid to directors for salary and fees.

**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

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|  |
|--|

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

|  |
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|  |
|--|



Add notes as necessary for an understanding of the position.

|                                 | Amount available<br>\$A'000 | Amount used<br>\$A'000 |
|---------------------------------|-----------------------------|------------------------|
| 3.1 Loan facilities             | 11,157                      | 11,157                 |
| 3.2 Credit standby arrangements | -                           | -                      |

**Estimated cash outflows for next quarter**

|                                | \$A'000      |
|--------------------------------|--------------|
| 4.1 Exploration and evaluation | 4,200        |
| 4.2 Development                | -            |
| 4.3 Production                 | 404          |
| 4.4 Administration             | 1,188        |
| <b>Total</b>                   | <b>5,792</b> |

*Reconciliation of cash*

| Reconciliation of cash at the end of the quarter<br>(as shown in the consolidated statement of cash<br>flows) to the related items in the accounts is as<br>follows. | Current quarter<br>\$A'000 | Previous quarter<br>\$A'000 |
|--|----------------------------|-----------------------------|
| 5.1 Cash on hand and at bank   | 70,497                     | 1,181                       |
| 5.2 Deposits at call   | 5,663                      | 5,725                       |
| 5.3 Bank overdraft   | -                          | -                           |
| 5.4 Other (provide details)  | -                          | -                           |
| <b>Total: cash at end of quarter (item 1.22)</b>   | <b>76,160</b>              | <b>6,906</b>                |

**Changes in interests in mining tenements**

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

**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</b>  |               |               |   |  |
| <b>+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>                                  | 1,663,929,592 | 1,663,295,592 |   |  |
| 7.4 Changes during quarter                                       | 223,520,005   | 223,520,005   |   |  |
| (a) Increases through issues                                     |               |               |   |  |
| (b) Decreases through returns of capital, buy-backs              |               |               |   |  |
| 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>   |               |               | <i>Exercise price</i>                         | <i>Expiry date</i>                               |
| (description and conversion factor)                              | 6,500,000     | -             | 45c   | 31.05.2011                                       |
|  | 5,379,077     | -             | 30c   | 10.10.2012                                       |
|  | 2,000,000     | -             | 25c   | 11.05.2013                                       |
|  | 332,081,205   | -             | 1.5c  | 31.12.2012                                       |
|  | 1,000,000     | -             | 20  | 20.11.2013                                       |
| 7.8 Issued during quarter  |               |               |   |  |
| 7.9 Exercised during quarter                                     | 2,525,104     | -             | 1.5c  | 31.12.2012                                       |
| 7.10 Expired during quarter                                      |               |               |   |  |

|      |   |  |  |
|------|---|--|--|
| 7.11 | <b>Debentures</b><br><i>(totals only)</i>   |  |  |
| 7.12 | <b>Unsecured notes</b> <i>(totals only)</i> |  |  |

*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: ..... Date: 27 October 2010  
(Director/Company secretary)

Print name: Denis Rakich

**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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