



## QUARTERLY REPORT *for the period ended 31 March 2010*

### HIGHLIGHTS

#### FINANCIAL

- Additional A\$1.5 million raised following the successful rights issue in the last quarter.
- Reduction in borrowings of A\$664,000.
- Revenue from gas sales increased 23%, from the prior quarter to A\$944,021 whilst revenue from oil sales increased 10% to A\$490,445 in the current quarter.
- Cash receipts from sales of A\$1.1 million for the quarter.

#### OPERATIONAL

- Gene 1-22H well in Williams Co., North Dakota was drilled in January 2010. It was fracture-stimulated with an initial rate of 2,936 boepd.
- The Gary 1-24H well scheduled to follow in mid May.
- Ripsaw #1 well was drilled and abandoned in Grimes County, Texas. The targeted seismic amplitude was caused by hydrocarbon-stained lignitic shale and not the anticipated gas-filled channel sandstone.
- Leasing continues to proceed on the Diamondback prospect in Texas.
- 320-acre spacing units were approved by the Wyoming Oil & Gas Commission for the London Flats #1-29H and the #2-29H Niobrara wells. The project has attracted considerable interest from industry looking to farm-in to Samson's acreage with an initial offer having been received that values the acre holding at a significant premium to book value.
- State GC-#2 well re-completed in the Bone Spring Formation and waiting for a fracture-stimulation treatment.

### DRILLING PROGRAMME 2010

#### North Dakota – Williston Basin

##### **Samson 31% Average Working Interest in 6 sections**

The Gene 1-22H well, a 17060' measured depth Bakken test, finished drilling in February 2010. The follow-up well, the Gary 1-24H, is Samson's third Bakken well in the North Stockyard Project area and will be drilled following a successful completion on the Gene well. Zavanna LLC (the operator) has issued an AFE in the gross amount of \$6.2M for the drilling and completion of the Gary 1-24H well. Samson will have a 37% working interest in the Gary well. It is anticipated that the Gary 1-24H well will be drilled mid-May.

#### Wyoming - Northern D-J Basin (Goshen County)

##### **Samson 50-100% Working Interest in ~54,000 acres**

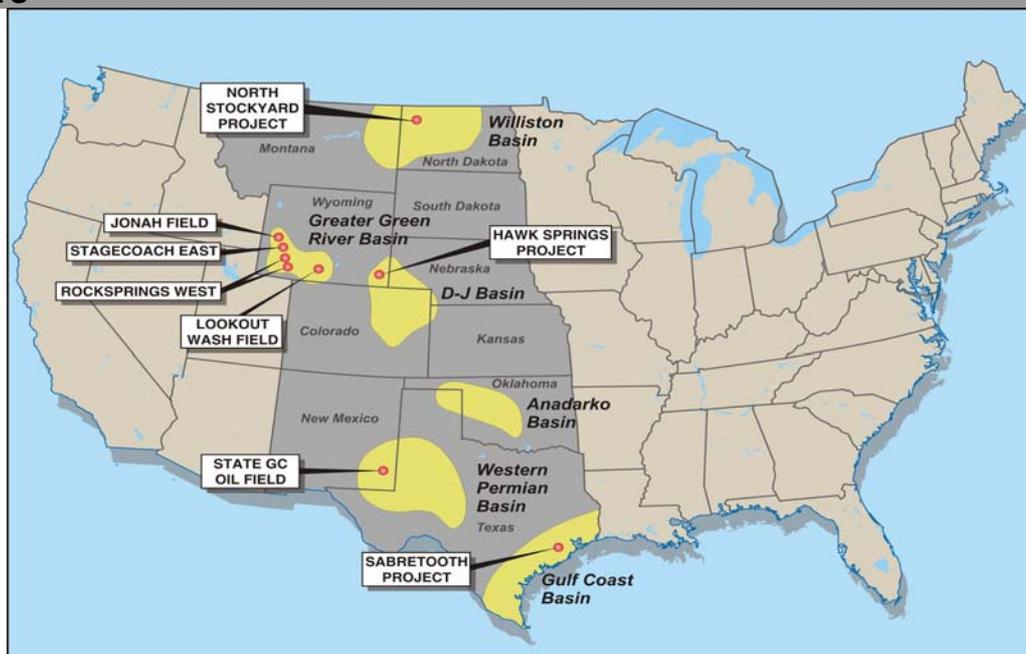
A recompletion/re-entry into the London Flats 1-29H well in Goshen County will test the oil production potential of the Niobrara Formation in the northern D-J Basin this summer. A successful well in the project could lead to the drilling of more than a hundred wells on Samson's acreage.

## 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 is due to be drilled in October 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 4.1 Mmcfg/d and 48 bopd for the quarter. Cumulative production to date is approximately 1.5 bcf and 18,000 bo.

## NORTH DAKOTA – WILLISTON BASIN

### **North Stockyard Project**

#### **Samson various Working Interests**

Samson has three producing wells 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 (WI 34.5%), averaged 40 bopd and 25 mcfg/d for the quarter from the Bluell Formation;
2. The Leonard #1-23H well, a 10% working interest (37.5% after non-consent penalty), averaged 133 bopd and 202 mcfg/d for 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 54,000 bo and 66,000 mcfg.
3. The Gene #1-24H well (30.6% working interest) was completed as a 5,500 foot horizontal well in the middle Bakken Formation. The initial flow back results pointed to a sand plug having developed within the well bore. This conclusion came from the observation that the Easter Sunday rate of 1,112 BOEPD rate from the toe end of the well was not surpassed when the balance of the frac job had been completed. In order to rectify this situation a work over rig was brought in, and using a snubbing unit, the frac plugs were drilled and residual frac sand was removed. An immediate large

pressure response was observed when a plug near the heel of the well was drilled, indicating the existence of this blockage. The incidence of sand plugs occurring in these frac jobs is not an unusual occurrence as the residual frac sand drops out of the flow stream as the stream flows through the limited diameter frac plug. In the eight hour period following the completion of the clean out operation the well flowed at an average rate of 2,406 BOPD and 3,180 MSCFD for a combined rate of 2,936 BOEPD. At the end of the flow back period and when the well was flowing into the production system on March 24<sup>th</sup> the oil rate was 894 BOPD and the gas rate was 950 MCFD for a combined rate of 1052 BOEPD. The decline from the initial rate is a characteristic of fracture stimulated wells where the initial 12 months decline is approximately 75%. In addition to this decline the Gene well is being choked back to restrict the flow rate so that the gas handling facilities can process the produced gas.

4. Gary #1-24H (37% working interest) Following the success of the Gene #1-22H, Samson will have a 37% working interest in the Gary #1-24H which is located in the section immediately to the east of the Leonard #1-23H and two sections to the east of the Gene #1-22H well. The Gary #1-24H is expected to spud in around mid to late May, the precise timing is dependent on the progress that is made on the prior well. The engineering design of the Gary well follows that deployed in the Gene well. The Gary well is currently classified as a Proved Undeveloped location by the Company's independent reserve engineers.

Samson has four additional sections for development in the Bakken (with an average working interest of 30%).

## **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 51 bopd and 83 mcf/d during the quarter. This rate is expected to be increased after the newly perforated Bone Spring Formation interval in the State GC#2 well is fracture stimulated,

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

The Greater Green River Basin in Wyoming hosts a number of world class gas fields and has grown in importance as a major gas producing region within continental USA. Samson holds a significant tenure position in the Basin both in terms of conventional low permeability gas reservoirs and an emerging shale gas play located within the Upper Cretaceous Baxter Shale. The low gas prices that have been experienced in this region have generally meant that development activity has been curtailed, until such time as gas prices return to more reasonable levels.

### **Rock Springs West Project**

Samson currently holds 13,432 acres in an area west of the town of Rock Springs. Within this acreage holding there are several discreet sub-projects: the most active currently is in the Rubicon and the Greens Canyon areas.

#### **Rubicon**

##### ***Samson 25% Working Interest***

In the Rubicon area Samson holds 6,400 acres with Devon Energy. The Rubicon 3-D seismic data, which was acquired by Samson by a free carry in exchange for half of Samson's equity in the leases, was delivered to Samson at the end of September. Interpretation of the data has been completed and a few prospects have being identified.

Samson's leases are located on the western flank of the Vermillion Basin in Sweetwater County, Wyoming. This area contains a 3,500 foot section of Upper Cretaceous Baxter Shale which was drilled in the 1970's and recovered a significant flow of gas from an un-stimulated Baxter Shale.

### **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. Recent geologic mapping has suggested that this unit can be developed further as a thick porous reservoir extending to the north of the existing well development. Eight new probable well locations have been determined as a result of this new mapping.

Average production during the quarter was up slightly at a gross rate of 4.8 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 the quarter was at a gross rate of 2.51 Mmcf/d. This was slightly lower than the previous quarter because a new compressor was installed between March 9<sup>th</sup> and the 21<sup>st</sup> which ceased production for 12 days. The new compressor will have a lower suction pressure that should deliver a higher stabilized production rate.

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

Samson holds a significant land position (40,838 net acres) in the Denver-Julesburg Basin (DJ Basin) and drilled the London Flats well in 2006. This well was originally drilled horizontally into the Upper Cretaceous Niobrara Formation, and the testing of this zone was inconclusive and temporarily abandoned to test an up-hole show in the Sharon Springs Formation. The Sharon Springs tested at sub-economic rates of 12 bopd from a set of natural fractures and the well was shut in. A recent reinvestigation into this well, along with new wellbore completion technology, shows that the original Niobrara Formation target, if fracture stimulated, may have the potential to produce at significant oil rates.

One of the industry leaders in the development of the Bakken Shale in the Williston Basin, North Dakota has taken a large land position in the region and has permitted nine new wells located 2 townships south of Samson's leases to test the Niobrara Formation. This same company recently drilled a Niobrara well on the Wyoming-Colorado border and reported an initial production rate of 1,700 bopd.

Samson is currently marketing a portion of its interest in this project, and the level of interest has been significant and an initial offer has been received which Samson is currently considering.

## PRODUCTION

March Quarterly Production and Estimated Revenue compared to the previous quarter:

	GAS Mcf	GAS A\$	OIL Bbls	OIL A\$	TOTAL A\$
December 2009 Quarter*	169,177	769,866	5,493	443,758	1,213,623
March 2010 Quarter **	165,811	944,021	6,231	490,445	1,434,465

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

\*Average Exchange Rate for Dec Qtr A\$: US\$ 0.91

\*\* Average Exchange Rate for Mar Qtr A\$: US\$ 0.91

Average commodity prices:

	GAS US\$/Mcf	OIL US\$/Bbl
December 2009 Quarter	\$4.19	\$73.50
March 2010 Quarter	\$5.18	\$71.63

## FINANCIAL

### Capital Raising

In conjunction with the renounceable rights issue detailed in the previous quarter, the Company raised an additional \$1.5million through issuing 124,999,995 fully paid ordinary shares at an issue price of A\$0.012 per share. These funds have been used to pay the costs associated with the raising and for near term exploration projects.

### Hedges

#### Current hedging profile

The following hedges were in place during the quarter. No cash was received or paid out in relation to these hedges as the commodity prices for January, February and March 2010 all fell between the designated collar prices.

#### 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

**Loan Facility**

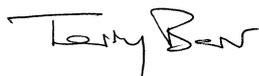
During September and October, the Company completed a successful rights offering, raising A\$ 10.946 million. Approximately A\$4.8 million was used to repay a portion of the loan facility outstanding with Macquarie Bank Limited. This rights offering and debt repayment have put the Company back in compliance with the loan facility.

Date	US\$ Balance	Spot Rate (A\$:US\$)	A\$ Equivalent
31 December 2009	12,586,248	0.8931	14,092,764
31 March 2010	11,986,248	0.9195	13,035,615

The Company's cash and current investments at 31 March 2010 were as follows:

	A\$ ('000's)
Cash at bank and on deposit	: 3,289
Current investments - <i>Shares in a listed company valued at market</i>	: 42
<b>Total</b>	<b><u>3,331</u></b>

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



**TERRY BARR**  
 Managing Director

28 April 2010

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

*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.

Name of entity

Samson Oil & Gas Limited

ABN

25 009 069 005

Quarter ended ("current quarter")

31 March 2010

#### Consolidated statement of cash flows

	Current quarter A\$ \$'000	Year to date (nine months) A\$ \$'000
<b>Cash flows related to operating activities</b>		
1.1 Receipts from product sales and related debtors	1,160	3,301
1.2 Payments for (a) exploration and evaluation	(230)	(860)
(b) development	(1,624)	(1,686)
(c) production	(505)	(1,211)
(d) administration	(700)	(2,445)
1.3 Dividends received	-	-
1.4 Interest and other items of a similar nature received	2	8
1.5 Interest and other costs of finance paid	(311)	(1,170)
1.6 Income taxes paid	-	-
1.7 Other (provide details if material)	(41)	(80)
Cash received from fixed forward gas swap	-	39
	(2,167)	(4,104)
<b>Net Operating Cash Flows</b>		
<b>Cash flows related to investing activities</b>		
1.8 Payment for purchases of: (a)prospects	-	-
(b)equity investments	-	-
(c) other fixed assets	-	(2)
1.9 Proceeds from sale of: (a)prospects	-	-
(b)equity investments	-	75
(c)other fixed assets	-	-
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>		
	-	73
1.13 Total operating and investing cash flows (carried forward)	(2,167)	(1,864)
1.13 Total operating and investing cash flows (brought forward)	(2,167)	(1,864)
<b>Cash flows related to financing activities</b>		
1.14 Proceeds from issues of shares, options, etc.	1,509	12,551
1.15 Proceeds from sale of forfeited shares	-	-
1.16 Proceeds from borrowings	-	-
1.17 Repayment of borrowings	(664)	(5,463)
1.18 Dividends paid	-	-
1.19 Other (costs associated with issue of shares)	(97)	(1,258)
	748	5,830
<b>Net financing cash flows</b>		

	<b>Net increase (decrease) in cash held</b>	(1,419)	1,799
1.20	Cash at beginning of quarter/year to date	4,764	1,891
1.21	Exchange rate adjustments to item 1.20	(56)	(401)
1.22	<b>Cash at end of quarter</b>	<b>3,289</b>	<b>3,289</b>

**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	40
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

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

**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	13,035	13,035
3.2	Credit standby arrangements	-	-

Loan from Macquarie Bank Limited denominated in US\$

**Estimated cash outflows for next quarter**

		A\$ \$'000
4.1	Exploration and evaluation	600
4.2	Development	2,294
	<b>Total</b>	<b>2,894</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	3,289	4,764
5.2	Deposits at call	-	-

5.3	Bank overdraft	-	-
5.4	Other (provide details)	-	-
<b>Total: cash at end of quarter (item 1.22)</b>		3,289	4,764

#### 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			
6.2	Interests in mining tenements acquired or 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>			
	<i>(description)</i>			
7.2	Changes during quarter			
	(a) Increases through issues			
	(b) Decreases through returns of capital, buy-backs, redemptions			
7.3	<b>*Ordinary securities</b>	1,295,194,853	1,295,194,853	
7.4	Changes during quarter	125,639,515	125,639,515	
	(a) Increases through issues			
	(b) Decreases through returns of capital, buy-backs			

7.5	<b>*Convertible debt securities</b> <i>(description)</i>				
7.6	Changes during quarter (a) Increases through issues (b) Decreases through securities matured, converted				
7.7	<b>Options</b> <i>(description and conversion factor)</i>			<i>Exercise price</i>	<i>Expiry date</i>
		6,500,000	-	45c	31.05.2011
		5,379,077	-	30c	10.10.2012
		1,200,000	-	25c	11.05.2013
		356,291,631	-	1.5c	31.12.2012
			-		
			-		
			-		
7.8	Issued/vested during quarter	12,500,007	-	1.5c	31.12.2012
7.9	Exercised during quarter	639,517	-	1.5c	31.12.2012
7.10	Expired during quarter	10,216,688	-	25c	31.12.2009
7.11	<b>Debentures</b> <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 give a true and fair view of the matters disclosed.



Sign here: ..... Date: 28 April 2010  
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.