

# MANAGEMENT'S DISCUSSION & ANALYSIS

# Management's Discussion & Analysis

## FORWARD LOOKING STATEMENTS

THIS MDA OF FINANCIAL CONDITIONS AND RESULTS OF OPERATIONS SHOULD BE READ IN CONJUNCTION WITH THE AUDITED FINANCIAL STATEMENTS AND NOTES THERETO FOR YEAR ENDED 31 DECEMBER 2008. THIS MDA IS BASED ON THE INFORMATION AVAILABLE ON 28 April 2009.

CERTAIN STATEMENTS IN THIS MD&A INCLUDING (I) STATEMENTS THAT MAY CONTAIN WORDS SUCH AS "ANTICIPATE", "COULD", "EXPECT", "SEEK", "MAY", "INTEND", "WILL", "BELIEVE", "SHOULD", "PROJECT", "FORECAST", "PLAN" AND SIMILAR EXPRESSIONS, INCLUDING THE NEGATIVES THEREOF, (II) STATEMENTS THAT ARE BASED ON CURRENT EXPECTATIONS AND ESTIMATES ABOUT THE MARKETS IN WHICH ORCA OPERATES AND (III) STATEMENTS OF BELIEF, INTENTIONS AND EXPECTATIONS ABOUT DEVELOPMENTS, RESULTS AND EVENTS THAT WILL OR MAY OCCUR IN THE FUTURE, CONSTITUTE "FORWARD-LOOKING STATEMENTS" AND ARE BASED ON CERTAIN ASSUMPTIONS AND ANALYSIS MADE BY ORCA. FORWARD-LOOKING STATEMENTS IN THIS MD&A INCLUDE, BUT ARE NOT LIMITED TO, STATEMENTS WITH RESPECT TO FUTURE CAPITAL EXPENDITURES, INCLUDING THE AMOUNT, NATURE AND TIMING THEREOF; NATURAL GAS PRICES AND DEMAND.

SUCH FORWARD-LOOKING STATEMENTS ARE SUBJECT TO IMPORTANT RISKS AND UNCERTAINTIES, WHICH ARE DIFFICULT TO PREDICT AND THAT MAY AFFECT ORCA'S OPERATIONS, INCLUDING, BUT NOT LIMITED TO: THE IMPACT OF GENERAL ECONOMIC CONDITIONS IN TANZANIA AND CANADA; INDUSTRY CONDITIONS, INCLUDING THE ADOPTION OF NEW ENVIRONMENTAL, SAFETY AND OTHER LAWS AND REGULATIONS AND CHANGES IN HOW THEY ARE INTERPRETED AND ENFORCED; VOLATILITY OF NATURAL GAS PRICES; NATURAL GAS PRODUCT SUPPLY AND DEMAND; RISKS INHERENT IN ORCA'S ABILITY TO GENERATE SUFFICIENT CASH FLOW FROM OPERATIONS TO MEET ITS CURRENT AND FUTURE OBLIGATIONS; INCREASED COMPETITION; THE FLUCTUATION IN FOREIGN EXCHANGE OR INTEREST RATES; STOCK MARKET VOLATILITY; AND OTHER FACTORS, MANY OF WHICH ARE BEYOND THE CONTROL OF THE ORCA.

ORCA'S ACTUAL RESULTS, PERFORMANCE OR ACHIEVEMENTS COULD DIFFER MATERIALLY FROM THOSE EXPRESSED IN, OR IMPLIED BY, THESE FORWARD-LOOKING STATEMENTS AND, ACCORDINGLY, NO ASSURANCE CAN BE GIVEN THAT ANY OF THE EVENTS ANTICIPATED BY THE FORWARD-LOOKING STATEMENTS WILL TRANSPIRE OR OCCUR, OR IF ANY OF THEM DO TRANSPIRE OR OCCUR, WHAT BENEFITS ORCA WILL DERIVE THEREFROM. SUBJECT TO APPLICABLE LAW, ORCA DISCLAIMS ANY INTENTION OR OBLIGATION TO UPDATE OR REVISE ANY FORWARD-LOOKING STATEMENTS, WHETHER AS A RESULT OF NEW INFORMATION, FUTURE EVENTS OR OTHERWISE. ALL FORWARD-LOOKING STATEMENTS CONTAINED IN THIS DOCUMENT ARE EXPRESSLY QUALIFIED BY THIS CAUTIONARY STATEMENT.

## NON-GAAP MEASURES

THE COMPANY EVALUATES ITS PERFORMANCE BASED ON PROFIT AND FUNDS FLOW FROM OPERATING ACTIVITIES. FUNDS FLOW FROM OPERATING ACTIVITIES IS A NON-GAAP (GENERALLY ACCEPTED ACCOUNTING PRINCIPLES) TERM THAT REPRESENTS CASH FLOW FROM OPERATIONS BEFORE WORKING CAPITAL ADJUSTMENTS. IT IS A KEY MEASURE AS IT DEMONSTRATES THE COMPANY'S ABILITY TO GENERATE CASH NECESSARY TO ACHIEVE GROWTH THROUGH CAPITAL INVESTMENTS. ORCA EXPLORATION ALSO ASSESSES ITS PERFORMANCE UTILIZING OPERATING NETBACKS. OPERATING NETBACKS REPRESENT THE PROFIT MARGIN ASSOCIATED WITH THE PRODUCTION AND SALE OF ADDITIONAL GAS AND IS CALCULATED AS REVENUES LESS RINGMAIN TARIFF, GOVERNMENT PARASTATAL'S REVENUE SHARE, OPERATING AND DISTRIBUTION COSTS FOR ONE THOUSAND STANDARD CUBIC FEET OF ADDITIONAL GAS. THIS IS A KEY MEASURE AS IT DEMONSTRATES THE PROFIT GENERATED FROM EACH UNIT OF PRODUCTION, AND IS WIDELY USED BY THE INVESTMENT COMMUNITY. THESE NON-GAAP MEASURES ARE NOT STANDARDISED AND THEREFORE MAY NOT BE COMPARABLE TO SIMILAR MEASUREMENTS OF OTHER ENTITIES.

ADDITIONAL INFORMATION REGARDING ORCA EXPLORATION GROUP INC IS AVAILABLE UNDER THE COMPANY'S PROFILE ON SEDAR AT [www.sedar.com](http://www.sedar.com).

## BACKGROUND

Orca Exploration's principal operating asset is its interest in a Production Sharing Agreement ("PSA") with the Tanzania Petroleum Development Corporation ("TPDC") in Tanzania. This PSA covers the production and marketing of certain gas from the Songo Songo gas field.

The gas in the Songo Songo field is divided between Protected Gas and Additional Gas. The Protected Gas is owned by TPDC and is sold under a 20-year gas agreement to Songas Limited ("Songas"). Songas is the owner of the infrastructure that enables the gas to be delivered to Dar es Salaam, namely a gas processing plant on Songo Songo Island, 232 kilometers of pipeline to Dar es Salaam and a 16 kilometer spur to the Wazo Hill Cement Plant.

Songas utilizes the Protected Gas (maximum 45.1 MMscfd) as feedstock for its gas turbine electricity generators at Ubungo, for onward sale to the Wazo Hill cement plant and for electrification of some villages along the pipeline route. Orca Exploration receives no revenue for the Protected Gas delivered to Songas and operates the field and gas processing plant on a 'no gain no loss' basis.

Orca Exploration has the right to produce and market all gas in the Songo Songo field in excess of the Protected Gas requirements ("Additional Gas").

### Principal terms of the PSA and related agreements

The principal terms of the Songo Songo PSA and related agreements are as follows:

#### Obligations and restrictions

- (a) The Company has the right to conduct petroleum operations, market and sell all Additional Gas produced and share the net revenue with TPDC for a term of 25 years expiring in October 2026.
- (b) The PSA covers the two licenses in which the Songo Songo field is located ("Discovery Blocks").

The Proven Section is essentially the area covered by the Songo Songo field within the Discovery Blocks.

- (c) No sales of Additional Gas may be made from the Discovery Blocks if in Orca Exploration's reasonable judgment such sales would jeopardise the supply of Protected Gas. Any Additional Gas contracts entered into are subject to interruption. Songas has the right to request that the Company and TPDC obtain security reasonably acceptable to Songas prior to making any sales of Additional Gas from the Discovery Block to secure the Company's and TPDC's obligations in respect of Insufficiency (see (e) below).

In June 2008, the Company initialled two long term power contracts with TANESCO, the owner of the Ubungo power plant, Songas Limited and the Ministry of Energy and Minerals for the supply of approximately 30 - 45 MMscfd for power generation. The first of the contracts [Amended and Restated Gas Agreement ("ARGA")] covers the supply of gas to the sixth turbine at the Ubungo power plant and provides for a maximum of approximately 9 MMscfd until July 2024. The second initialled contract [Portfolio Gas Sales Agreement ("PGSA")] covers the supply of Additional Gas sales to a portfolio of gas fired generation in Tanzania.

The ARGA provides clarification of the Protected Gas volumes and removes all terms dealing with the security of the Protected Gas and the consequences of any insufficiency to a new Insufficiency Agreement ("IA"). The IA specifies terms under which Songas may demand cash security in order to keep them whole in the event of a Protected Gas insufficiency. Once the IA is signed, it will govern the basis for determining security. Under the provisional terms of the IA, when it is calculated that funding is required, the Company shall fund an escrow account at a rate of US\$2/Mmbtu on all industrial Additional Gas sales out of its and TPDC share of revenue and TANESCO shall contribute the same amount on Additional Gas sales to the power sector. The funds provide security for Songas in the event of an insufficiency of Protected Gas. The Company is actively monitoring the reservoir and does not anticipate that a liability will occur in this respect.

- (d) By 31 July 2009, the Government of Tanzania ("GoT") can request Orca Exploration to sell 100 Bcf of Additional Gas for the generation of electricity over a period of 20 years from the start of its commercial use, subject to a maximum of 6 Bcf per annum or 20 MMscfd ("Reserved Gas"). In the event that the GoT does not nominate by 31 July 2009, or consumption of the Reserved Gas has not commenced within three years of the nomination date, then the reservation shall terminate. Where Reserved Gas is utilized, TPDC and the Company will receive a price that is no greater than 75% of the market price of the lowest cost alternative fuel delivered at the facility to receive Reserved Gas or the price of the lowest cost alternative fuel at Ubungo. Under the terms of the initialled ARGA, sales under the ARGA and PGSA are considered Reserved Gas.
- (e) "Insufficiency" occurs if there is insufficient gas from the Discovery Blocks to supply the Protected Gas requirements or is so expensive to develop that its cost exceeds the market price of alternative fuels at Ubungo.

Where there have been third party sales of Additional Gas by Orca Exploration and TPDC from the Discovery Blocks prior to the occurrence of the Insufficiency, Orca Exploration and TPDC shall be jointly liable for the Insufficiency and shall satisfy its related liability by either replacing the Indemnified Volume (as defined in (f) below) at the Protected Gas price with natural gas from other sources; or by paying money damages equal to the difference between: (a) the market price for a quantity of alternative fuel that is appropriate for the five gas turbine electricity generators at Ubungo without significant modification together with the costs of any modification; and (b) the sum of the price for such volume of Protected Gas (at US\$0.55/Mmbtu) and the amount of transportation revenues previously credited by Songas to the electricity utility, TANESCO, for the gas volumes.

- (f) The "Indemnified Volume" means the lesser of the total volume of Additional Gas sales supplied from the Discovery Blocks prior to an Insufficiency and the Insufficiency Volume. "Insufficiency Volume" means the volume of natural gas determined by multiplying the average of the annual Protected Gas volumes for the three years prior to the Insufficiency by 110% and multiplied by the number of remaining years (initial term of 20 years) of the power purchase agreement entered into between Songas and TANESCO in relation to the five gas turbine electricity generators at Ubungo from the date of the Insufficiency.

An Insufficiency Agreement has been negotiated with TPDC, Songas and TANESCO that reduces these potential liabilities. The Insufficiency Agreement is expected to be signed at the same time as the long term power contracts.

#### Access and development of infrastructure

- (g) The Company is able to utilize the Songas infrastructure including the gas processing plant and main pipeline to Dar es Salaam. Access to the pipeline and gas processing plant is open and can be utilized by any third party who wishes to process or transport gas.

Songas is not required to incur capital costs with respect to additional processing and transportation facilities unless the construction and operation of the facilities are, in the reasonable opinion of Songas, financially viable. If Songas is unable to finance such facilities, Songas shall permit the seller of the gas to construct the facilities at its expense, provided that, the facilities are designed, engineered and constructed in accordance with good pipeline and oilfield practices.

#### Revenue sharing terms and taxation

- (h) 75% of the gross revenues less processing and pipeline tariffs and direct sales taxes in any year ("Net Revenues") can be used to recover past costs incurred. Costs recovered out of Net Revenues are termed "Cost Gas".

The Company pays and recovers all costs of exploring, developing and operating the Additional Gas with two exceptions: (i) TPDC may recover reasonable market and market research costs as defined under the PSA; and (ii) TPDC has the right to elect to participate in the drilling of at least one well for Additional Gas in the Discovery Blocks for which there is a development program as detailed in the Additional Gas plans as submitted to the Ministry of Energy and Minerals ("Additional Gas Plan") subject to TPDC being able to elect to participate in a development program only once and TPDC having to pay a proportion of the costs of such development program by committing to pay between 5% and 20% of the total costs ("Specified Proportion"). If TPDC does not notify the Company within 90 days of notice from the Company that the Ministry of Energy and Minerals ("MEM") has approved the Additional Gas Plan, then TPDC is deemed not to have elected. If TPDC elects to participate, then it will be entitled to a rateable proportion of the Cost Gas and their profit share percentage increases by the Specified Proportion for that development program.

TPDC has indicated that they wish to exercise their right to 'back in' to the field development by contributing 20% of the cost of SS-10 and the cost of future wells in return for a 20% increase in the profit share percentage for the production emanating from these wells. The implications and workings of the 'back in' are still to be discussed in detail with TPDC and there may be the need for reserve modifications once these discussions are concluded. For the purpose of the reserves certification as at 31 December 2008, it has been assumed that they will 'back in' for 20% and this is reflected in the Company's net reserve position. However, the financial statements have not taken account of any reimbursement for the SS-10 capital expenditure incurred, pending the finalisation of the terms of the 'back in'.

- (i) The price payable to Songas for the general processing and transportation of the gas is 17.5% of the price of gas delivered to a third party less any direct taxes payable by the customer that are included in the gas price less any tariffs paid for non-Songas owned distribution facilities ("Songas Outlet Price").

In September 2001, the GoT, made a formal request to the World Bank for funds to increase the diameter of the onshore pipeline from 12 inches to 16 inches at a projected incremental cost of US\$3.5 million. The World Bank agreed to finance this increase and accordingly the pipeline capacity was increased from circa 65 MMscfd to 105 MMscfd. The tariff that is payable to GoT for this incremental capacity has yet to be formally agreed, but the Company expects it to be 17.5% of the Songas Outlet Price.

In October 2008, Songas submitted a third tariff application to the regulator, EWURA, to cover the financing and operating costs of the third and fourth train which is forecast to increase the gas processing capacity to 140 MMscfd. On 27 February 2009, EWURA issued an order that sees the introduction of flat rate tariffs from 1 January 2010. The tariff level will be set at a rate that enables Songas to make a rate of return on their investment as determined by EWURA. Songas may challenge this order and there is no certainty that they will finance the third and fourth train. The Company is negotiating the long term gas price to the power sector based on the price of gas at the Wellhead. As a consequence, the Company is not impacted by the changes to the tariff paid to Songas in respect of sales to the power sector.

- (j) The cost of maintaining the wells and flowlines is split between the Protected Gas and Additional Gas users in proportion to the volume of their respective sales. The cost of operating the gas processing plant and the pipeline to Dar es Salaam is covered through the payment of the pipeline tariff.
- (k) Profits on sales from the Proven Section ("Profit Gas") are shared between TPDC and the Company, the proportion of which is dependent on the average daily volumes of Additional Gas sold or cumulative production.

The Company receives a higher share of the net revenues after cost recovery, the higher the cumulative production or the average daily sales, whichever is higher. The profit share is a minimum of 25% and a maximum of 55%.

Average daily sales of Additional Gas	Cumulative sales of Additional Gas	TPDC's share of Profit Gas	Company's share of Profit Gas
<i>MMscfd</i>	<i>Bcf</i>	<i>%</i>	<i>%</i>
0 - 20	0 - 125	75	25
> 20 <= 30	> 125 <= 250	70	30
> 30 <= 40	> 250 <= 375	65	35
> 40 <= 50	> 375 <= 500	60	40
> 50	> 500	45	55

For Additional Gas produced outside of the Proven Section, the Company's profit share increases to 55%.

Where TPDC elects to participate in a development program, their profit share percentage increases by the Specified Proportion (for that development program) with a corresponding decrease in the Company's percentage share of Profit Gas.

The Company is liable to income tax. Where income tax is payable, there is a corresponding deduction in the amount of the Profit Gas payable to TPDC.

- (l) Additional Profits Tax is payable where the Company has recovered its costs plus a specified return out of Cost Gas revenues and Profit Gas revenues. As a result: (i) no Additional Profits Tax is payable until the Company recovers all its costs out of Additional Gas revenues plus an annual return of 25% plus the percentage change in the United States Industrial Goods Producer Price Index ("PPI"); and (ii) the maximum Additional Profits Tax rate is 55% of the Company's Profit Gas when costs have been recovered with an annual return of 35% plus PPI return. The PSA is, therefore, structured to encourage the Company to develop the market and the gas fields in the knowledge that the profit share can increase with larger daily gas sales and that the costs will be recovered with a 25% plus PPI annual return before Additional Profits Tax becomes payable. Additional Profits Tax can have a significant negative impact on the project economics if only limited capital expenditure is incurred.

#### Operatorship

- (m) The Company is appointed to develop, produce and process Protected Gas and operate and maintain the gas production facilities and processing plant, including the staffing, procurement, capital improvements, contract maintenance, maintain books and records, prepare reports, maintain permits, handle waste, liaise with GoT and take all necessary safe, health and environmental precautions all in accordance with good oilfield practices. In return, the Company is paid or reimbursed by Songas so that the Company neither benefits nor suffers a loss as a result of its performance.
- (n) In the event of loss arising from Songas' failure to perform and the loss is not fully compensated by Songas, Orca Exploration, CDC or insurance coverage, then Orca Exploration is liable to a performance and operation guarantee of US\$2.5 million when (i) the loss is caused by the gross negligence or willful misconduct of the Company, its subsidiaries or employees, and (ii) Songas has insufficient funds to cure the loss and operate the project.

## CONSOLIDATION

The companies that are being consolidated are:

Company	Incorporated
Orca Exploration Group Inc.	British Virgin Islands
PAE PanAfrican Energy Corporation	Mauritius
PanAfrican Energy Tanzania Limited	Jersey
Orca Exploration Uganda Inc	British Virgin Islands
Orca Exploration Uganda (Holdings) Inc	British Virgin Islands
Orca Exploration (Ventures) Inc	British Virgin Islands

## Results for the year ended 31 December 2008

### OPERATING VOLUMES

The sales volumes for the year were 8,660 MMscf or 23.7 MMscfd. This represents an overall increase of 12% over the previous year. The Company's sales volumes were split between the industrial and power sectors as follows:

	2008	2007
Gross sales volume (MMscf):		
Industrial sector	1,475	1,504
Power sector	7,185	6,227
Total volumes	8,660	7,731
Gross daily sales volume (MMscfd):		
Industrial sector	4.0	4.1
Power sector	19.7	17.1
Total daily sales volume	23.7	21.2

### Industrial sector

During the year a total of three new customers signed contracts for the supply of Additional Gas and were connected to the low pressure gas distribution system. Sales to these customers accounted for 5% of the total industrial operating volumes in the year. The overall level of industrial operating volumes declined by 2% compared to 2007, primarily as a consequence of a fall in the operating volumes sold to the textile customers. The fall in demand from the textile customers can be attributed to the increased level of competition within the world textile markets. By the end of 2008, the Company had 20 industrial customers. Industrial sales for the year averaged 4.0 MMscfd (2007: 4.1 MMscfd). The level of industrial sales peaked in July 2008 with sales of 5.0 MMscfd.

### Power sector

Sales to the power sector averaged 19.7 MMscfd (2007: 17.1 MMscfd) during 2008. The Additional Gas was consumed by the Ubungo power plant, the newly installed Wärtsilä 102 MWs power plant and the emergency power generation units operated by Aggreko Plc ("Aggreko") and Dowans Tanzania Limited ("Dowans") which were installed in 2007. The allocation of the gas volumes between the different power generation units is as follows:

(MMscf)	2008	2007
<b>Permanent generation</b>		
Ubungo power plant	2,339	2,350
Wärtsilä	2,125	-
Total volumes	4,464	2,350
<b>Emergency generation</b>		
Aggreko	1,908	2,735
Dowans A and B	813	1,142
Total volumes	2,721	3,877
Total power sector volumes	7,185	6,227

The Ubungo power plant gas consumption during 2008 remained at a similar level to 2007. The 102 MWs Wärtsilä power plant was installed and commissioned in February 2008, but did not become fully operational until August 2008, from which point the average daily consumption was 13.6 MMscfd.

The emergency power units operated by Aggreko consumed a total of 1,908 MMscf during the year, a fall of 30% over 2007. The unit had consumed on average 9.8 MMscfd up to the Wärtsilä power generation unit becoming fully operational, with an average of 2.4 MMscfd thereafter. TANESCO's power purchase agreement for the Aggreko units was terminated in December 2008.

In July 2008 TANESCO terminated its power purchase agreement with Dowans in respect of the 120 MWs of emergency power generation, following a contractual dispute. The units still remain in country, but their future is uncertain.

## COMMODITY PRICES

<i>US\$/mcf</i>	2008	2007
Average sales price:		
Industrial sector	11.98	9.31
Power sector	2.37	2.19
<i>Weighted average price</i>	4.01	3.58

### *Industrial sector*

The price of gas for the industrial sector continued to be set at a discount to the price of Heavy Fuel Oil ("HFO") in Dar es Salaam. During 2008, the Company renegotiated the sales contracts with six of the largest industrial customers, who between them accounted for the majority of the 2008 industrial sales volumes. Under the new five year contracts the pricing mechanism included both caps and floors, which had the effect of limiting the downside to approximately US\$ 7.38/mcf, whilst imposing a pricing cap of US\$ 12.60/mcf increasing at a rate of 2% per annum.

The average gas prices for the year was US\$11.98/mcf (2007:US\$9.31/mcf). The higher gas price achieved for the industrial sector is a consequence of the high world oil prices experienced in the first three quarters of the year. The highest average Additional Gas price to industrial customers in Dar es Salaam during the year was US\$13.53/mcf in July and the lowest average price of US\$7.97/mcf was recorded in December 2008.

### *Power sector*

The average sales price to the power sector was US\$2.37/mcf for the year (2007: US\$2.19).

The increase in the sales price is primarily due to the new sales contracts with the power sector. The previous Interim Agreement for the sale of Additional Gas to the Ubungo power plant provided for different gas prices, depending on the average availability of the six turbines, from a minimum of US\$0.62/mcf to the maximum of US\$2.14/mcf. Under the new sales contract the price of gas no longer fluctuates with the availability of turbines, and is based on a fixed price which is subject to an annual inflationary increase. As a result an average Additional Gas price of US\$2.22/mcf was recorded in the year for the Ubungo power plant and a price of US\$2.34/mcf for the 102 MWs power generation unit operated by Wärtsilä.

The price of Additional Gas to the Aggreko emergency power plant increased in January 2008 by the consumer price index to US\$2.29/mcf from US\$2.22/mcf in accordance with the contract.

The price of Additional Gas to the Dowans emergency power plants averaged US\$2.92/mcf for 2008.

During the second quarter of 2008, the Company initialled the long term contracts for the supply of a forecast 200 - 250 Bcf of Additional Gas to the power sector. The wellhead price is fixed at approximately US\$1.95/mcf and will increase at an expected 2% per annum until July 2012 at which point there will be a step change to US\$2.83/mcf and then increase at 2% per annum. These prices are net of the gas processing, transportation, marketing and distribution costs that are subject to annual approval by the energy regulator, EWURA. Based on existing tariff rates approved by EWURA, the initial all-in Additional Gas price to the power sector is expected to be approximately US\$2.36/mcf. The final price will be determined once final charges are known.

## OPERATING REVENUE

Under the terms of the PSA with TPDC, Orca Exploration is responsible for invoicing, collecting and allocating the revenue from Additional Gas sales.

Orca Exploration is able to recover all costs incurred on the exploration, development and operations of the project out of 75% of the Net Revenues ("Cost Gas"). Any costs not recovered in any period are carried forward to be recovered out of future revenues.

During 2008, Additional Gas sales volumes were in excess of 20 MMscfd for all quarters with the exception of the second quarter. Consequently, the revenue less cost recovery share of revenue ("Profit Gas") increased to 30% from 25% for all quarters except Q2 where it remained at 25%.

Orca Exploration had recoverable costs throughout 2007 and 2008 and accordingly was allocated 82.3% (2007: 81.25%) of the Net Revenues as follows:

<i>(Figures in US\$'000)</i>	2008	2007
Gross sales revenue	34,727	27,674
Gross tariff for processing plant and pipeline infrastructure	(5,664)	(4,493)
Gross revenue after tariff	29,063	23,181
Analysed as to:		
Company Cost Gas	17,937	17,393
Company Profit Gas	5,979	1,630
Company operating revenue	23,916	19,023
TPDC Profit Gas	5,147	4,158
	29,063	23,181

The Company's total revenues for the year amounted to US\$23,782,000 after adjusting the Company's operating revenue of US\$23,916,000 by:

- i) US\$249,000 for current income tax. The Company is liable for income tax in Tanzania, but the income tax is recoverable out of TPDC's Profit Gas when the tax is payable. To account for this, revenue is adjusted to reflect the current income tax charge or loss.
- ii) US\$383,000 for the deferred effect of additional profits tax. This tax is considered a royalty and is netted against revenue.

Revenue per the income statements may be reconciled to the operating revenue as follows:

<i>(Figures in US\$'000)</i>	2008	2007
Industrial sector	17,673	14,010
Power sector	17,054	13,664
<b>Gross sales revenue</b>	34,727	27,674
Processing and transportation tariff	(5,664)	(4,493)
TPDC share of revenue	(5,147)	(4,158)
<b>Company operating revenue</b>	23,916	19,023
Additional Profits Tax	(383)	(324)
Current income tax adjustment	249	78
<b>Revenue</b>	23,782	18,777

## Processing and Transportation Tariff

### Historical

Under the terms of the project agreements, the current tariff paid for processing and transporting the Additional Gas is calculated as 17.5% of the price of gas at the Songas main pipeline in Dar es Salaam ("Songas Outlet Price").

In calculating the Songas Outlet Price for the industrial customers, an average amount of US\$1.69/mcf ("Ringmain Tariff") (2007: US\$1.36/mcf) has been deducted from the achieved industrial sales price of US\$11.98/mcf (2007: US\$9.31/mcf) to reflect the gas price that would be achievable at the Songas main pipeline. The Ringmain Tariff represents the amount that would be required to compensate a third party distributor of the gas for constructing the connections from the Songas main pipeline to the industrial customers. No deduction has been made for sales to the power sector since the gas is not transported through the Company's own infrastructure.

To enable the Company to supply 30-45 MMscfd of Additional Gas to the power sector under the initialled long term power contracts, Songas is planning to install a third and fourth gas processing train on Songo Songo Island conditional on a satisfactory economic return as approved by the energy regulator, EWURA. This will take the gas processing capacity to 140 MMscfd. During August 2008, EWURA informed Songas that they would need to re-submit their application on the grounds that the costs of the engineering and procurement contract needed to be firm. In October, Songas re-submitted their application and EWURA issued their order on 26 February 2009. Songas is currently reviewing the order and there is no certainty that they will finance the third and fourth train.

The regulatory process is likely to lead to a new tariff regime being introduced that will be subject to annual amendments. A flat rate gas processing and transportation tariff may be introduced from 1 January 2010 that will be set at a rate that enables Songas to make a rate of return on their investment as determined by EWURA. The Company will pass on any increase or decrease in the EWURA approved charges to TANESCO/Songas in respect of sales to the power sector. This protocol insulates Orca Exploration from any increases in the gas processing and pipeline infrastructure costs.

In the last quarter of the year, Orca Exploration as operator installed larger Joule Thompson valves on the two existing gas processing trains as a way of increasing throughput. This has resulted in the Songo Songo gas processing plant being re-rated by Lloyds Register to 90 MMscfd. The re-rating of the gas processing plant was approved by Songas in Q1 2009.

## PRODUCTION AND DISTRIBUTION EXPENSES

The well maintenance costs are allocated between Protected and Additional Gas based on the proportion of their respective sales during the year. The total costs for the maintenance for the year was US\$541,000 (2007: US\$989,000) of which US\$243,000 (2007: US\$403,000) was allocated for the Additional Gas.

Other field operating costs include an apportionment of the annual PSA license costs and some costs associated with the evaluation of the reserves.

The direct cost of maintaining the ring main distribution pipeline and pressure reduction station (security, insurance and personnel) is approximately US\$0.7 million per annum in its current form.

These costs are summarized in the table below:

<i>(Figures in US\$'000)</i>	2008	2007
Share of well maintenance	243	403
Other field and operating costs	566	306
Ring main distribution pipeline	668	484
<b>Production and distribution expenses</b>	<b>1,477</b>	<b>1,193</b>

## OPERATING NETBACK

The operating netback per mcf before general and administrative costs, overheads, income tax and additional profits tax may be analysed as follows:

<i>(Amounts in US\$/mcf)</i>	2008	2007
Gas price - industrial	11.98	9.31
Gas price - power	2.37	2.19
<b>Weighted average price for gas</b>	<b>4.01</b>	<b>3.58</b>
Tariff (after allowance for the Ringmain Tariff)	(0.65)	(0.58)
TPDC Profit Gas	(0.59)	(0.54)
<b>Net selling price</b>	<b>2.77</b>	<b>2.46</b>
Well maintenance and other operating costs	(0.09)	(0.09)
Ring main distribution pipeline	(0.08)	(0.06)
<b>Operating netback</b>	<b>2.60</b>	<b>2.31</b>

Operating netbacks were higher in 2008 mainly due to the higher sales price achieved in both the industrial and power markets. The sales mix remaining relatively unchanged with the power sector accounting for 83% of the total sales volume for the year compared to 81% in 2007.

There was a US\$0.3 million increase in the production and distribution expenses during the year, which resulted in a marginal increase in the rate to US\$0.17/mcf from US\$0.15/mcf in 2007.

The 11% increase in the US\$/mcf rates for the Tariff and TPDC share of profit gas from US\$1.12/mcf to US\$1.24/mcf is a direct function of the higher sales price that was achieved in the year compared to 2007.

The operating netback continues to benefit from the recovery of 75% of the Net Revenues as Cost Gas.

## GENERAL AND ADMINISTRATIVE EXPENSES

The general and administrative expenses ("G&A") may be analysed as follows:

<i>(Figures in US\$'000)</i>	2008	2007
Employee costs	2,107	2,059
Consultants	3,184	2,037
Travel and accommodation	912	656
Communications	66	85
Office	936	598
Insurance	238	176
Auditing and taxation	166	152
Depreciation	76	154
Reporting, regulatory and corporate	290	310
	<b>7,975</b>	<b>6,227</b>
Marketing costs and legal fees	4,663	2,134
New ventures	294	90
Stock based compensation	1,754	2,257
<b>Net general and administrative expenses</b>	<b>14,686</b>	<b>10,708</b>

During the year, US\$0.6 million of general administrative expenses (2007: US\$1.2 million) were capitalized. These costs include consultancy fees and the proportionate share of options, treasury stock and stock appreciation rights for the personnel directly responsible for the development of the option agreement and the continuing management of the project in Exploration Area 5 in Uganda ("EA5") until the decision not to exercise the option was taken in June 2008.

G&A averaged approximately US\$1.22 million per month in 2008 (2007: US\$0.89 million). G&A per mcf was US\$1.70/mcf (2007: US\$1.39/mcf). Whilst a large proportion of G&A is relatively fixed in nature and therefore declines on a mcf basis as volumes produced increase, significant costs have been incurred during the last three quarters in the negotiation of the power contracts, renewing sales contracts with industrial customers, the preparation of applications to EWURA and the commencement of arbitration proceedings against a third party contractor for breaches of contract that occurred during the drilling of the SS-10 well in 2007. This has led to the G&A costs being relatively high per mcf. It is expected that these will fall as volumes increase and long term power contracts are signed.

The main variances are summarized below:

#### Employee costs

The increase in the cost is a result of hiring new local staff in Tanzania including the employment of an additional expat to oversee the next phase of infrastructure expansion. There has also been an increase of expenditure on staff training and development. The average number of staff for the year was 21 (2006: 15). The Company has reduced the provision for staff bonuses when compared to 2007.

#### Stock based compensation

No new options were issued during 2008. A total of 2,814,000 options were outstanding at the end of 2008 following the cancellation of 33,000 options in 2008. The increase in compensation recorded in 2008 is a result of a full years charge for the option issued during 2007 as they have started to vest, as opposed to a partial year charge in 2007. The fair value of these options, have been determined using the Black-Scholes option pricing model. A total charge of US\$2.1 million was recorded in 2008 of which US\$0.1 million was capitalized.

A total of 810,000 stock-appreciation rights were outstanding at the end of the year. A total of 120,000 stock appreciation rights were issued in the year, of which 105,000 were capped at a maximum payout of \$Cdn 3 per option. All stock appreciation rights, are revalued at each reporting date using the Black-Scholes option pricing model. A total credit of US\$0.6 million was recorded in 2008 for all stock appreciation rights compared to a charge of US\$0.8 million in 2007. The fall in the charge is a consequence of the deterioration of the Company's stock price in line with the world wide stock market collapse. The additional US\$0.7 million charge in 2007 is in relation to the 400,000 capped stock appreciation rights at Cdn\$3 that were issued in 2006 and fully expensed by the end of 2007.

In April 2007, 200,000 Class B shares were awarded to a newly appointed officer. These shares were held in escrow and vested to the officer in three equal installments starting 7 April 2007. At the time the shares were awarded they had a market value of US\$1.6 million (Cdn\$1.7 million). A total charge of US\$0.6 million has been recognized during 2008 (2007: US\$0.9 million) of which US\$0.1 million has been capitalized in 2008 (2007: US\$0.4 million).

Total charges for Class B shares, stock options and stock appreciation rights may be summarized as follows:

<i>(Figures in US\$ '000)</i>	<b>2008</b>	<b>2007</b>
Stock options	2,086	691
Stock appreciation rights	(570)	1,475
Treasury stock	606	930
	2,122	3,096
Capitalized	(368)	(839)
	1,754	2,257

#### Consultancy costs

The increase in consultancy costs is reflective of the increase in the number of consultants contracted by the Company in 2007 being employed for the full year in 2008. There has also been a significant decrease in the capitalization of consultancy costs following the decision not to participate in the exercise of the option to acquire a 50% working interest in Exploration Area 5 in Uganda.

### Travel and accommodation

The increase in travel and accommodation costs is primarily due to the increase in the number of business trips to Tanzania by Company officials and other marketing and legal professionals for the negotiation of the power and related contracts which coincided with higher airfares.

### Office costs

The increase in office costs is a result of the expansion of the marketing development activities which has ultimately led to the establishment of a second office location in Dar es Salaam.

### Marketing costs including legal fees

These costs include marketing costs, legal, corporate promotion and costs of training Government officials in accordance with the terms of the PSA. During the year, higher costs were experienced in negotiating power and other contracts with Songas, and TANESCO and in preparing pricing applications for the regulatory authority, EWURA. In addition, a total of US\$1.0 million was incurred during the year on legal costs associated with the commencement of arbitration proceedings against a third party contractor for breaches of contract that occurred during the drilling of the SS-10 well in 2007.

### NET FINANCING INCOME/(CHARGE)

Interest income decreased to US\$0.1 million (2007: US\$0.6 million). The decrease is due to the reduction in cash balances and the decline in interest rates. The large interest income in 2007 was the result of the large cash balance at the start of the year following the US\$18.1 million rights issue which was boosted by the US\$30.4 million raised from a private equity placement in July 2007. The exchange loss in the year is a result of the strengthening of the US Dollars against the Tanzanian Shilling. Despite the gas sales price being denominated in US Dollars, the invoices are submitted in Tanzanian Schillings. Therefore, there is an exchange exposure between the time that the invoices are submitted and the date that the payment is received. The total gain on foreign exchange recorded in 2007 was primarily the result of a gain of US\$0.4 million on the conversion of the Canadian dollars received from the private placement.

The movement in finance income and charges is summarized in the table below:

<i>Figures in US\$'000</i>	<b>2008</b>	<b>2007</b>
<b>Finance income</b>		
Interest income	145	628
Foreign exchange gain	56	832
	<b>201</b>	<b>1,460</b>
<b>Finance charges</b>		
Overdraft charges	(62)	-
Foreign exchange loss	(578)	(85)
	<b>(640)</b>	<b>(85)</b>
<b>Net financing income/(charge)</b>	<b>(439)</b>	<b>1,375</b>

## TAXATION

### Income Tax

Under the terms of the PSA with TPDC, the Company is liable for income tax in Tanzania at the corporate tax rate of 30%. However, where income tax is payable, this is recovered from TPDC by deducting an amount from TPDC's profit share. This is reflected in the accounts by adjusting the Company's revenue by the appropriate amount.

As at 31 December 2008, there were temporary differences between the carrying value of the assets and liabilities for financial reporting purposes and the amounts used for taxation purposes under the Income Tax Act 2004. Applying the 30% Tanzanian tax rate, the Company has recognized a deferred tax liability of US\$5.5 million which represents an additional deferred future income tax charge of US\$2.3 million for the year. This tax has no impact on cash flow until it becomes a current income tax at which point the tax is paid to the Commissioner of Taxes and recovered from TPDC's share of Profit Gas.

### Additional Profits Tax

Under the terms of the PSA, in the event that all costs have been recovered with an annual return of 25% plus the percentage change in the United States Industrial Goods Producer Price Index, an Additional Profits Tax ("APT") is payable.

The Company provides for APT by forecasting the total APT payable as a proportion of the forecast Profit Gas over the term of the PSA license. The effective APT rate has been calculated to be 20%. Accordingly, US\$0.4 million (2007: US\$0.3 million) has been netted off revenue for the year ended 31 December 2008.

As at 31 December 2008, the Company had US\$29.1 million (2007: US\$41.7 million) of accrued costs (unaudited by TPDC) that are recoverable out of 75% of the future Net Revenues. Management does not anticipate that any APT will be payable in 2009, as the forecast revenues will not be sufficient to cover the un-recovered costs brought forward as inflated by 25% plus the PPI percentage change and the forecast expenditures for 2009. The actual APT that will be paid is dependent on the achieved value of the Additional Gas sales and the quantum and timing of the operating costs and capital expenditure program.

The APT can have a significant negative impact on the Songo Songo project economics as measured by the net present value of the cash flow streams. Higher revenue in the initial years leads to a rapid payback of the project costs and consequently accelerates the payment of the APT that can account for up to 55% of the Company's profit share. Therefore, the terms of the PSA rewards the Company for taking higher risks by incurring capital expenditure in advance of revenue generation.

### DEPLETION AND DEPRECIATION

The Natural Gas Properties are depleted using the unit of production method based on the production for the period as a percentage of the total future production from the Songo Songo proven reserves. As at 31 December 2008, the proven reserves as evaluated by the independent reservoir engineers McDaniel & Associates Consultants Ltd ("McDaniel") were 389.4 Bcf after TPDC 'back in' on a life of license basis. This leads to an average depletion charge of US\$0.54/mcf for the year (2007: US\$0.58/mcf).

Non-Natural Gas Properties are depreciated as follows:

Leasehold improvements	Over remaining life of the lease
Computer equipment	3 years
Vehicles	3 years
Fixtures and fittings	3 years

### CARRYING VALUE OF ASSETS

Capitalized costs are periodically assessed to determine whether it is likely that such costs will be recovered in the future. To the extent that these capitalized costs are unlikely to be recovered in the future, they are written off and charged to earnings.

A total of US\$9.5 million was incurred in 2007 and 2008 for the securing of an option agreement with Tower Resources plc and the initial evaluation of Exploration Area 5 ("EA 5") in Uganda. 300 kilometers of 2-D seismic was shot during Q4 2007 and Q1 2008. Whilst the seismic data did show the existence of a number of structures, other aspects indicated that the level of risk was higher than expected and in the view of the Company did not warrant the cost of participating in a drilling exploration program. Accordingly the Company decided not to exercise its option to secure a 50% working interest in Exploration Area 5 and US\$9.5 million was written off to the income statement in recognition of the impairment of the exploration assets in Uganda.

### FUNDS GENERATED BY OPERATIONS

Funds from operations before working capital changes were US\$9.7 million for the year ended 31 December 2008 (2007: US\$8.7 million).

<i>(Figures in US\$ '000)</i>	<b>2008</b>	<b>2007</b>
(Loss)/profit after taxation	(9,523)	1,745
Adjustments <sup>(i)</sup>	19,274	6,951
<b>Funds from operations before working capital changes</b>	<b>9,751</b>	<b>8,696</b>
Working capital adjustments	(4,566)	2,071
<b>Net cash flows from operating activities</b>	<b>5,185</b>	<b>10,767</b>
Net cash flows used in investing activities	(11,113)	(45,633)
Net cash flows from financing activities	(1)	30,703
<b>Net decrease in cash and cash equivalents</b>	<b>(5,929)</b>	<b>(4,163)</b>

<sup>(i)</sup> See consolidated statements of cash flows

The decrease in cash and cash equivalents is effectively a consequence of the paying down of trade creditors following the completion of the SS-10 well. Whilst the increase in the year-end level of trade debtors, has lead to a decrease in cash, the overall increase in sales for the year due to higher volumes and higher realized prices has not materialized in increased cash balances as a consequence of the increase in the level of general administrative costs. The cash flow generated from operations have been re-invested in property, plant and equipment.

## CAPITAL EXPENDITURES

Capital expenditures amounted to US\$7.7 million during the year (2007: US\$53.7 million). The capital expenditures may be analysed as follows:

<i>(Figures in US\$'000)</i>	<b>2008</b>	<b>2007</b>
Geological and geophysical and well drilling	3,473	51,129
Pipelines and infrastructure	4,147	2,267
Power development	38	146
Other equipment	82	175
	<b>7,740</b>	<b>53,717</b>

### Geological and geophysical and well drilling - US\$3.5 million

A total of US\$0.2 million was incurred in the year on geological studies and interpretation of data sets from the main Songo Songo reservoir attained through down hole pressure gauges during 2008 and the suite of logs ascertained from the drilling of SS-10 in the last quarter of 2007. The aim of these studies was to get a better understanding of the connectivity between the wells, establish optimum well performance with a view to get a better understanding of well deliverability, and assessing the GIIP reserves in place. A more detailed discussion can be found under reservoir management and studies in the operations report.

A total of US\$0.6 million was incurred on well planning and geological interpretation for the future exploration drilling scheduled on the Songo Songo West prospect. With the assistance of the internal work undertaken by Orca Exploration, McDaniel associates were commissioned to undertake an independent evaluation of the mineral resources potential of the Songo Songo West prospect.

A total of US\$2.7 million was incurred on technical analysis of the Ugandan seismic results of Exploration Area 5. Following the interpretation of the finding, the Company decided not to exercise its option to acquire a 50% working interest in the block and wrote off a total of US\$9.5 million of expenditure incurred on the asset.

### Pipelines and infrastructure - US\$4.1 million

A total of US\$0.2 million was spent on the completion and commissioning of an 8 kilometer extension to the low pressure distribution system that was primarily constructed in 2007. The extension increased the total low pressure network to 42 kilometres within Dar es Salaam. A total of US\$0.3 million was incurred on connecting three new customers to the network in the year. These three new customers accounted for 5% of the total industrial sales volume in 2008.

In September 2008, the Company signed a five year contract with Tanzania Portland Cement Company ("TPCC"), a subsidiary of Heidelberg Cement, for the supply of gas to a new US\$100 million kiln at its Wazo Hill plant in Dar es Salaam. The contract commenced in Q1 2009 when the kiln started consuming commissioning gas. Initially, it is forecast that 2 MMscfd of Additional Gas will be supplied under the contract during 2009, but this is expected to increase to in excess of 6 MMscfd by 2012 as TPCC overhauls its existing kilns and brings them back on production to meet increasing demand. In the last quarter of 2008 Orca Exploration installed a pressure reduction station ("PRS") at the Wazo Hill cement plant at a cost of US\$1.0 million to enable it to meet its obligations under the contract.

Orca Exploration incurred US\$2.3 million in the year on compressed natural gas ("CNG") facilities, consisting of a compressor, a vehicle dispenser, and two trailer filling facilities to deliver 0.7 MMscfd of CNG to industrial customers in Dar es Salaam. The facilities are expected to be operational during Q2 2009.

Orca Exploration incurred a total of US\$0.3 million on expansion studies and the re-rating of the Songo Songo gas processing plant. As a result of the fitting of larger capacity Joules Thompson valves to the two existing gas processing trains, there has been a 20 MMscfd increase in the certified capacity of the gas processing plant.

## WORKING CAPITAL

Working capital as at 31 December 2008 was US\$9.7 million (31 December 2007: US\$7.3 million) and may be analysed as follows:

<i>(Figures in US\$'000)</i>	2008	2007
Cash and cash equivalents	10,586	16,515
Trade and other receivables	13,196	8,236
	23,782	24,751
Trade and other payables	14,055	17,452
<b>Working capital</b>	<b>9,727</b>	<b>7,299</b>

The increase in working capital by US\$2.4 million during 2008 is primarily due to the generation of US\$2.0 million of funds from operating activities in the period after capital expenditure of US\$7.7 million. Within the working capital components, there has been a decrease in trade and other payables balances of US\$3.4 million as a result of the payment of trade payables, with total trade debtors increasing by US\$5.0 million as a result of increased sales.

The majority of the cash is held in US and Cdn dollars in Mauritius and in Tanzanian Shillings in Tanzania bank accounts. There are no restrictions in Tanzania for converting Tanzania Shillings into US dollars. Any surplus cash is held in a fixed rate interest earning deposit account.

Trade and other receivables at 31 December 2008 represent US\$11.9 million of trade receivables (2007: US\$7.3 million), US\$0.95 million of prepayments (2007: US\$0.8 million) and other US\$0.35 million (2007: US\$0.1 million).

Under the contract terms with the industrial customers, the Additional Gas payments must be received within 30 days of the month end. As at 31 December 2008, US\$3.0 million (2007: US\$3.3 million) was due from industrial customers which has all subsequently been received. The balance of US\$8.9 million (2007: US\$4.0 million) is made up of amounts due from the two power customers, TANESCO and Songas.

The contracts with Songas and TANESCO accounted for 49% (2007: 49%) of the Company's operating revenue in 2009. Songas' financial security is, in turn, heavily reliant on the payment of capacity and energy charges by TANESCO. TANESCO is dependent on the Government of Tanzania for some of its funding. Whilst some payments have been delayed, the Company has subsequently collected all amounts from Songas and TANESCO in respect of the amounts due at 31 December 2008.

Of the trade and other payables, US\$3.8 million related to capital expenditure (2007: US\$7.7 million).

## OUTSTANDING SHARE CAPITAL

There were 29.6 million shares outstanding as at 31 December 2008 which may be analysed as follows:

<i>Number of shares ('000)</i>	2008	2007
<b>Shares outstanding</b>		
Class A shares	1,751	1,751
Class B shares	27,863	27,863
	29,614	29,614
<b>Convertible securities</b>		
Options	2,814	2,847
<b>Fully diluted Class A and Class B shares</b>	<b>32,428</b>	<b>32,461</b>
<b>Weighted average</b>		
Class A and Class B shares	29,614	28,259
Convertible securities		
Options	1,425	1,543
<b>Weighted average diluted Class A and Class B shares</b>	<b>31,039</b>	<b>29,802</b>

The movement in Class B shares during the year is analysed in the table below:

<i>Number of shares ('000)</i>	2008	2007
<b>As at 1 January</b>	<b>27,863</b>	<b>25,023</b>
Issued	-	2,700
Stock options exercised	-	160
Normal course issuer bid	-	(20)
<b>As at 31 December</b>	<b>27,863</b>	<b>27,863</b>

The Company issued 2,500,000 Class B shares at Cdn\$13.80 per share following a fully subscribed private placement that closed in July 2007. Net proceeds of US\$30.4 million were raised for the Company. A large proportion of the funds were used for the completion of the SS-10 well in Tanzania and for the funding of a new venture in Uganda.

In April 2007, the Company issued 200,000 Class B shares to a newly appointed officer. These shares are held in escrow by the Company and vest to the officer in three equal annual installments starting 7 April 2007.

In January 2007, the Company initiated a normal course issuer bid to purchase up to 1,085,379 Class B shares between 31 January 2007 and 31 December 2007, subject to a maximum usage of US\$2.2 million of funds. A total of 19,800 Class B shares were purchased during the bid period. The normal course issuer bid was renewed in 2008 to 31 December 2008 with a total of 200 shares purchased during the year.

### Stock Based Compensation

The stock option plan provides for the granting of stock options to directors, officers, employees and consultants. The exercise price of each stock option is determined as the closing market price of the common shares on the day prior to the day of grant. Each stock option granted permits the holder to purchase one common share at the stated exercise price. In accordance with IFRS2, the Company records a charge to the profit and loss account using the Black-Scholes fair valuation option pricing model. The valuation is dependent on a number of estimates, including the risk free interest rate, the level of stock volatility, together with an estimate of the level of forfeiture. The level of stock volatility is calculated with reference to the historic closing share price at the date of issue.

The movement in stock options for the year is analysed in the table below:

<i>Number of options ('000)</i>	<b>Options</b>
<b>As at 31 December 2007</b>	2,847
Issued	-
Exercised	-
Forfeited	(33)
<b>As at 31 December 2008</b>	2,814

## CONTRACTUAL OBLIGATIONS AND COMMITTED CAPITAL INVESTMENT

### Capital Investment

#### Re-rating of the Songas processing plant

Orca Exploration is committed to paying Songas US\$0.5 million on successful completion and operation of the gas processing facilities at 90 MMscfd together with a further US\$0.5 million on the first anniversary of the successful completion of the project. The gas processing plant was re-rated from 70 Mmscfd to 90 MMscfd by Lloyds Register in January 2009. The re-rating was approved by Songas in Q1 2009.

#### Wazo Hill cement plant

Orca Exploration signed a five year contract with Tanzania Portland Cement Company ("TPCC"), a subsidiary of Heidelberg Cement, for the supply of gas to a new US\$100 million kiln at its Wazo Hill plant in Dar es Salaam. In order to honour this contract, Orca Exploration committed to install a pressure reduction station at Wazo Hill at a cost of US\$0.7 million.

#### Compressed natural gas

In Q3 2008, Orca Exploration ordered US\$2.5 million of CNG facilities, consisting of a compressor, a vehicle refueling dispenser and two trailer filling facilities to deliver 0.7 MMscfd of CNG to industrial customers in Dar es Salaam. The facilities are expected to be operational during Q2 2009. A total of US\$2.3 million had been spent on this project by the end of 2008.

#### Funding

Management forecasts that the Company will be able to meet its 2009 capital expenditure program through the use of existing cash balances and self-generated cash flows. The Company currently has no bank borrowings and there is scope for utilizing debt funding once the longer term contracts for the supply of gas to the power sector are in place.

## Contractual Obligations

### Protected Gas

Under the terms of the original gas agreement for the Songo Songo project ("Gas Agreement"), in the event that there is a shortfall/insufficiency in Protected Gas as a consequence of the sale of Additional Gas, then the Company is liable to pay the difference between the price of Protected Gas (US\$0.55/mmbtu) and the price of an alternative feedstock multiplied by the volumes of Protected Gas up to a maximum of the volume of Additional Gas sold (23.8 Bcf as at 31 December 2008).

The Gas Agreement has been amended by an initialled Amended and Restated Gas Agreement ("ARGA"). The ARGA provides clarification of the Protected Gas volumes and removes all terms dealing with the security of the Protected Gas and the consequences of any insufficiency to a new Insufficiency Agreement ("IA"). The IA specifies terms under which Songas may demand cash security in order to keep them whole in the event of a Protected Gas insufficiency. Once the Insufficiency Agreement is signed, it will govern the basis for determining security. Under the provisional terms of the IA, when it is calculated that funding is required, the Company shall fund an escrow account at a rate of US\$2/Mmbtu on all industrial Additional Gas sales out of its and TPDC share of revenue, and TANESCO shall contribute the same amount on Additional Gas sales to the power sector. The funds provide security for Songas in the event of an insufficiency of Protected Gas. The Company is actively monitoring the reservoir and does not anticipate that a liability will occur in this respect.

### Back in

TPDC has indicated that they wish to exercise their right to 'back in' to the field development by contributing 20% of the costs of the future wells including SS-10 in return for a 20% increase in the profit share percentage for the production emanating from these wells. The implications and workings of the 'back in' are still to be discussed in detail with TPDC and there may be the need for reserve modifications once these discussions are concluded. For the purpose of the reserves certification, it has been assumed that they will 'back in' for 20% and this is reflected in the Company's net reserve position. However, the financial statements do not take account of any reimbursement for the SS-10 capital expenditure, pending the finalisation of the terms of the 'back in'.

### Operating leases

The Company has entered into two five year rental agreements that expire on 30 November 2012 and 30 November 2013 respectively at a cost of approximately US\$0.2 million per annum for the use of offices in Dar es Salaam.

## OFF-BALANCE SHEET TRANSACTIONS

As at 31 December 2008, the Company had no off-balance sheet arrangements.

## RELATED PARTY TRANSACTIONS

One of the non executive Directors is a partner at a law firm. During the year, the Company incurred US\$195,000 to this firm for services provided. The transactions with this related party was made at the exchange amount.

## POST BALANCE SHEET EVENTS

There are no post balance sheet events.

## SUMMARY QUARTERLY RESULTS

The following is a summary of the results for the Company for the last eight quarters:

(Figures in US\$'000 except where otherwise stated)	2008				2007			
	Q4	Q3	Q2	Q1	Q4	Q3	Q2	Q1
<b>Financial</b>								
Revenue	6,371	7,301	4,826	5,284	5,562	6,363	3,021	3,831
Profit/(loss) after taxation	12	816	(10,208)	(143)	284	1,942	(609)	128
Operating netback (US\$/mcf)	2.32	2.79	3.44	2.21	2.27	2.30	2.79	2.03
Working capital	9,727	8,705	6,094	8,297	7,299	20,939	(3,050)	10,570
Shareholders' equity	64,712	64,142	62,824	72,053	71,544	70,996	38,291	37,983
Profit/(loss) per share - basic and diluted (US\$)	0.00	0.03	(0.35)	0.00	0.01	0.07	(0.02)	0.00
<b>Capital expenditures</b>								
Geological, geophysical and well drilling	(987)	419	2,851	1,190	16,323	10,426	13,723	10,657
Pipeline and infrastructure	2,217	705	979	246	469	314	1,205	279
Power development	13	4	21	-	4	7	26	109
Other equipment	31	51	-	-	-	108	35	32
<b>Operating</b>								
Additional Gas sold - industrial (MMscf)	392	425	336	322	364	442	397	301
Additional Gas sold - power (MMscf)	2,149	2,097	956	1,983	2,152	1,974	745	1,356
Average price per mcf - industrial (US\$)	10.08	13.29	12.97	11.55	11.08	9.58	8.61	7.70
Average price per mcf - power (US\$)	2.39	2.41	2.93	2.05	2.19	2.19	2.17	2.19

The principal developments in Q4 were as follows:

- Achieved a quarterly sales volume of 2,541 MMscf or 27.6 MMscfd which represents the best quarter since sales began in 2004.
- Completed the installation of larger capacity Joule-Thompson valves on the two existing gas processing trains which has resulted in the gas processing capacity of the plant increasing by 20 MMscfd to 90 MMscfd.
- Continued the installation of Compressed Natural Gas facilities in Dar es Salaam. It is intended that the facilities will be operational during Q2 2009 leading to 0.7 MMscfd of CNG sales. It is anticipated that this market will expand rapidly to supply gas to consumers that cannot be cost-effectively connected to the Company's existing low pressure gas distribution system.
- The negative capital charge in the geological, geophysical and well drilling category is a result of the renegotiation of some of the charges incurred during the standby period whilst the Caroil-6 rig was repaired during the 2007 drilling campaign. The Company has begun arbitration proceedings against a third party contractor for breaches of contract that occurred during the drilling of the SS-10 well in 2007 with a view to recovering further costs.

### Variance analysis between quarters

#### Revenue

The Company commenced the sale of Additional Gas to industrial customers in September 2004. Since then, the volumes of Additional Gas sold to the industrial sector have increased from an average of 1.2 MMscfd in Q4 2004 to 4.3 MMscfd in Q4 2008 (Q4 2007: 4.3 MMscfd). Industrial sales peak in the third quarters of each year as textile customers take advantage of low cotton prices during the harvest season. The average sales in Q3 2008 were 4.6 MMscfd which was lower than Q3 2007 when 5.3 MMscfd was sold. The textile industry is facing some contraction due to heavy competition in world markets.

The average price to the industrial sector has varied in line with the price of crude oil as the gas is priced at a discount to the price of Heavy Fuel Oil in Dar es Salaam. The average price ranged from US\$5.23/mcf in Q1 2005 peaking at US\$13.29/mcf in Q3 2008. During the second half of 2008, the Company extended the term of six contracts accounting for the majority of the industrial gas sales volumes for an additional five years from the dates that existing contracts were due to expire (the earliest termination date is now September 2014). In return the Company has agreed to cap the price of gas to these customers whilst also incorporating a floor price. This is expected to keep the price of gas in the range of US\$7.38/mcf to US\$11.49/mcf (increasing at 2% per annum).

The sale of Additional Gas to the power sector commenced in Q3 2005 and this contributed towards a significant step increase in revenue from that quarter. In Q4 2008 sales averaged 23.4 MMscfd which was identical to the rate achieved in Q4 2007 and represented the highest level of sales achieved in any quarter.

Historically the gas price paid by Songas for use at the Ubungo power plant has varied month by month depending on the availability of the gas turbines at the Ubungo power plant. However from January 2008 the price was fixed at US\$2.37/mcf. The higher average sales price for the power sector recorded in 2008 is due to an increase in the sales price paid by TANESCO for Additional Gas for the emergency power units operated by Dowans Tanzania Limited ("Dowans"). TANESCO cancelled the contract with Dowans at the end of July 2008.

#### Loss / profit after taxation

The majority of the Company's costs associated with the production and distribution of gas are fixed in nature. There has been an increase during 2008 because of the increase in the costs of negotiating the initialled long term power contracts.

Profitability in the first and fourth quarters of each year is affected by the seasonality of gas demand by the textile customers. In addition, there tends to be lower demand for gas by the power sector in the first two quarters of each year as the hydro generation utilization increases with the seasonal rainfall.

A profit of US\$0.01 million was recorded in Q4 2008 compared to a profit of US\$0.8 million in Q3 2008. The fall in profit is primarily the result of the decline in both the level of sales volumes and prices achieved in the industrial markets.

The loss after taxation recorded in 2008 is the result of the US\$9.5 million impairment of the Company's Uganda assets following the decision not to exercise the right to acquire a 50% working interest from Tower, together with the step change increase in the level of general administrative expenses. The increase in general and administrative costs has occurred due to an increase in the legal and marketing costs associated with negotiating long term power contracts together with an increase in the costs of the Company's new venture activities. The Company is currently focussed on reducing its general and administrative expenses in 2009.

### Working capital

The increase in working capital by US\$2.4 million during 2008 to US\$9.7 million in Q4 2008 from US\$7.3 million in Q4 2007 is primarily due to the generation of US\$2.0 million of funds from operating activities in the year after incurring capital expenditure of US\$7.7 million. The available funds enabled the Company to reduce the trade and other payables balances especially those related to the drilling of SS-10.

### SELECTED FINANCIAL INFORMATION

Selected annual financial information derived from the audited consolidated financial statements for the years ended 31 December 2006, 2007 and 2008 is set out below:

<i>(Figures in US\$'000 except per share amount)</i>	2008	2007	2006
Revenue	23,782	18,777	13,828
Funds from operations before working capital changes	9,751	8,696	5,969
(Loss)/profit after taxation	(9,523)	1,745	2,577
Total assets	85,248	92,789	43,904
(Loss)/profit per share:			
Basic	(0.32)	0.06	0.11
Diluted	(0.32)	0.06	0.10

Revenue increased by 27% in 2008 compared to 2007. Additional Gas volumes sold increased 12% from 7,731 MMscf in 2007 to 8,660 MMscf due to the increase in sales to the power sector for increasing electricity demand. Revenue increased by 36% in 2007 compared to 2006. Additional Gas volumes sold increased from 4,837 MMscf in 2006 to 7,731 MMscf in 2007 primarily due to the installation of emergency power generation by Dowans and Aggreko in the last quarter of 2006.

Funds from operations before working capital changes increased by 12% in 2008 primarily as a result of the increase in revenues associated with higher volumes and prices.

Despite increased sales, a loss of US\$9.5 million was recorded in 2008 due to the write off of US\$9.5 million in relation to the withdrawal from exploration activities in Uganda, and the increase in general administrative costs. During 2008, the Company's assets decreased by 8% to US\$85.2 million (2007: increased 111% to US\$92.8 million). The Company's assets are made up as follows:

<i>(Figures in US\$'000)</i>	2008	2007	2006
<b>Current assets</b>			
Cash and cash equivalents	10,586	16,515	20,678
Trade and other receivables	13,196	8,236	4,275
	23,782	24,751	24,953
<b>Fixed assets</b>			
Exploration and evaluation assets	648	6,881	-
Property, plant and equipment	60,818	61,157	18,951
<b>Total assets</b>	<b>85,248</b>	<b>92,789</b>	<b>43,904</b>

The decrease in the cash and cash equivalents in 2008 is primarily the result of reducing the trade and other payables and the payment of capital expenditure in both Uganda and Tanzania. The decrease in the cash and cash equivalents in 2007 is primarily the result of the high level of capital expenditure associated with the SS-10 development well and the expansion of activities into Uganda. This was financed by the net receipt of US\$30.4 million from the issue of 2.5 million Class B shares at Cdn\$13.80 per share in July 2007.

The increase in trade and other receivables is due to the increased trading activities in the power sector and the delay in payments from TANESCO. This is more fully discussed in 'Working Capital' on page 38.

In 2008, the Company's capital expenditure was focused on expanding the infrastructure and improving the geological understanding of the gas reserves in place, both with a view to increasing the deliverability and security of Additional Gas supply. The efforts undertaken resulted in the initialling of two long-term power contracts and a relaxation of the financial security required in the event of an insufficiency of Protected Gas. The expenditures incurred on plant, property and equipment is discussed further in 'Capital Expenditure' above.

## BUSINESS RISKS

### Operating Hazards and Uninsured Risks

The business of Orca Exploration is subject to all of the operating risks normally associated with the exploration for, and the production, storage, transportation and marketing of oil and gas. These risks include blowouts, explosions, fire, gaseous leaks, migration of harmful substances and oil spills, any of which could cause personal injury, result in damage to, or destruction of, oil and gas wells or formations or production facilities and other property, equipment and the environment, as well as interrupt operations. In addition, all of Orca Exploration's operations will be subject to the risks normally incident to drilling of natural gas wells and the operation and development of gas properties, including encountering unexpected formations or pressures, premature declines of reservoirs, blowouts, equipment failures and other accidents, sour gas releases, uncontrollable flows of oil, natural gas or well fluids, adverse weather conditions, pollution and other environmental risks. Drilling conducted by Orca Exploration overseas will involve increased drilling risks of high pressures and mechanical difficulties, including stuck pipe, collapsed casing and separated cable. The impact that any of these risks may have upon Orca Exploration is increased due to the fact that Orca Exploration currently only has one producing property. Orca Exploration will maintain insurance against some, but not all, potential risks; however, there can be no assurance that such insurance will be adequate to cover any losses or exposure for liability. The occurrence of a significant unfavourable event not fully covered by insurance could have a material adverse effect on Orca Exploration's financial condition, results of operations and cash flows. Furthermore, Orca Exploration cannot predict whether insurance will continue to be available at a reasonable cost or at all.

### Foreign Operations

All of Orca Exploration's operations and related assets are located in Tanzania which may be considered to be politically and/or economically unstable. Exploration or development activities in Tanzania may require protracted negotiations with host governments, national oil companies and third parties and are frequently subject to economic and political considerations, such as, the risks of war, actions by terrorist or insurgent groups, expropriation, nationalization, renegotiation or nullification of existing contracts, taxation policies, foreign exchange restrictions, changing political conditions, international monetary fluctuations, currency controls and foreign governmental regulations that favour or require the awarding of drilling contracts to local contractors or require foreign contractors to employ citizens of, or purchase supplies from, a particular jurisdiction. In addition, if a dispute arises with foreign operations, Orca Exploration may be subject to the exclusive jurisdiction of foreign courts.

In the foreign countries in which Orca Exploration will conduct business, currently limited to Tanzania, the state generally retains ownership of the minerals and consequently retains control of (and in many cases, participates in) the exploration and production of hydrocarbon reserves. Accordingly, these operations may be materially affected by host governments through royalty payments, export taxes and regulations, surcharges, value added taxes, production bonuses and other charges.

All of Orca Exploration's development properties and all of its proved natural gas reserves are located offshore on the Songo Songo Island in Tanzania, and, consequently, Orca Exploration's assets will be subject to regulation and control by the government of Tanzania and certain of its national and parastatal organizations including the energy regulator, EWURA. Orca Exploration and its predecessors have operated in Tanzania for a number of years and believe that it has good relations with the current Tanzanian government. However, there can be no assurance that present or future administrations or governmental regulations in Tanzania will not materially adversely affect the operations or future cash flows of Orca Exploration.

### **Additional Financing**

Depending on future exploration, development, and marketing plans, Orca Exploration may require additional financing. The ability of Orca Exploration to arrange such financing in the future will depend in part upon the prevailing capital market conditions as well as the business performance of Orca Exploration. There can be no assurance that Orca Exploration will be successful in its efforts to arrange additional financing on terms satisfactory to Orca Exploration. If additional financing is raised by the issuance of shares from treasury of Orca Exploration, control of Orca Exploration may change and shareholders may suffer additional dilution.

From time to time Orca Exploration may enter into transactions to acquire assets or the shares of other companies. These transactions may be financed partially or wholly with debt, which may temporarily increase Orca Exploration's debt levels above industry standards.

### **Industry Conditions**

The oil and gas industry is intensely competitive and Orca Exploration competes with other companies which possess greater technical and financial resources. Many of these competitors not only explore for and produce oil and natural gas, but also carry on refining operations and market petroleum, natural gas products and other products on an international basis. Oil and gas production operations are also subject to all the risks typically associated with such operations, including premature decline of reservoirs and invasion of water into producing formations. Currently, Orca Exploration operates the Songo Songo natural gas property. There is a risk that in the future either the operatorship could change and the property operated by third parties or operations may be subject to control by national oil companies, Songas, or parastatal organisations and, as a result, Orca Exploration may have limited control over the nature and timing of exploration and development of such properties or the manner in which operations are conducted on such properties.

The marketability and price of natural gas which may be acquired, discovered or marketed by Orca Exploration will be affected by numerous factors beyond its control. There is currently no developed natural gas market in Tanzania and no infrastructure with which to serve potential new markets beyond that being constructed by Orca Exploration and Songas. The ability of Orca Exploration to market any natural gas from current or future reserves may depend upon its ability to develop natural gas markets in Tanzania and the surrounding region, obtain access to the necessary infrastructure to deliver sales gas volumes, including acquiring capacity on pipelines which deliver natural gas to commercial markets. Orca Exploration is also subject to market fluctuations in the prices of oil and natural gas, uncertainties related to the delivery and proximity of its reserves to pipelines and processing facilities and extensive government regulation relating to prices, taxes, royalties, land tenure, allowable production, the export of oil and gas and many other aspects of the oil and gas business. Orca Exploration is also subject to a variety of waste disposal, pollution control and similar environmental laws.

The oil and natural gas industry is subject to varying environmental regulations in each of the jurisdictions in which Orca Exploration may operate. Environmental regulations place restrictions and prohibitions on emissions of various substances produced concurrently and oil and natural gas and can impact on the selection of drilling sites and facility locations, potentially resulting in increased capital expenditures.

### **Additional Gas**

Orca Exploration has the right, under the terms of the PSA, to market volumes of Additional Gas subject to satisfying the requirements to deliver Protected Gas to Songas.

There is a risk that Songas could interfere in Orca Exploration's ability to produce, transport and sell volumes of Additional Gas if Orca Exploration's obligations to Songas under the Gas Agreement are not met. In particular, Songas has the right to request reasonable security on all Additional Gas sales.

### Replacement of Reserves

Orca Exploration's natural gas reserves and production and, therefore, its cash flows and earnings are highly dependent upon Orca Exploration developing and increasing its current reserve base and discovering or acquiring additional reserves. Without the addition of reserves through exploration, acquisition or development activities, Orca Exploration's reserves and production will decline over time as reserves are depleted. To the extent that cash flow from operations is insufficient and external sources of capital become limited or unavailable, Orca Exploration's ability to make the necessary capital investments to maintain and expand its oil and natural gas reserves will be impaired. There can be no assurance that Orca Exploration will be able to find and develop or acquire additional reserves to replace production at commercially feasible costs.

### Asset Concentration

Orca Exploration's natural gas reserves are limited to one property, the Songo Songo field, and the production potential from this field is limited to six wells. There has been limited production from the six wells in the Songo Songo field to date. There is no assurance that Orca Exploration will have sufficient deliverability through the existing wells to provide additional natural gas sales volumes, and that there may be significant capital expenditures associated with any remedial work, or new drilling required to achieve deliverability. In addition, any difficulties relating to the operation or performance of the field would have a material adverse effect on Orca Exploration.

### Environmental and Other Regulations

Extensive national, state, and local environmental laws and regulations in foreign jurisdictions will affect nearly all of Orca Exploration's operations. These laws and regulations set various standards regulating certain aspects of health and environmental quality, provide for penalties and other liabilities for the violation of such standards and establish in certain circumstances obligations to remediate current and former facilities and locations where operations are or were conducted. In addition, special provisions may be appropriate or required in environmentally sensitive areas of operation. There can be no assurance that Orca Exploration will not incur substantial financial obligations in connection with environmental compliance. Significant liability could be imposed on Orca Exploration for damages, cleanup costs or penalties in the event of certain discharges into the environment, environmental damage caused by previous owners of property purchased by Orca Exploration or non-compliance with environmental laws or regulations. Such liability could have a material adverse effect on Orca Exploration. Moreover, Orca Exploration cannot predict what environmental legislation or regulations will be enacted in the future or how existing or future laws or regulations will be administered or enforced. Compliance with more stringent laws or regulations, or more vigorous enforcement policies of any regulatory authority, could in the future require material expenditures by Orca Exploration for the installation and operation of systems and equipment for remedial measures, any or all of which may have a material adverse effect on Orca Exploration. As party to various licenses, Orca Exploration has an obligation to restore producing fields to a condition acceptable to the authorities at the end of their commercial lives.

While management believes that Orca Exploration is currently in compliance with environmental laws and regulations applicable to Orca Exploration's operations in Tanzania, no assurances can be given that Orca Exploration will be able to continue to comply with such environmental laws and regulations without incurring substantial costs.

Orca Exploration's petroleum and natural gas operations are subject to extensive governmental legislation and regulation and increased public awareness concerning environmental protection.

No provision has been recognized for future decommissioning costs which are anticipated to be minimal as it is forecast that there will still be commercial gas reserves once Orca Exploration relinquishes the license in 2026. Orca Exploration expects that the cost of complying with environmental legislation and regulations will increase in the future. Compliance with existing environmental legislation and regulations has not had a material effect on capital expenditures, earnings or competitive position of Orca Exploration to date. Although management believes that Orca Exploration's operations and facilities are in material compliance with such laws and regulations, future changes in these laws, regulations or interpretations thereof or the nature of its operations may require the Company to make significant additional capital expenditures to ensure compliance in the future.

#### **Volatility of Oil and Gas Prices and Markets**

Orca Exploration's financial condition, operating results and future growth will be dependent on the prevailing prices for its natural gas production. Historically, the markets for oil and natural gas have been volatile and such markets are likely to continue to be volatile in the future. Prices for oil and natural gas are subject to large fluctuations in response to relatively minor changes to the demand for oil and natural gas, whether the result of uncertainty or a variety of additional factors beyond the control of Orca Exploration. Any substantial decline in the prices of oil and natural gas could have a material adverse effect on Orca Exploration and the level of its natural gas reserves. Additionally, the economics of producing from some wells may change as a result of lower prices, which could result in a suspension of production by Orca Exploration.

No assurance can be given that oil and natural gas prices will be sustained at levels which will enable Orca Exploration to operate profitably. From time to time Orca Exploration may avail itself of forward sales or other forms of hedging activities with a view to mitigating its exposure to the risk of price volatility. The term of the Company's six largest gas supply contracts has been recently extended for five years. The new contracts contain pricing caps and floors that limit the industrial downside price to US\$7.38/mcf. The Company also entered into fixed price contracts with TANESCO and Songas for the supply of Additional Gas to the power sector. Therefore during 2008 the Company has taken very positive steps in mitigating the exposure to price volatility.

The Songo Songo field was the first gas field to be developed in East Africa and was followed by a commercial gas discovery in the south of Tanzania at Mnazi Bay. The Company is the only supplier of gas into the main demand centre of Dar es Salaam and has therefore been able to negotiate industrial gas sales contracts with gas prices that are at a discount to the lowest cost alternative fuels in Dar es Salaam, namely HFO and coal.

Recently, there has been increased activity in the exploration of oil and gas in Tanzania, with the result that one well has been drilled on an adjacent prospect to Songo Songo and is assessed to have a small accumulation of gas. There are currently two rigs operating in Tanzania and two wells were being drilled in Q1 2009. The exploration activity will be closely monitored by the Company, but could lead to increased competition for gas markets and lower gas prices in the future.

In addition, various factors, including the availability and capacity of oil and gas gathering systems and pipelines, the effect of foreign regulation of production and transportation, general economic conditions, changes in supply due to drilling by other producers and changes in demand may adversely affect Orca Exploration's ability to market its gas production.

#### **Uncertainties in Estimating Reserves and Future Net Cash Flows**

There are numerous uncertainties inherent in estimating quantities of proved and probable reserves and cash flows to be derived therefrom, including many factors beyond the control of Orca Exploration. The reserve and cash flow information contained herein represents estimates only. The reserves and estimated future net cash flow from Orca Exploration's properties have been independently evaluated by McDaniel & Associates Consultants Ltd. These evaluations include a number of assumptions relating to factors such as initial production rates, production decline rates, ultimate recovery of reserves, timing and amount of capital expenditures, marketability of production, crude oil price differentials to benchmarks, future prices of oil and natural gas, operating costs, transportation costs, cost recovery provisions and royalties, TPDC "back-in" methodology and other government levies that may be imposed over the producing life of the reserves. These assumptions were based on price forecasts in use at the date of the relevant evaluations were prepared and many of these assumptions are subject to change and are beyond the control of Orca Exploration. Actual production and cash flows derived therefrom will vary from these evaluations, and such variations could be material.

**Title to Properties**

Although title reviews have been done and will continue to be done according to industry standards prior to the purchase of most oil and natural gas producing properties or the commencement of drilling wells, such reviews do not guarantee or certify that an unforeseen defect in the chain of title will not arise to defeat the claim of Orca Exploration which could result in a reduction of the revenue received by Orca Exploration.

**Acquisition Risks**

Orca Exploration intends to acquire natural gas infrastructure and possibly additional oil and gas properties. Although Orca Exploration performs a review of the acquired properties that it believes is consistent with industry practices, such reviews are inherently incomplete. It generally is not feasible to review in depth every individual property involved in each acquisition. Ordinarily, Orca Exploration will focus its due diligence efforts on the higher valued properties and will sample the remainder. However, even an in depth review of all properties and records may not necessarily reveal existing or potential problems, nor will it permit a buyer to become sufficiently familiar with the properties to assess fully their deficiencies and capabilities. Inspections may not be performed on every well, and structural or environmental problems, such as ground water contamination, are not necessarily observable even when an inspection is undertaken. Orca Exploration may be required to assume pre-closing liabilities, including environmental liabilities, and may acquire interests in properties on an "as is" basis. There can be no assurance that Orca Exploration's acquisitions will be successful.

**Reliance on Key Personnel**

Orca Exploration is highly dependent upon its executive officers and key personnel. The unexpected loss of the services of any of these individuals could have a detrimental effect on Orca Exploration. Orca Exploration does not maintain key life insurance on any of its employees or officers.

**Controlling Shareholder**

W David Lyons, the Company's non-executive Chairman, is the sole controlling shareholder of Orca Exploration and holds approximately 99.5% of the outstanding Class A shares and approximately 15.9% of the Class B shares. Consequently, Mr. Lyons holds approximately 20.9% of the equity (22.2% fully diluted) and controls 62.5% of the total votes of Orca Exploration.

## CORPORATE INFORMATION

## BOARD OF DIRECTORS

**W. DAVID LYONS**

Non-Executive Chairman  
St. Helier  
Jersey

**PETER R. CLUTTERBUCK**

President & Chief  
Executive Officer  
Haslemere  
United Kingdom

**NIGEL A. FRIEND**

Chief Financial Officer  
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United Kingdom

**PIERRE RAILLARD**

Vice President Operations  
Dar es Salaam  
Tanzania

**JOHN PATTERSON**

Non-Executive Director  
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Canada

**DAVID ROSS**

Non-Executive Director  
Calgary  
Canada

**JAMES SMITH**

Vice President Exploration  
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United Kingdom

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**DAVID W. ROSS**

Company Secretary

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## ENGINEERING CONSULTANTS

**MCDANIEL & ASSOCIATES CONSULTANTS LTD.**

Calgary  
Canada

## AUDITORS

**KPMG LLP**

Calgary  
Canada  
and Calgary, Canada

## LAWYERS

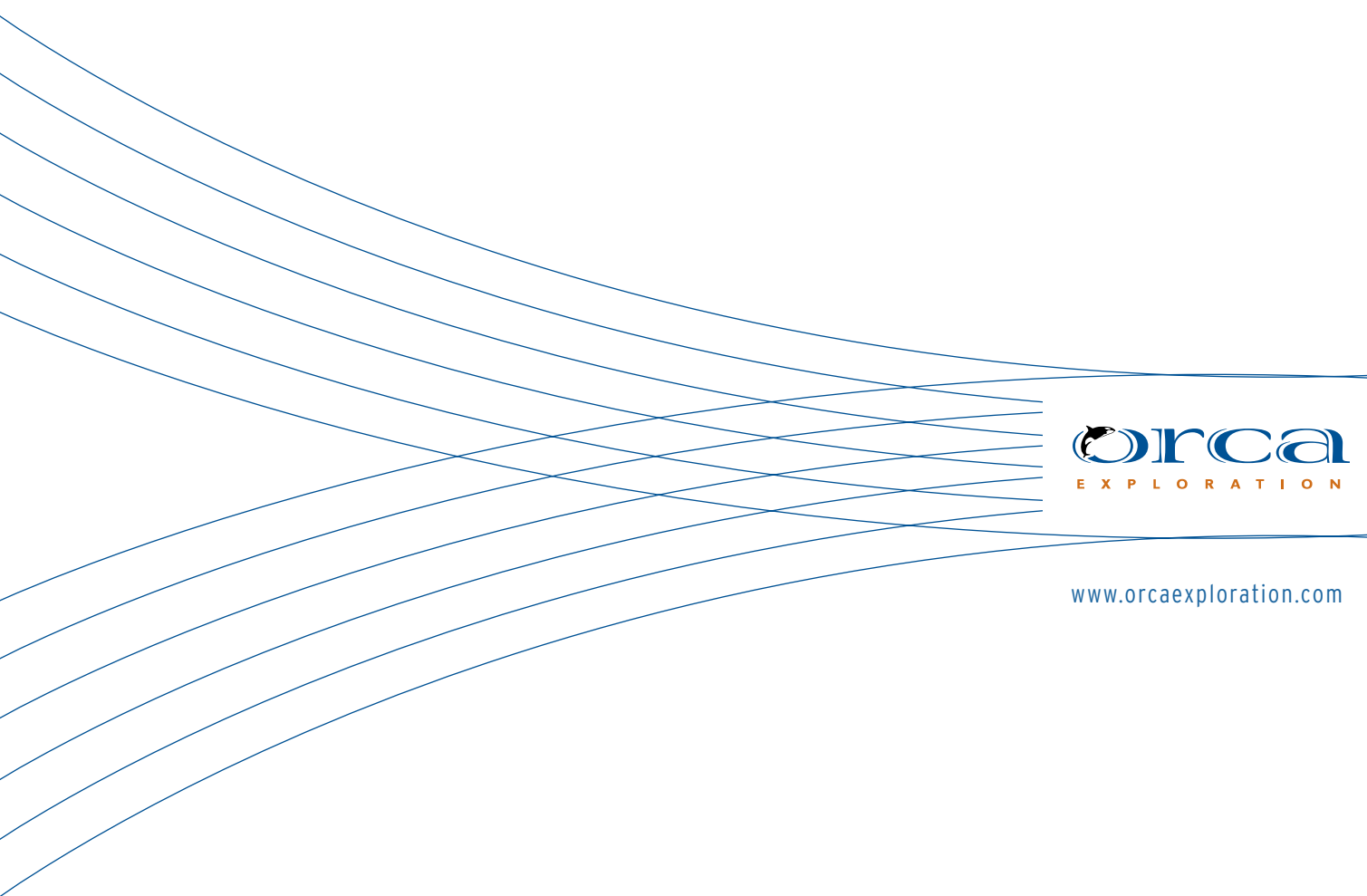
**BURNET, DUCKWORTH & PALMER LLP**

Calgary

## TRANSFER AGENT

**CIBC MELLON TRUST TRUST COMPANY**

Toronto, Montreal Canada



[www.orcaexploration.com](http://www.orcaexploration.com)