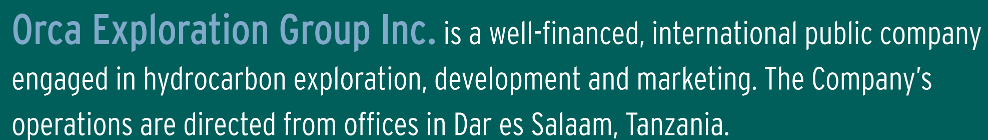
Orca Exploration Group Inc.
2008 Annual Report



Orca Exploration Group Inc. is a well-financed, international public company engaged in hydrocarbon exploration, development and marketing. The Company's operations are directed from offices in Dar es Salaam, Tanzania.

Orca's focus is on the exploration, production, development and marketing of natural gas to meet Tanzania's growing power and industrial energy needs.

Orca Exploration trades on the TSXV under the trading symbols **ORC.B** and **ORC.A**

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This annual report contains certain forward-looking statements based on current expectations, but which involve risks and uncertainties. Actual results may differ materially. All financial information is reported in U.S. dollars (US$), unless otherwise noted.

FINANCIAL AND OPERATING HIGHLIGHTS

YEARS ENDED 31 DECEMBER	2008	2007	Change
Financial *(US$ '000 except where otherwise stated)*			
Revenue	23,782	18,777	27%
(Loss)/profit before taxation	(7,056)	3,775	n/m
Operating netback (US$/mcf)	2.60	2.31	13%
Cash and cash equivalents	10,586	16,515	(36%)
Working capital	9,727	7,299	33%
Shareholders' equity	64,712	71,544	(10%)
(Loss)/profit per share - basic and diluted (US$)	(0.32)	0.06	n/m
Funds from operations before working capital changes	9,751	8,696	12%
Funds per share from operations before working capital changes - basic (US$)	0.33	0.31	6%
Funds per share from operations before working capital changes - diluted (US$)	0.31	0.29	7%
Outstanding Shares *('000)*			
Class A shares	1,751	1,751	0%
Class B shares	27,863	27,863	0%
Options	2,814	2,847	(1%)
Operating			
Additional Gas sold - industrial (MMscf)	1,475	1,504	(2%)
Additional Gas sold - power (MMscf)	7,185	6,227	15%
Average price per mcf - industrial (US$)	11.98	9.31	29%
Average price per mcf - power (US$)	2.37	2.19	8%
Gross Recoverable Reserves to end of license *(Bcf)*			
Proved	389	309	26%
Probable	102	165	(38%)
Proved plus probable	491	474	4%
Present Value, discounted at 10% *(US$ million)*			
Proved	258	183	41%
Proved plus probable	299	255	17%

GLOSSARY

mcf	Thousands of standard cubic feet
MMscf	Millions of standard cubic feet
Bcf	Billions of standard cubic feet
Tcf	Trillions of standard cubic feet
MMscfd	Millions of standard cubic feet per day
Mmbtu	Millions of British thermal units
HHV	High heat value
1P	Proven reserves
2P	Proven and probable reserves
3P	Proven, probable and possible reserves
GIIP	Gas initially in place
Kwh	Kilowatt hour
MW	Megawatt
US$	US dollars

In these uncertain times, Orca Exploration Group Inc. has what it will take to successfully weather the economic storm that has swept across the globe. We have a cash generating asset in a friendly country, rapidly growing demand for the natural gas that Orca produces from Tanzania's Songo Songo field, no corporate debt, no license commitments and a skilled and disciplined team of employees.

Our work focuses on the further development of the Songo Songo natural gas field – a project that has been in the works for more than two decades. Today it enables Tanzania to displace expensive oil imports used for power generation, improve its domestic balance of payments and be an African leader in the reduction of hydrocarbon emissions. This is a very valuable project both to Tanzania and to our Orca shareholders.

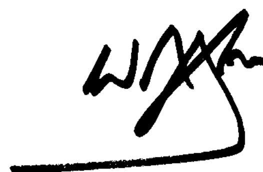
To secure long term benefits for both Tanzania and our shareholders, Orca has negotiated licenses that carry forward until October 2026. We have also initialled sustainable pricing formulas that will meet Tanzania's need for cost-effective access to its gas resources and Orca's return on investment expectations. This has been accomplished by a careful balancing of Orca's financial and operations strengths with our conservative fiscal philosophy. It is also a tribute to the excellent working relationship we have with our partner, Tanzania Petroleum Development Corporation and for the guidance of the Ministry of Energy and Minerals.

In recent years there has been increasing industrial activity in Tanzania's main industrial hub of Dar es Salaam. This is borne out by the US$100 million investment by Heidelberg Cement in a new cement kiln at Wazo Hill to meet the increasing demands of the construction industry and the projected 7% growth in electricity demand. Tanzania's overall economic growth was 7.5% in 2008 and is projected to be 4.5% in 2009.

The Tanzanian economy is fortunate in today's climate in that it has no significant exposure to the major financial markets which are in turmoil. The country's exports are focused on agricultural products and its mining industry, which is growing in importance, includes high value minerals. Tanzania is the third largest producer of gold in Africa and the only supplier of Tanzanite.

The International Monetary Fund is extremely supportive of Tanzania and the work of President Kikwete and the Chama cha Mapinduzi Party to encourage private sector investments in Tanzania. The country also has strong support from the World Bank which has earmarked funds for Tanzania's development over the next three years. Some of this is expected to be allocated to upgrade and strengthen the electricity transmission infrastructure.

I have personally been associated with the development of Tanzania's natural gas resources since the early 1990s and I feel confident that Orca has an excellent project that is creating long term value for shareholders and real benefits for East Africa. Orca's management is working hard to safeguard and grow the value of your investment.



W. David Lyons
Chairman
28 April 2009

Opposite page: *A new US$100 million cement kiln which will use Additional Gas is under construction at Dar es Salaam.*

As Orca Exploration enters 2009,

it is in a strong position to weather the global deterioration in financial markets:

- The Company had cash and cash equivalents of approximately US$10 million as at 31 December 2008 and no outstanding long term indebtedness.
- The Company increased funds from operations before working capital changes by 12% to US$9.7 million in 2008. This is expected to increase in 2009 as sales volumes increase and there is a reduction in general and administrative costs.
- The terms of the Company's gas sales contracts partially insulate the business from the volatility in world oil prices. The prices are fixed in the case of sales to the power sector and there are pricing floors in place for the majority of the sales volumes to the industrial customers.
- The Tanzanian economy is not currently expected to be as severely impacted by the financial crisis given the minimal credit levels in the country. It is expected that the World Bank and other multi-laterals will continue to finance infrastructure developments making credit available on a timely basis.
- During 2008, the Company increased Additional Gas sales volumes by 12% to an average of 23.7 MMscfd.
- The Company's recoverable gross proven and probable (2P) reserves on a life of license basis increased by 4% to 491 Bcf in 2008 providing Orca with the ability to commence the negotiation of further long term power contracts.
- The Company has no expenditure or financial obligations to Government or stakeholders with respect to its assets, and all investments are entirely at Orca's discretion.
- In Q1 2009, the Company was given approval by Songas Limited, to increase the processing capacity of the gas plant on Songo Songo Island by 20 MMscfd from 70 to 90 MMscfd. This will facilitate the growth in sales volumes in 2009.

These factors will enable Orca to continue to grow its Tanzanian gas business in 2009 and to have the confidence to invest a further US$11 million primarily in the development of the downstream gas markets.

INCREASED RESERVES

The independent reserve evaluator, McDaniel and Associates Consultants Ltd. ("McDaniel") report of the Songo Songo reserves as at 31 December 2008 demonstrates that the Company's gross proven (1P) and proven and probable (2P) reserves in Songo Songo to the end of the license period have increased by 26% to 389 Bcf and 4% to 491 Bcf respectively during 2008. On a life of field basis the proven and proven and probable reserves have increased by 18% to 433 Bcf and 17% to 649 Bcf respectively. Orca Exploration will look at ways to accelerate field deliverability such that increased reserves can be assigned to the proved category, or seek to extend the current license period. Since production from Songo Songo began in 2004 there has been a 125% increase in Orca's proven reserves and a 92% increase in the proven and probable reserves on a life of field basis.

Based on these reserves and deliverability profiles produced by the Company and McDaniel, the Company is looking to develop gas markets that can consume approximately 100 – 120 MMscfd of Additional Gas. To meet these sales levels, it is assessed that there is a need to drill two new development wells in the field and install field compression.

Orca anticipates that reserves can be further increased by the drilling of the Songo Songo West exploration prospect. In September 2008, McDaniel evaluated this prospect and assessed it to contain unrisked mean resources of 552 Bcf. This prospect will be drilled as soon as practical given the availability of capital.

SUCCESS IN INCREASING GAS PROCESSING CAPACITY

In Q4 2008, the Company successfully completed the installation of a new Joule-Thompson valve on each of the gas processing trains and associated pipework, with no significant disruption of gas supply to Dar es Salaam. In Q1 2009, Lloyds Register certified the two processing trains at 45 MMscfd each and Songas Limited approved the re-rating to 90 MMscfd. Each of the trains was tested to 55 MMscfd and Lloyds Register may yet certify the plant at 110 MMscfd after having successfully inspected the gas heat exchangers later in 2009. If this level of processing is confirmed, it is unlikely that infrastructure capacity would be a constraint until 2011/2012, which allows sufficient lead time for further processing and pipeline expansion.

Since 2006, Songas has been looking to expand the gas processing infrastructure by installing two additional gas processing trains. This expansion is planned to increase gas processing capacity to a minimum of 160 MMscfd. With re-rating of all four trains to 55 MMscfd, the plant would be capable of delivering in excess of 200 MMscfd.

Current delays in the implementation of this expansion involve issues raised by the energy regulator, EWURA, in approving the economic and contractual terms. Songas is currently reviewing its position in relation to the latest order issued by EWURA on 27 February 2009. All parties are working towards resolving the remaining issues to allow this to happen. In the event that the currently planned expansion does not proceed, the Company is developing a contingency plan to expand the entire system (gas processing and pipeline) to 200 MMscfd. The Company will look for a third party to finance this expansion with the objective of it being in place by the end of 2011, in line with the requirement for additional capacity.

Opposite page: *Orca is currently supplying Additional Gas for the operation of Ubungo 6.*

EXPANDING MARKETS AND DOWNSTREAM DISTRIBUTION

During 2008, Orca expanded its downstream low pressure gas distribution system extending it by 7 kilometers to 42 kilometers. Three new customers were connected during 2008. This brings the total number of customers on line to 20 as at 31 December 2008. In addition, eight new contracts were signed in 2008 and these customers will be connected during the course of 2009. There is now significant surplus system capacity that can accommodate further growth.

The most significant industrial contract signed in 2008 was with Tanzania Portland Cement Company ("TPCC") for the supply of gas to a new US$100 million kiln at its Wazo Hill cement plant. The supply of gas commenced ahead of schedule in Q1 2009 at a rate of approximately 2.0 MMscfd. This is forecast to increase to 4.0 MMscfd by 2010 given the significant growth in cement demand in Tanzania.

INITIALLING OF LONG TERM POWER CONTRACTS

In June 2008, the Company agreed commercial terms and 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 Additional Gas for power generation. The first contract provides for the supply of gas to the sixth turbine at the Ubungo power plant to a maximum of approximately 9 MMscfd until July 2024. The second initialled contract covers the supply of Additional Gas to the remaining gas powered generation currently in Tanzania. Beginning in November 2010, the take or pay contract volume in this contract is set at 32 MMscfd through to July 2023, with a maximum daily quantity of 36 MMscfd.

The quantum of the gas sales volumes to the power sector in the short term under these initialled contracts will depend on the availability of the 561 MWs of Tanzania's hydro generation, the timing of any further increase in the Songo Songo infrastructure capacity and the level of installed and operational gas fired generation.

The same contract price applies to both contracts. It is primarily composed of a wellhead price and an amount that is paid to Songas for the use of the gas processing and pipeline infrastructure that is subject to approval from the energy regulator, EWURA. The wellhead price is fixed at approximately US$1.95/mcf which will increase at an expected 2% per annum from July 2009. From July 2012, there will be a step change in the wellhead price to a forecast US$2.83/mcf which will then increase at 2% per annum. Retail downstream burner tip price will be the wellhead price plus processing and transportation tariff. This protocol insulates Orca Exploration from any increases in the gas processing and pipeline infrastructure tariffs.

These contracts are currently interlinked with the construction of the third and fourth gas processing trains. Final signature will take place once Songas commits to the EPC contract for these trains. In the event that Songas does not reach agreement with EWURA on the economic and contractual terms, the contracts will need to be amended to delink them from the gas processing expansion. In the meantime, gas continues to be supplied to the power plants, and payment is received on a monthly basis under an interim arrangement.

INSULATION OF CASH FLOWS FROM OIL PRICE VOLATILITY

Orca's cash flows are not significantly exposed to oil price volatility as a result of negotiating fixed prices and pricing floors with its customers.

During 2008, the Company extended the term of six of its largest contracts accounting for the majority of the industrial gas sales volumes. The extensions cover an additional five years from the dates that existing contracts were due to expire with the earliest contract termination date being September 2014. In return the Company 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 to these industrial customers in the range of US$7.38/mcf to US$11.49/mcf (increasing at 2% per annum).

Power contract prices are fixed as per the initialled power contracts. This also applies to the new gas supply contract with TPCC, the cement manufacturer at Wazo Hill.

SALES GROWTH

During 2008, the Company increased Additional Gas sales volumes by 12% to an average of 23.7 MMscfd. Based on the existing signed industrial contracts and the initialled power contracts, it is forecast that there will be approximately 50 MMscfd of Additional Gas sales from 2011. Whilst the industrial market in Dar es Salaam, as supplied by the low pressure distribution system, is expected to expand steadily over the next few years, the majority of the growth required to maximize the current proven and probable reserves is expected to come from the production of CNG and demand from the power sector.

Power sector

In response to the Tanzanian Power Sector Master Plan, which projects growth in electricity demand at 7% to 10% per annum or approximately 100 MWs of new generation per annum until 2016, TANESCO has commenced planning for the installation of a 200 – 250 MW power plant at Kinyerezi, Dar es Salaam. This plant is expected to consume a maximum of 50 MMscfd. The negotiation of the Kinyerezi power plant contract is expected to commence in the second half of 2009, once the initialled contracts are signed. TANESCO has indicated that it would intend this plant to be

operational by 2011/2012. Discussions have been held between the Governments of Kenya and Tanzania as members of the East African Community to progress a gas pipeline from Dar es Salaam to Mombasa, which can take gas in excess of Tanzanian demand, to fulfil existing thermal fuel generation in Mombasa, and a future 200 MWs of dual fuel new generation. This market fits well with the potential Songo Songo West prospect.

CNG

During 2008, the Company commenced the construction of CNG facilities in Dar es Salaam, which include the construction of one "Mother Station" consisting of a compressor, a vehicle refuelling dispenser and two trailer filling facilities and three "Daughter Stations" for the supply of some industries, hotels and one institution at a cost of US$2.5 million. The CNG facilities are expected to be operational in Q2 2009 and lead 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 Orca's existing low pressure gas distribution system. This will commence with supply to the Mikocheni region, followed by a further supply to the city of Morogoro.

NEW VENTURES

In 2008, Orca decided not to exercise its option to drill two wells in Exploration Area 5 ("EA5") in Uganda to secure a 50% interest in the license. The 300 kilometers of 2-D seismic revealed a number of structures, but the technical analysis indicated a level of risk too high to warrant the costs of an exploration drilling program. The Company believes that proven reserves can be acquired at lower cost by acquisition in today's market, rather then by exploration, which is still a high cost activity. As part of the financial settlement with Tower Resources Plc. it was agreed that if any discovery in EA5 is found to be commercial, Orca could recover, out of the cost recovery pool, up to US$7.5 million that was spent on the seismic acquisition.

FINANCIAL RESULTS

Orca Exploration's 2008 revenues increased 27% to US$23.8 million compared to 2007. Funds from operations before working capital changes increased 12% to US$9.7 million.

The Company's 2008 profitability was impacted by a US$9.5 million write down of the costs associated with the Ugandan seismic acquisition. If this one off item is removed, the Company made a profit before taxation of US$2.5 million. In addition, profitability and cash flows were impacted by higher general and administrative costs. Approximately US$4.7 million was incurred on legal and marketing costs in 2008 in respect of an arbitration claim initiated by Orca Exploration and the negotiation of the initialled long term power contracts. Some of these costs will continue in 2009, but the intention is to reduce the general and administrative cash costs by 20% or approximately US$2.5 million in 2009 compared with 2008.

POSITIVE OUTLOOK

Orca Exploration enters 2009 in a strong financial, operating and marketing position. Despite economic turmoil in world financial markets the Company is expected to continue to bolster its cash reserves in 2009 through the development of its Tanzanian asset.

During 2009, the Company will stay on course to build markets in Tanzania so as to maximize the existing proven and probable reserves. This will involve:

- Planning a two-well development drilling program in 2011 and 2012 to increase deliverability to meet the forecast sales growth;
- Re-rating the capacity of the Songo Songo gas processing plant to 110 MMscfd;
- Preparing for the expansion of the high pressure gas processing and pipeline system to process and transport a peak of 200 MMscfd (including Protected Gas);
- Executing the initialled long term gas supply and related agreements;
- Commencing the negotiation of a contract with TANESCO to supply between 40 and 50 MMscfd of gas to the proposed Kinyerezi power plant;
- Establishing and expanding the CNG market in Tanzania;
- Further progressing potential export potential to Kenya.

Over the course of 2009, management's first priority will be to focus on successfully executing its base business plan in a manner which avoids financial risk. However we have not lost sight of the longer term goal to grow Orca's assets beyond our existing base. The Company still intends to drill the relatively low risk Songo Songo West exploration prospect as soon as practical. In addition, Orca will continue to monitor potentially suitable asset acquisition opportunities that may arise as result of turmoil in world capital markets. These will focus on proven reserves rather than exploration.

In these uncertain times, Orca appreciates the confidence and support of its loyal shareholders. Management remains very optimistic about your Company's prospects in Tanzania and will work hard to demonstrate the inherent value that is present in your Company's assets and operations.

Peter R. Clutterbuck
President and CEO

28 April 2009

Photo below: Industrial markets for Additional Gas continue to increase in Dar es Salaam and new markets are being developed with CNG delivery systems.

Operations Review

PRODUCTION

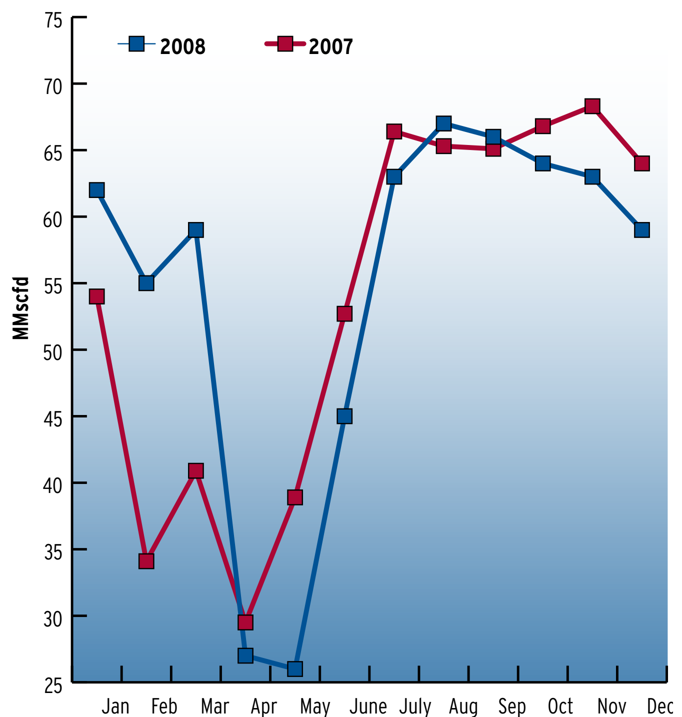
During 2008, 20.1 Bcf (2007: 19.7 Bcf) of natural gas was produced from the Songo Songo field offshore Tanzania or an average of 54.9 MMscfd (2007: 54.0 MMscfd). This brings total production since commercial operations commenced on 20 July 2004 to 77.1 Bcf. The production volumes achieved during the year followed a similar production profile to the levels attained in 2007.

On several occasions in 2008, production was limited by the capacity of the gas processing plant at 70 MMscfd. Orca Exploration, as operator of the plant, financed a number of studies in 2007 and 2008 to persuade the owner of the gas processing plant, Songas Limited, that the existing facilities could be re-rated to 90 MMscfd. In Q4 2008, Songas approved the installation of two new 3" Joule-Thompson valves and the plant was recertified by Lloyds Register at 90 MMscfd in January 2009. The Company received formal approval from Songas that the plant could operate at this level in Q1 2009.

Operatorship

Orca Exploration operates the gas processing plant on Songo Songo Island on behalf of the stakeholders, including Songas Limited ("Songas"). Operatorship is on a 'no gain/no loss' basis. Two internationally experienced staff manage the site operations on a rotational basis with support from the Company's head office personnel in Dar es Salaam. Twenty-six Tanzanian technicians operate and maintain the wells, gathering system and processing plant. Since commencement of commercial operations, there has been 100% uptime in relation to the supply of gas to major customers outside of planned shutdowns.

Average daily production



Songo Songo production by well

The production from the five Songo Songo wells between 2004 and 2008 has been as follows:

Well	2004 Bcf	2005 Bcf	2006 Bcf	2007 Bcf	2008 Bcf	Total Bcf
SS-3	0.8	1.3	1.5	1.9	1.5	7.0
SS-4	0.6	1.9	1.9	1.1	0.9	6.4
SS-5	1.7	3.9	8.9	8.5	7.1	30.1
SS-7	1.5	3.8	3.2	3.4	3.5	15.4
SS-9	-	3.8	2.5	4.8	7.1	18.2
Total	**4.6**	**14.7**	**18.0**	**19.7**	**20.1**	**77.1**

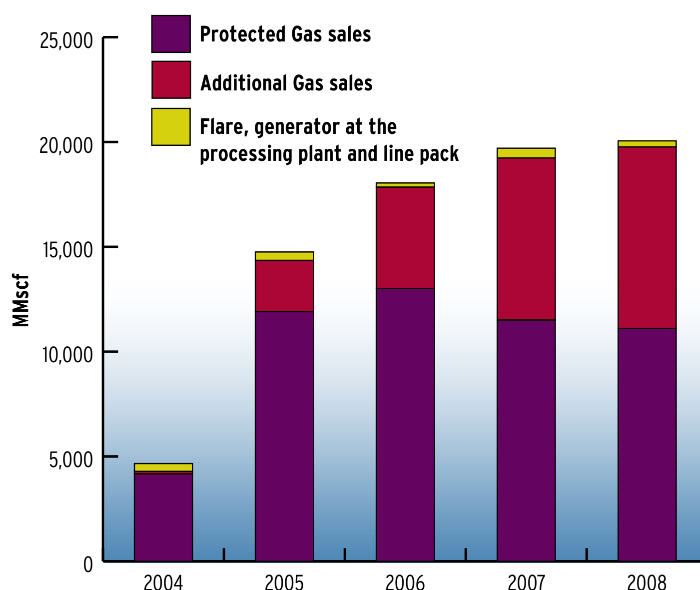
The total gas production from the Songo Songo field between 2004 and 2008 was allocated as follows:

	2004	2005	2006	2007	2008	Total
	Bcf	*Bcf*	*Bcf*	*Bcf*	*Bcf*	*Bcf*
Protected Gas sales	4.1	11.9	13.0	11.5	11.1	51.6
Additional Gas sales	0.1	2.5	4.8	7.7	8.7	23.8
Flare, generator at the processing plant and line pack	0.4	0.3	0.2	0.5	0.3	1.7
Total	**4.6**	**14.7**	**18.0**	**19.7**	**20.1**	**77.1**

Protected Gas production

Under the terms of a Gas Agreement signed in 2001, the Protected Gas from Songo Songo is 100% owned by the Tanzanian Petroleum Development Corporation ("TPDC") and is sold to Songas under a 20 year Gas Agreement for:

1. The operation of five turbines at the Ubungo power plant;
2. Onward sale to the Tanzanian Portland Cement Company ("TPCC") for the operation of kilns 2 and 3 at its Wazo Hill cement plant; and
3. Village electrification (at a rate not to exceed 1 MMscfd).

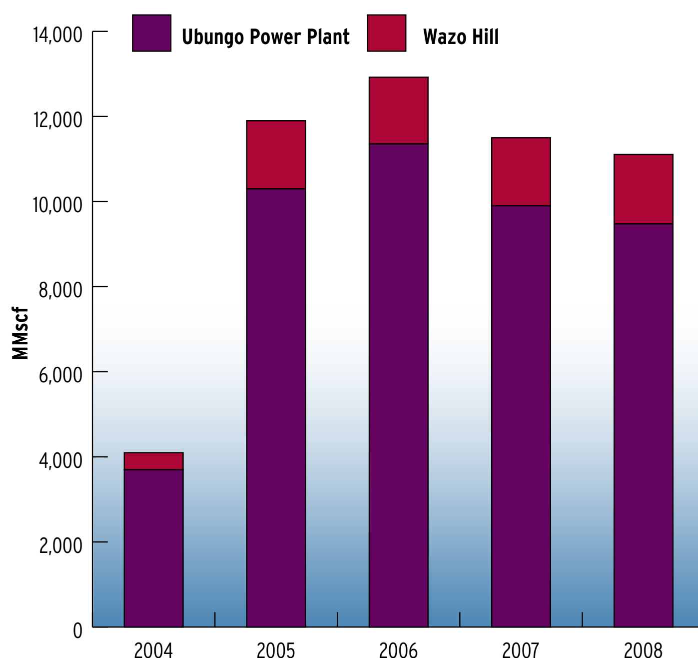


The Protected Gas was allocated as follows:

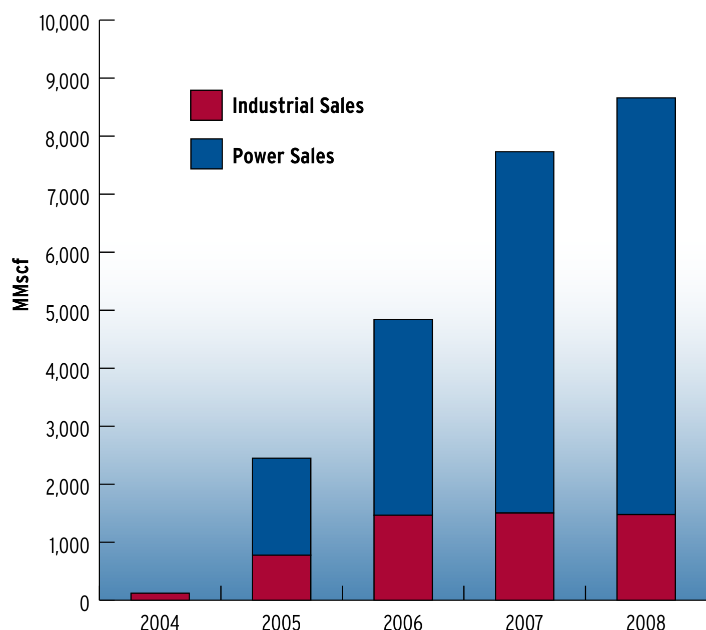
	2008			2007		
	Protected Gas consumed		Utilization rate	Protected Gas consumed		Utilization rate
Year ended 31 December	*Bcf*	*MMscfd*	*%*	*Bcf*	*MMscfd*	*%*
Protected Gas user						
Five turbines at the Ubungo power plant	9.5	25.8	68	9.9	27.3	71
Wazo Hill cement plant	1.6	4.5	76	1.6	4.4	74
Village electrification	-	-	-	-	-	-
Total consumption	**11.1**	**30.3**	**67**	**11.5**	**31.7**	**73**

Protected Gas utilization in 2008 decreased at the Ubungo power plant primarily because of the significant rain fall experienced during the first five months of 2008 that enabled TANESCO to dispatch their hydro electricity generation capacity. Since commercial operations commenced, the Protected Gas utilization at the Ubungo power plant has been 76%.

At the Wazo Hill cement plant, the 2008 utilization rate averaged 76% (2007: 74%). The village electrification program was not functional in 2007 or 2008 and there is no planned date for its commencement.



The maximum gas required for the Protected Gas users over the remaining 15 years and seven months of the Gas Agreement was 257 Bcf as at 31 December 2008. For the purposes of calculating the level of gas available as Additional Gas, an assumption has to be made as to the expected utilization of the Protected Gas over the remaining term of the Gas Agreement. These assumptions are reviewed on an annual basis based on historic and projected usage.



The Protected Gas users and their forecast maximum and most likely demand are as follows:

Protected Gas Demand	Theoretical maximum 100% load factor *MMscfd*	Most likely *MMscfd*	Utilizations in 2008 *MMscfd*
Six gas turbines at the Ubungo power plant	47.4	39.8	32.2
Less gas supplied to the sixth turbine which is Additional Gas	(9.2)	(7.8)	(6.4)
Total Protected Gas at Ubungo	38.2	32.0	25.8
Wazo Hill cement plant	5.9	4.4	4.5
Village electrification program	1.0	1.0	-
Total daily Protected Gas demand	45.1	37.4	30.3
Protected Gas reserves to end of the Songas power purchase agreement *(Bcf)*	257	213	

The forecast theoretical maximum of Protected Gas is estimated at 100% utilization to be 45.1 MMscfd based on technical tests of the Ubungo turbines and the Wazo Hill cement plant though there are variations during the year and over time depending on ambient temperature and degradation. The 'most likely' utilization, including the village electrification program, is forecast to be 80 - 85% over the remaining term of the Gas Agreement. This compares with an actual utilization rate of 67% in 2008. The actual Protected Gas utilization at the Ubungo power plant primarily depends on the availability of the Ubungo power units, the status of the water levels at the hydroelectricity dams and the capacity of the 'run of river' hydros. The run of river hydros can only generate when the rivers are flowing, typically during the short rains in November and December and the long rains in April and May.

Additional Gas Production

Under the terms of a Gas Agreement signed in 2001, the gas from the Songo Songo field in excess of the volume reserved as Protected Gas, is available to Orca Exploration to be marketed as Additional Gas. The details of the 2008 Additional Gas sales are reported in the 'Markets' section of this report.

Flare, generator and line pack requirements

A relatively small amount of gas is used in local electricity generation on Songo Songo Island. Gas is also required to maintain the Songo Songo Island gas plant flare at all times. This leads to a small annual loss of gas.

There are also fluctuations in the line pack in the 232 kilometer high pressure pipeline to Dar es Salaam. The line is estimated to hold a maximum of 85 MMscf of gas. At current production levels the line pack holds sufficient gas for less than a day of Protected and Additional Gas sales in Dar es Salaam.

THE SONGO SONGO FIELD

Summary of Orca Exploration's assessment of Gas Initially in Place (GIIP)

During 2008, Orca Exploration's management has estimated the potential reserves and resources in its two Tanzanian license blocks ("Discovery Blocks"). The reserves and resources are assessed for the following areas:

1. The Songo Songo main producing field ("Songo Songo Field", "SS Field");
2. The northern section of the field that has gas reserves established by the drilling of SS-1, but no current production ("Songo Songo North", "SS North"); and
3. The exploration prospect west of the Songo Songo Field ("Songo Songo West", "SS West").

A summary of management assessment of P50 GIIP for the Songo Songo Field and Songo Songo North discoveries and the forecast unrisked resources of Songo Songo West are illustrated on the right.

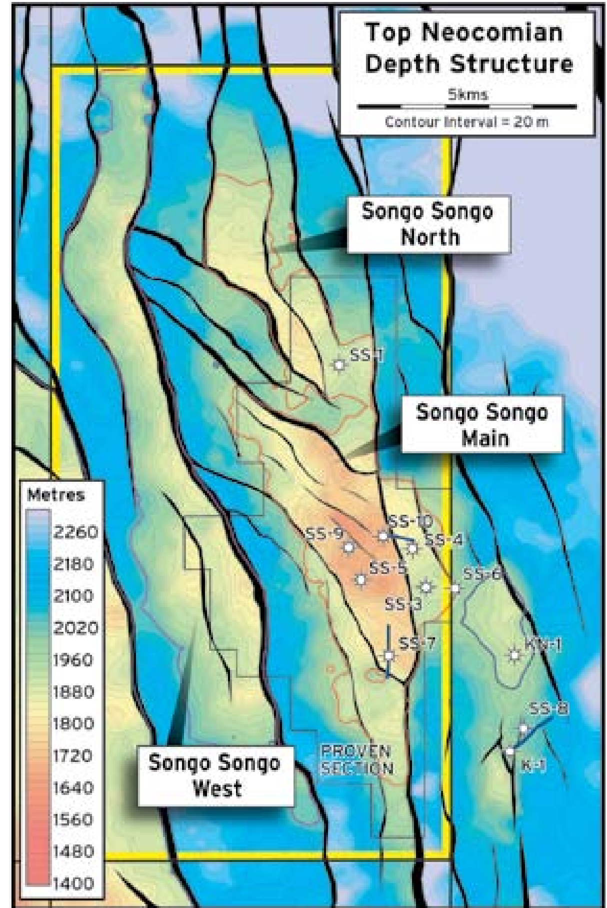
Songo Songo Field and Songo Songo North

Management's internal evaluation of the P50 (Base Case) GIIP for the combined Songo Songo Field and Songo Songo North discovery is 1,571 Bcf. The GIIP estimates are based on the most recent top reservoir depth structure maps resulting from the 2008 depth conversion study. The GIIP range is based on volumetric structural mapping utilizing the Petrel modelling software, which incorporates the reservoir properties derived from the 2008 petrophysical reservoir analysis.

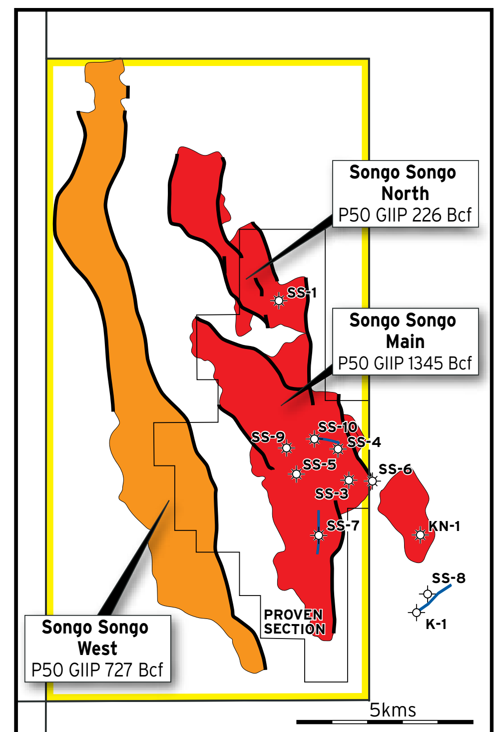
Management's P50 GIIP of 1,571 Bcf for the Songo Songo Field and Songo Songo North compares with the McDaniel end 2008 GIIP estimates as presented below.

Bcf	1P	2P	3P
McDaniels Songo Songo Field GIIP *(Bcf)*	1,236	1,433	1,562

Songo Songo Gas Fields and Songo Songo West Prospect



Songo Songo License; Management estimate of Gas Initially In Place (GIIP)



The McDaniel reserves evaluation are summarized in more detail below.

Reservoir management

The static (Petrel™) and dynamic simulation (ECLIPSE™) reservoir models were rebuilt during 2008. This was necessary primarily due to the additional work undertaken on depth conversion during 2008 which had a significant positive impact on Gross Rock Volume ("GRV"), as well as the petrophysical analysis of well SS-10 which had a positive impact on the evaluation of net to gross ("N:G") and permeability in low porosity reservoir. The depth conversion was re-addressed with two specific objectives: to assess the GRV as input to resource evaluation of the Songo Songo West prospect; and to review Songo Songo Field GRV as input to evaluation of GIIP. The Petrel geological model incorporates revised reservoir zonation and zonal facies distributions based on a revision of the stratigraphy, depositonal environments and palaeography of the Neocomian to Cenomanian reservoirs in early 2008.

The ECLIPSE™ simulation model is used to monitor and continuously evaluate the reserves of the Songo Songo Field and Songo Songo North in order to ensure that the Protected Gas deliverability requirements can be met and to manage forecast Additional Gas sales. The model has been used to predict well performance and identify the investments in wells and well head compression that will be required to meet forecast gas demand. It is used to assess the likely well response to uncertainties such as aquifer size and extent of reservoir compartmentalization, if any.

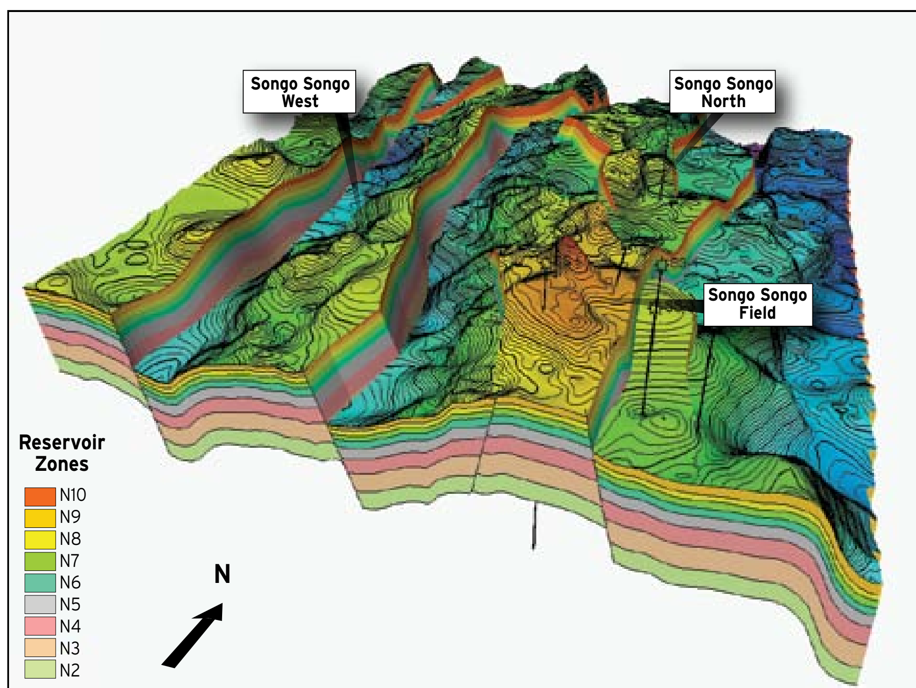
Reservoir surveillance

Orca Exploration is required to deliver a peak supply of approximately 45 MMscfd of Protected Gas until 31 July 2024 from the Discovery Blocks as well as meet the Additional Gas sales obligations.

The Company has in place a number of reservoir monitoring procedures aimed at constantly reviewing both the field reserve estimates, well and field deliverability, based on established industry procedures and practices and expected reservoir responses from similar gas developments throughout the world. Through these reservoir surveillance and management practices Orca Exploration is able to ensure delivery of the Protected Gas volumes to the end of the contract term and assist with the forecast of Additional Gas sales within the capability of the reservoir.

The Company uses down hole pressure gauges to monitor and record bottom hole pressure. The gauges are installed on all producing wells with the exception of SS-9. A pressure gauge will be installed in the SS-10 development well after it has been connected to the gas processing facility. The pressure data collected from the gauges is used for a variety of purposes

Songo Songo license Management P50 geologic model (Petrel™)



Notes:
Zones 2-8 belong to the Neocomian. Zone 9 belongs to the Late Aptian and Zone 10 belongs to the Late Albian. Zone 10 is the only Zone which is not correlated in all wells having been eroded to the south and southeast. The Cenomanian is treated as a single zone in the model.

including near well formation parameter assessment, well deliverability and estimates of field GIIP. The pressure gauges were last retrieved during October 2008 and at the same time were re-installed to allow further ongoing evaluation. The data collected in October has been interpreted for Pressure Transient Analysis ("PTA"), and Material Balance (MBAL™) and has also been incorporated into a new simulation model (ECLIPSE™) with the production history match extended to that date. The performance of each individual well is in addition monitored throughout the year and the well test schedule is reviewed to ensure the necessary field performance data is obtained.

To obtain the most reliable data for reservoir management, the Songo Songo gas plant is equipped with a test separator that allows production from individual wells to be measured and important surface pressures and temperatures to be captured using Keller wellhead gauges. This information has been combined with the results of the downhole pressure gauges to show that SS-3, SS-4, SS-5 and SS-9 demonstrate conclusive evidence of communication with other wells. In addition, interference testing in 2007 confirms that SS-7 is also in communication with SS-5, reducing the risk of compartmentalization.

The pressure data acquired in October 2007 in development well SS-10 supports the Eclipse interpretation that there has been little or no movement in the gas water contact ("GWC") since the field start up in July 2004. The static GWC and pressure data acquired from the offset wells, support a likely GIIP towards the upper end of the Company's estimated range.

The field is still in the early stages of it's depletion with approximately 7.1% of the original recoverable 2P reserves produced to the end of 2008. The downhole pressure data obtained in 2008 and the new history matched Eclipse simulation model suggest the possible presence of a weak aquifer. At this early stage of production the data remain inconclusive for the presence of an aquifer, but management will continue to monitor for this as more pressure data is available, and by continued monitoring for water production from the wells.

Material Balance analysis

Material balance analysis using the down hole pressure gauge data continues to support a main field GIIP of about 1,342 Bcf. The material balance calculations use pressure data from the producing wells which are located on the main Songo Songo field structure. A saddle (structural low) is interpreted to separate the main field from Songo Songo North structure, an interpretation supported by (ECLIPSE™) forecast simulation runs which show negligible pressure decline in Songo Songo North as the main field wells are produced. Management therefore believes that the MBAL GIIP of 1,342 Bcf applies to the main field only, and that the SS North structure is an additional, currently un-depleted, volume. In addition, the material balance GIIP of 1,342 Bcf is consistent with management's 2008 P50 volumetric assessment and thus strengthens the validity of the Songo Songo Field GIIP estimate. The Songo Songo North structure which produced gas on test from the Songo Songo 1 discovery well when it was drilled in 1974, is estimated by management to contain a further 226 Bcf of GIIP in the P50 case.

Well and field deliverability

The flow rates of the wells (including an estimated rate for SS-10 when it comes on production) based on the requirement to have 1,600 pounds per square inch of pressure in the gas processing plant are as follows:

Well deliverability summary	31 December 2008 maxiumum capacity *(MMscfd)*
SS-3	16
SS-4	14
SS-5	65
SS-7	20
SS-9	55
SS-10 (Estimated)	55
Total	225
Maximum Protected Gas demand	(45)
Available for Additional Gas	**180**

The Songo Songo well pressures showed approximately a 1.3% decline over the course of 2008 in line with expectations. The current deliverability is sufficient to enable 180 MMscfd of Additional Gas production above the peak demand for Protected Gas. This will allow the Company to produce more than 115 MMscfd of Additional Gas for a period of time even in the unlikely event that the most productive well becomes unavailable at peak demand.

Development of the Songo Songo Field and Songo Songo North

The Company's immediate objective is to maximize the sales of gas from the Songo Songo Field and Songo Songo North. In reviewing the potential of these reservoirs and the gas demand forecasts, it is assessed that the Company should develop the field to be able to deliver a maximum peak of 200 MMscfd (including Protected Gas) and a maximum average of 160 MMscfd (including Protected Gas). To meet these demand forecasts, it is planned that an additional vertical development well will have to be drilled in the Songo Songo Field by the end of 2011. It is anticipated that the well will be drilled with a jack up rig and that it will be tied back to the expanded Songo Songo gas processing facilities (see under Infrastructure).

The current well stock will not drain the Songo Songo North reservoir. Accordingly, the intention is to drill a single vertical development well into this structure which would also enable the GIIP associated with Songo Songo North to be quantified with more certainty. The well will be completed as a producer and tied back with a new flow line to the inlet manifold in front of the Songo Songo Island gas processing facility. The intention would be to drill the SS North well after drilling a single well in the Songo Songo Field as described above.

In addition to the above, field compression will need to be installed by 2013 to maintain the deliverability of the wells and meet the inlet pressure of the gas processing facilities.

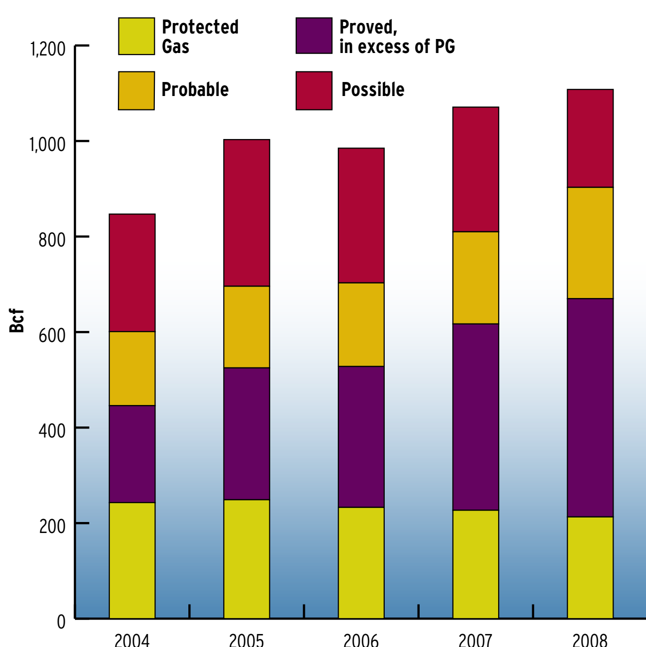
GAS RESERVES

In accordance with National Instrument 51-101 Standards of Disclosure for Oil and Gas Activities, the independent petroleum engineers, McDaniel prepared a report dated March 2009 that assessed the Orca Exploration natural gas reserves based on information on the Songo Songo Field and Songo Songo North as at 31 December 2008 (the "McDaniel Report"). A summary of the remaining Additional Gas reserves on a life of license and life of field basis are presented in the tables on page 15. The 1P and 2P reserves are based on production to the end of the license period (October 2026) while the 3P reserves assume that the license will be extended to the end of the field life.

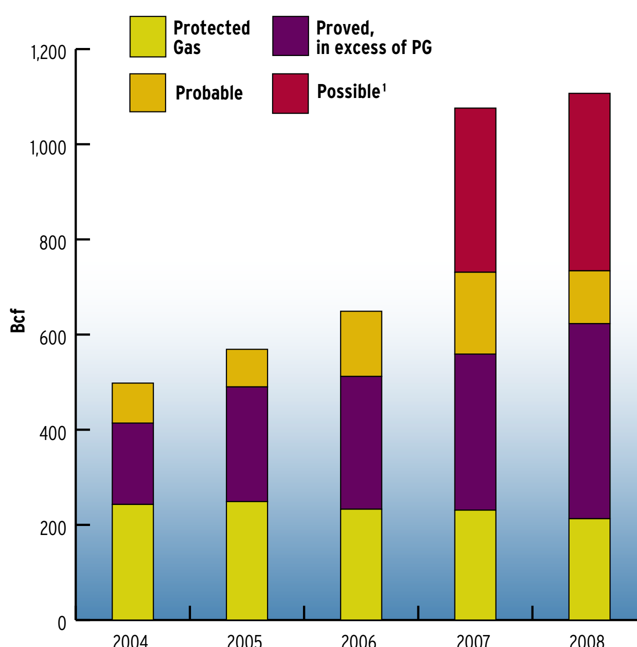
Over the course of 2008, for the audited reserves on a gross Company basis there has been a 26% increase in Songo Songo's 1P Additional Gas reserves to the end of the license period, and an 18% increase on a life of field basis, despite Additional Gas sales of 8.7 Bcf being produced. The total 2P Additional Gas reserves on a gross property basis have increased 4% on a life of license basis and 18% on a life of field basis. The increase in the proven and probable reserves has arisen from a combination of improved volumetric structural mapping, the 2008 pressure and gas production data and the SS-10 development well results.

Orca management estimates that the total recoverable P50 reserves (Protected Gas plus additional Gas) from the Songo Songo Field and the Songo Songo North discovery is 1,116 Bcf at 31 December 2008.

Gross field reserves on a life-of-field basis



Gross field reserves on a life-of-license basis



[1] Audited life of license possible reserves were not estimated for the years 2004 to 2006.

The gross and net Company Additional Gas reserves to end of license are as follows:

Songo Songo Additional Gas reserves to October 2026 *(Bcf)*	**2008** *Gross (1)*	**2008** *Net (2)*	**2007** *Gross*	**2007** *Net*
Independent reserves evaluation				
Proved producing	253.5	146.9	247.6	159.1
Proved undeveloped	135.9	99.8	61.0	51.0
Total proved (1P)	389.4	246.7	308.6	210.1
Probable	102.0	67.3	165.0	113.8
Total proved and probable (2P)	491.4	314.0	473.6	323.9
Possible	340.7	219.2	307.1	191.4
Total proved, probable and possible (3P)	832.1	533.2	780.7	515.3

(1) Gross equals the gross reserves that are available for the Company after estimating the effect of the TPDC back in (see below).
(2) Net equals the economic allocation of the Gross reserves to the Company as determined in accordance with the Production Sharing Agreement.

The gross and net Company Additional Gas reserves to end of field life are as follows:

Songo Songo Additional Gas reserves to end of field life *(Bcf)*	**2008** *Gross (1)*	**2008** *Net (2)*	**2007** *Gross*	**2007** *Net*
Independent reserves evaluation				
Proved producing	434.7	263.2	367.7	235.8
Proved undeveloped	(1.6)	15.4	(2.0)	12.6
Total proved (1P)	433.1	278.6	365.7	248.4
Probable	215.6	144.2	186.4	131.6
Total proved and probable (2P)	648.7	422.8	552.1	380.0
Possible	183.4	110.4	228.6	135.3
Total proved, probable and possible (3P)	832.1	533.2	780.7	515.3

(1) Gross equals the gross reserves that are available for the Company after estimating the effect of the TPDC back in (see below).
(2) Net equals the economic allocation of the Gross reserves to the Company as determined in accordance with the Production Sharing Agreement.

The McDaniel Report has assumed that TPDC will exercise its right to 'back in' to the field development by contributing 20% of the costs of the future wells, including SS-10 and a proportion of the infrastructure and operating costs, in return for a 20% increase in the profit share for the production emanating from these wells. McDaniel has taken the view that this 'back in' right should be treated as a TPDC working interest and therefore the Gross reserves have been adjusted for the volumes of Additional Gas (30.3 Bcf at 2P) that are allocated to TPDC for their working interest share. The implications and workings of the 'back in' are still to be discussed in detail with TPDC and may lead to future modifications in the way the Gross Company reserves are calculated.

For the purpose of calculating the gross Additional Gas reserves, McDaniel has assumed in their 2P case that 213 Bcf (2007: 227 Bcf) or an average of 13.7 Bcf per annum will be required to meet the demands of the Protected Gas users from 1 January 2009 to 31 July 2024. During 2008, the Protected Gas users consumed 11.1 Bcf.

The principal assumptions used by McDaniel in its evaluation of the Tanzanian PSA are as follows:

Year	Additional Gas price 1P	Gross Additional Gas volumes 1P	Additional Gas price 2P	Gross Additional Gas volumes 2P
	US$/mcf	MMscfd	US$/mcf	MMscfd
2009	3.27	30.1	3.27	30.1
2010	3.64	39.1	3.71	39.4
2011	3.74	52.0	3.87	52.5
2012	4.17	62.5	4.20	67.8
2013	4.49	72.0	4.47	77.0
2014	4.85	76.5	4.69	86.0
2015	5.20	80.4	4.93	95.0
2016	5.29	80.4	4.94	100.0
2017	5.38	804	5.03	100.0
2018	5.47	80.4	5.12	100.0
2019	5.57	80.4	5.21	100.0
2020	5.67	80.4	5.31	100.0
2021	5.77	80.4	5.40	100.0
2022	5.73	57.8	5.46	83.5
2023	5.65	39.9	5.51	69.0

Present value of reserves

The estimated value of the Songo Songo reserves on a life of license basis based on the assumptions on production and pricing are as follows:

	2008			2007		
US$ millions	*5%*	*10%*	*15%*	*5%*	*10%*	*15%*
Proved producing	168.9	114.1	83.8	191.1	125.6	89.0
Proved undeveloped	203.0	143.5	103.4	65.7	57.1	47.7
Total proved (1P)	**371.9**	**257.6**	**187.2**	**256.8**	**182.7**	**136.7**
Probable	81.1	41.0	21.0	114.8	72.2	46.6
Total proved and probable (2P)	**453.0**	**298.6**	**208.2**	**371.6**	**254.9**	**183.3**
Possible	238.8	102.1	48.7	**185.1**	**87.1**	**43.4**
Total proved, probable and possible	**691.8**	**400.7**	**256.9**	**556.7**	**342.0**	**226.7**

The 17% increase on the 2P present value at a 10% discount basis from US$254.9 million to US$298.6 million on a life of licence basis is primarily due to the increase in the reserves and the timing of the future capital expenditure that has the effect of minimizing the impact of Additional Profits Tax.

It should be noted that McDaniel has assumed in the 3P case, that the Company receives an extension to the PSA. Hence for this category only, the reserves are not restricted to the life of the licence.

EXPLORATION

Songo Songo West

Orca Exploration has mapped and evaluated the Songo Songo West prospect adjacent to the Songo Songo Field. The prospect lies approximately 2.5 kilometers west of the main field and the prognosis is that the prospect is very similar in terms of trap and reservoir presence to the Songo Songo Field. The seismic on Songo Songo West indicates closure on an elongate north-south oriented tilted fault block trap at the same reservoir interval as the main field. Songo Songo West lies entirely within the Company's Discovery Blocks.

McDaniel conducted an independent assessment of natural gas resources in the Songo Songo West prospect in September 2008. Several cases were reviewed to estimate the size of the potential gas accumulation.

As within Songo Songo main field two reservoirs are envisaged will be present within the SSW prospect – the Neocomian and the Cenomanian.

The McDaniel's Neocomian and Cenomanian GIIP and resources are summarized in the tables below.

Neocomian ***(Bcf)***	**P90**	**P50**	**Mean**	**P10**
Unrisked OGIP	232	566	678	1,381
Unrisked resources	170	418	505	1,028
Risked mean resources	-	-	264	-
Cenomanian ***(Bcf)***	**P90**	**P50**	**Mean**	**P10**
Unrisked OGIP	12	43	62	158
Unrisked resources	9	32	46	118
Risked mean resources		-	16	

Source: McDaniel September 2008

Songo Songo West is interpreted by McDaniel to be a low risk prospect with a 52% chance of success in the Neocomian and 35% in the Cenomanian. The chance of success is measured as the probability that a hydrocarbon accumulation exists that will demonstrate stabilized flow of hydrocarbons if tested. McDaniel assessed the P50, unrisked recoverable resources in the Songo Songo West prospect at 450 Bcf and the mean, unrisked recoverable resources at 551 Bcf. Management's unrisked mean GIIP for the Songo Songo West prospect of 810 Bcf compares with the McDaniel combined Neocomian and Cenomanian unrisked mean GIIP of 740 Bcf.

Songo Songo West represents a major potential source of reserves upside in the Songo Songo area, which could provide the resources to underwrite a significant expansion of the gas infrastructure and markets, both in Tanzania and beyond. It is currently proposed that an initial exploration well would be drilled towards the south of the Songo Songo West structure, and closest to Songo Songo island ("Songo Songo West South"). If it is successful and can flow at commercial rates, it is likely to be tied back immediately to the manifold in front of the processing plant and flowed for a period to prove up the long term deliverability of gas from the field. Following this confirmation, it is likely that an appraisal well will be drilled into the northern extent of Songo Songo West ("Songo Songo West North") to get a better understanding of the areal extent of the reservoir and the recoverable reserves. The final field development decision would then be taken, but is likely to involve a significant expansion of the existing facilities.

Photo below: Field production is processed at the Songo Songo gas plant before being pipelined to Dar es Salaam.

INFRASTRUCTURE

The infrastructure that processes and transports the gas from the Songo Songo Field to Dar es Salaam was commissioned in July 2004.

The initial infrastructure for the Songo Songo gas to electricity project incorporated the following elements:

- Completion and tie back of the original five producing wells;
- Construction of a gas processing facility on Songo Songo Island ("SSI") with two gas processing trains;
- Construction of a high pressure offshore and onshore pipeline system;
    - a) a 25 kilometer 12" offshore pipeline from the field to the Somanga Funga landfall;
    - b) a 207 kilometer 16" onshore pipeline to the Ubungo power plant;
    - c) a 16 kilometer 8" lateral pipeline to the Wazo Hill cement plant.
- Conversion of four existing turbines at the Ubungo power plant (2 x 19 MW and 2 x 34 MW) from diesel to gas.

Orca Exploration is the operator of the wells and the gas processing plant. Songas Limited ("Songas") is the operator of the high pressure pipeline system and the Ubungo power plant.

SSI gas processing plant

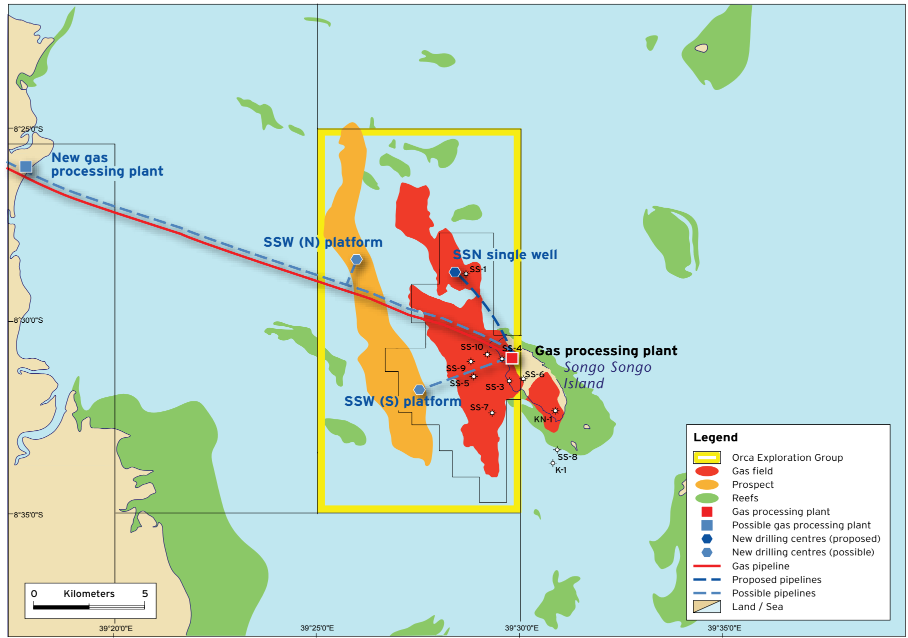
There are two trains at the gas processing facilities with a design specification of 35 MMscfd. The Songo Songo raw gas is relatively dry and requires minimal processing. The gas treatment is a simple dew point control process which uses the energy in the raw gas to chill the gas through a Joule-Thompson valve. Liquid condensate is removed from the cold gas, leaving the dry gas to be transported to Dar es Salaam.

With the growth in the market for Additional Gas, there were times during 2008 and 2007 when the peak flow rates were in excess of the gas processing capacity of 70 MMscfd. In Q3 2007, Orca Exploration submitted a proposal to Songas to increase the gas processing capacity to 90 MMscfd through upgrading and re-rating the existing trains to 45 MMscfd each. In Q4 2008, the Company signed an agreement ("Re-rating Agreement") with Songas and TANESCO that enabled the Company, as operator of the gas processing plant, to install two larger Joule-Thompson valves and modify the relief systems on the two existing gas processing trains. The work was successfully implemented without significant disruption to the supply of gas to customers in Dar es Salaam. The increase in the capacity of the plant to 90 MMscfd has been certified by Lloyds Register and the Company received formal approval from Songas to operate at this level in Q1 2009.

During the plant tests, each of the gas processing trains was operated at 55 MMscfd. Lloyds Register may yet certify the plant to 110 MMscfd after they have inspected the heat exchangers. This will be pursued with Songas during Q2 2009 as an interim measure in the event that the capacity of the gas processing plant impacts the supply of gas to Dar es Salaam over the course of the next eighteen months.

Songas has submitted an aplication to the energy regulator, EWURA, for the installation of two new gas processing trains taking the capacity to a minimum of 160 MMscfd with the potential to increase it to in excess of 200 MMscfd should the re-rating of each train to 55 MMscfd be approved. In February 2009, EWURA issued an order that is currently being reviewed by Songas. The total cost of the expansion is estimated at US$65 million.

Songo Songo Field development options



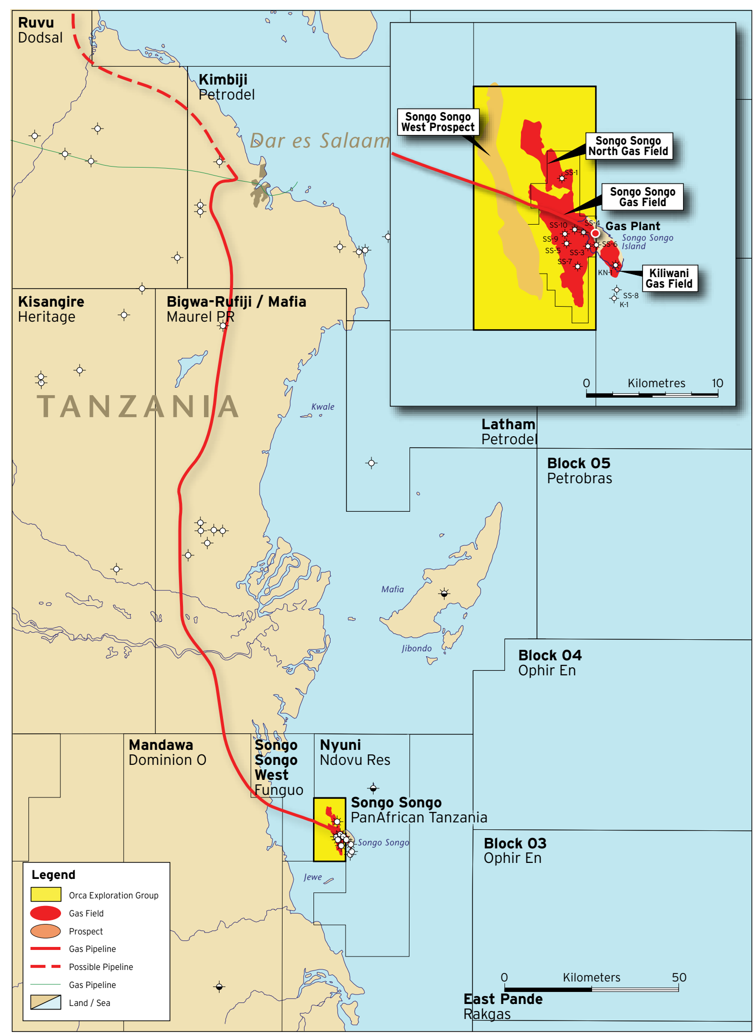
High pressure pipeline network

The main pipeline from Songo Songo Island to the Ubungo power plant in Dar es Salaam including both the offshore section and the onshore section has an estimated maximum capacity in its current configuration of 105 MMscfd. The limiting upstream pressure at the exit of the gas processing facilities on Songo Songo Island is between 84 bar and 87 bar while the minimum delivery pressure at Ubungo is 53 bar.

The Company's objective is to increase the throughput capacity of the pipeline system to a peak of 200 MMscfd by the middle of 2012 to meet the forecast average consumption of 140-160 MMscfd (including Protected Gas) and to maximize the potential of the Songo Songo Field and Songo Songo North. The Company is currently commissioning reports to assess how this may be achieved with minimal cost. However, it is forecast that twinning the existing system may be the most cost effective way of achieving this level of deliverability whilst also increasing the security of supply.

The capacity of the spur line to Wazo Hill is estimated to be around 40 MMscfd. This value has been calculated using pipeline flow equations, using a pressure at Ubungo of 53 bar and a delivery pressure at Wazo Hill / Tegeta of 10 bar. Like the main pipeline, the actual flow levels have been considerably below this rate to date, so the calculations will be recalibrated once more data becomes available at higher rates.

Songo Songo Field, marine and land pipeline routes to market

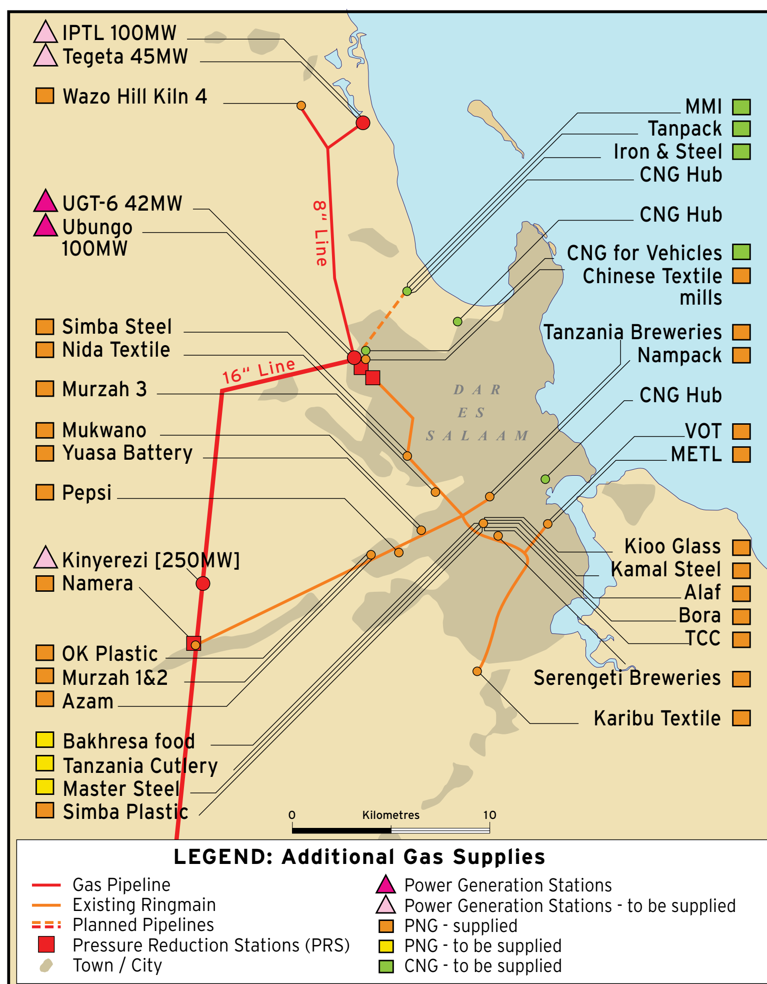


Low pressure distribution system

The low pressure distribution system has been designed so that there is significant spare capacity and security of supply. There are three pressure reduction stations ("PRS") and two separate connections to the 16" high pressure pipeline. A fourth PRS was installed in Q1 2009 specifically to handle the Additional Gas sales to the Wazo Hill cement plant.

Since 2004, the Company has constructed 42 kms of low pressure pipeline in Dar es Salaam and at the end of 2008 was delivering Additional Gas to 20 industrial customers. Three new customers were connected in 2008 and a further five customers have signed contracts and are in the process of installing equipment to consume natural gas in the first half of 2009. By the end of 2009, it is expected that the Company will have increased its industrial base to 30 customers with the addition of an 8 kms extension to Mikocheni and the connection of a series of small customers near the airport.

Power and industrial customers in the Dar es Salaam area



MARKET DEVELOPMENT

Summary

The 4% increase in the 2P recoverable reserves on a life of license basis in 2008 continues to provide the Company with an opportunity to develop new markets.

The current target profile for the sales of gas in Tanzania (including Protected Gas) is based on the forecast gas reserves in the Songo Songo Field and Songo Songo North. It is dependent on the investment in the drilling of two new wells, field compression and the expansion of the pipeline system to Dar es Salaam.

In the event that gas is discovered in Songo Songo West, then there is assessed to be sufficient demand, especially from the power sector and the CNG market, to absorb the majority of the P50 resources.

Power sector

Sales to the power sector averaged approximately 19.7 MMscfd in 2008. Until the end of 2010, the demand for gas from the power sector will be determined by the quantum of gas fired generation capacity in Tanzania and the availability of the hydro and gas processing capacity. Thereafter, the take or pay provisions in the long term initialled power contracts will set a floor on the annual gas volumes sold to the power sector. There is expected to be significant growth in electricity demand in Tanzania and gas is likely to be the feedstock provided the right contractual terms can be agreed. This is discussed below.

Demand by the power sector until the end of 2010

As at 31 December 2008, there was 143 MWs of installed gas fired generation in Tanzania that is being powered by Additional Gas (maximum demand of approximately 30 MMscfd). A further 45 MWs of additional generation is due to be connected and commissioned at Tegeta in Q4 2009 (maximum demand of approximately 10 MMscfd). Accordingly, the maximum consumption by the power sector is expected to be 40 MMscfd from Q4 2009.

The following lists the capacity of the gas fired generation consuming Additional Gas as at 31 December 2008 and forecast additions during 2009:

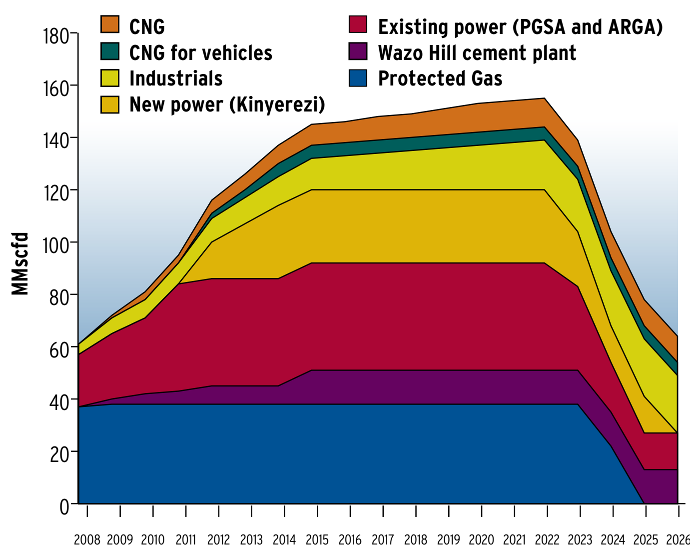
Status	**Power Plant**	**Installed capacity MWs**
Operational	Ubungo power plant (Unit 6)	41
Operational	Wärtsilä at Ubungo	102
Total as at 31 December 2008		**143**
Operational from Q4 2009	Tegeta	45
Forecast total as at 31 December 2009		**188**

In July 2008, the Company ceased supplying Additional Gas to the 120 MWs of emergency power generation owned and operated by Dowans Tanzania Limited ("Dowans"). This was a result of TANESCO cancelling its power purchase agreement with Dowans due to contractual irregularities. The power plant still remains in country but its future is uncertain.

Demand by the power sector from 2011 under the ARGA and PGSA

The supply of Additional Gas to the power sector is currently governed by two interim power agreements. It is forecast that these will be superseded by two long term contracts with Songas and TANESCO that were initialled in June 2008; the Amended and Restated Gas Agreement ("ARGA") and the Portfolio Gas Supply Agreement ("PGSA").

Target average gas sales per day



Under the ARGA, 19.5 % of the gas supplied to the six turbines at Ubungo is considered to be Additional Gas. Whilst there is no explicit take or pay in the agreement the utilization at the Ubungo power plant is expected to be high given the low cost of the Protected Gas (Gas (US$0.55/Mmbtu LHV escalating with US CPI) that makes up the remaining 80.5% of the supply to the plant. The maximum volume of Protected and Additional Gas delivered to the Ubungo power plant is capped at approximately 47.4 MMscfd. At an 84% utilization rate, it is expected that 7.7 MMscfd will be supplied to the Ubungo power plant as Additional Gas until the termination of the agreement on 31 July 2024.

The PGSA covers the supply of Additional Gas to a portfolio of gas generation facilities (namely; Wärtsilä 102 MWs and Tegeta 45 MWs). Further delivery points may be added in the future subject to the consent of the Company and TPDC, and provided that TANESCO pay all the tie-in costs.

Under the terms of the initialled PGSA, it is forecast that in the periods prior to the installation of the third and fourth gas processing trains, the Company will supply TANESCO's existing gas fired generation as nominated subject to there being available gas processing capacity. From November 2010, the maximum daily quantity ("MDQ") that the Company has to supply under the initialled PGSA is approximately 37 MMscfd.

Photo below: Gas from the Songo Songo will soon be available as compressed natural gas (CNG). To service this new market, Orca is constructing compression and refuelling stations at Dar es Salaam.

Growth in electricity demand and the potential for further gas fired generation

As at 31 December 2008 there was approximately 1,127 MWs of available power generation in Tanzania though only 925 MWs was operational due to contractual disputes with Dowans and IPTL. In the last few years there has been a rebalancing of power generation mix in Tanzania resulting in hydro generation accounting for less than 50% of the available generation. The only major water storage is at the Mtera reservoir which supplies the 80 MW Mtera and 200 MW Kidatu hydro plants. The remaining 261 MWs of hydro generation is "run of river" which is only operational on average for 4-5 months in the year. Accordingly, the level of the Mtera reservoir is integral to the generation of 280 MWs of electricity. Since 2006 there have been good rainfalls in the rainy seasons which occur between April and May and November and December each year and the Mtera reservoir is still relatively full.

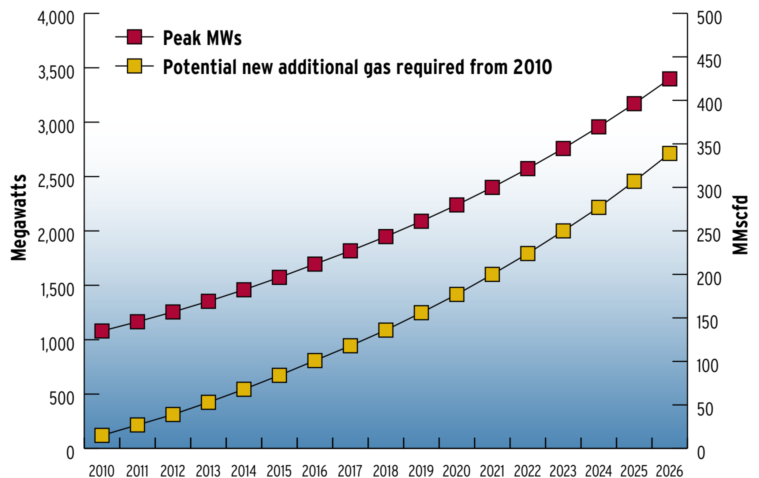
It is estimated that under the base case assumptions of the TANESCO's power sector master plan ("PSMP") that peak demand (before adding in any capacity margin to provide a more normal level of security of supply) will be 1,700 MWs in 2016 (growth of 7.8% per annum from 2006) and 4,800 MWs in 2031 (growth of 7.2% from 2016). Total current aggregate available capacity (with all hydro facilities producing) is expected to between 925 MWs by the end of 2009 though this could increase to a maximum of 1,172 MWs if contractual issues are resolved with IPTL and Dowans. Of this amount, 150 MWs is operating on expensive heavy fuel oil ("HFO") (100MWs) or industrial diesel oil ("IDO") (50MWs).

Based on this forecast availability at the end of 2009, there has to be an increase of between 528 MWs and 775 MWs in the period 2010-2016 to meet forecast demand increased in Tanzania or in excess of 100 MWs per annum. It is therefore reasonable to assume that an additional 20 MMscfd of peak demand will be required for each year between 2010 and 2016 to meet power sector demand in Tanzania in addition to the existing available generation.

Whilst the rate of growth slows marginally after 2016, there is still a requirement for in excess of 100 MWs per annum of new generation (adding 20 MMscfd of peak potential gas demand).

If it is assumed that TANESCO would want to maximize the use of gas in its generation mix, dispatching gas generation after the hydro and Protected Gas and would like to displace the existing HFO or IDO generation, then this is the forecast gas requirements over the period to 2026 in excess of the gas requirements outlined in the PGSA and the ARGA assuming a 70% utilization rate for the gas fired generation.

Forecast increase in power demand (per Tanzania Power Sector Master Plan)



It is forecast that whilst there are sufficient gas reserves in the country, gas fired generation will be the preferred choice for new capacity. In addition, the current gas is priced at a level that makes gas fired generation competitive with the all-in-cost of coal generation.

TANESCO has indicated that they intend to construct a 200-250 MW generation plant at Kinyerezi, Dar es Salaam by 2011/2012. The Company has commenced discussions to assess how gas may be made available for these units, recognizing the need for additional drilling and infrastructure to be able to deliver the volumes contemplated for these units. The sales projections assume that a contract will be negotiated with TANESCO for the supply of gas to 200 MWs at Kinyerezi in incremental amounts starting 2012.

Prospective industrial sales

Sales to the industrial sector averaged approximately 4.0 MMscfd in 2008 peaking at 5.0 MMscfd in July. The Company continues to sign and connect other smaller industrial customers to the existing 42 kilometers of low pressure pipeline. A total of three new industrial contracts were signed in 2008 and gas is currently being supplied to 20 customers. Subsequent to December 31, 2008 a further five industrial customers have signed contracts and are in the process of installing equipment to consume natural gas.

It is anticipated that the level of industrial sales will increase to in excess of 6.0 MMscfd in 2009 (excluding the Additional Gas sales to Wazo Hill) through the construction of an 8 kilometer extension of the distribution system to the Mikocheni area and the hook up of new customers in Dar es Salaam. It is then forecast that 1.0 MMscfd will be added each year through expansion of the industrials existing facilities and the connection of new industrial customers that have relocated to Dar es Salaam.

The Company has 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).

Demand for cement in Tanzania has increased significantly and this is forecast to lead to an increase in the gas consumption at the Wazo Hill cement plant in Dar es Salaam. In Q3 2008, a contract was signed with Tanzania Portland Cement Company ("TPDCC") for the supply of gas to a new kiln ("Kiln 4") at its Wazo Hill cement plant that was commissioned in February 2009, ahead of schedule. Kiln 4 consumes more gas than the existing two kilns ("Kilns 2 and 3") that utilize Protected Gas. It is envisaged that the supply of Additional Gas will rise during Q2 2009 to a rate of approximately 2.0 MMscfd. TPCC is considering accelerating their growth and continuing to partly run kilns 2 and 3 from 2010. If all kilns were operational TPCC would require up to 7.5 MMscfd of Additional Gas.

Compressed Natural Gas (CNG)

CNG is widely used around the world, including India and China.

There is a strong push by the Government of Tanzania to utilize CNG and the Company plans to expand CNG activities in 2009. In Q3 2008, the Company committed US$2.5 million to purchase one compressor, a vehicle dispenser and two trailer filling facilities to deliver 0.7 MMscfd of CNG. The facilities are currently in the process of being delivered to site and installed. It is anticipated that the Company will start the sale of CNG in Tanzania in Q2 2009.

During 2009, it is anticipated that these facilities will be expanded so that CNG can be transported to other non pipeline markets in Dar es Salaam.

CNG vehicles are available in a variety of developed and developing countries around the globe including Argentina, Italy, Pakistan, Brazil, USA and India. There are over 8.5 million natural gas vehicles in the world with Argentina, Pakistan and Brazil having over 1.5 million each.

The diesel and gasoline market in Tanzania is extremely significant and has a combined maximum demand in excess of 100 MMscfd, with over 50% of the vehicle in Tanzania being located within the general vicinity of Dar es Salaam. Whilst it would not be possible to capture all this market, it is assumed that by 2014 this market could grow to 5 MMscfd. This compares with typical penetration rates in other countries of approximately 25%. It is envisaged that CNG will retail at a 40%-60% discount to gasoline to encourage vehicles owners to convert their vehicles.

The Company is currently installing a compressor and a vehicle dispenser adjacent to its Pressure Reduction Station at a busy intersection at the Ubungo power plant. This is expected to be followed by the construction of a station in Morogoro to facilitate transport between these two industrial centres and the installation of compressors at the existing customers that have a fleet of trucks e.g. Pepsi. It is anticipated that once the market is established in the medium term, the local petrol retailers will retail the CNG. Accordingly there will be no need for significant capital after this time, but the price realized for the CNG will be reduced.

CORPORATE SOCIAL RESPONSIBILITY

The Board of Directors regularly reviews the aims of the corporate social responsibility strategy and how this translates into practical and beneficial community relations support in Tanzania. A budget is established with agreed ongoing assistance covering education, health and the provision of water and power on Songo Songo Island. Particular emphasis is given to providing educational materials and equipment for the existing school, with support being given to the setting up of a new secondary school. The overall aim is to improve the quality of life for all the local inhabitants and maintain good community relations.

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

TTHE 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.

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
MMscfd	*Bcf*	*%*	*%*
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
Permanent generation		
Ubungo power plant	2,339	2,350
Wärtsilä	2,125	-
Total volumes	4,464	2,350
Emergency generation		
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

US$/mcf	**2008**	**2007**
Average sales price:		
Industrial sector	11.98	9.31
Power sector	2.37	2.19
Weighted average price	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:

(Figures in US$'000)	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:

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

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

OPERATING NETBACK

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

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

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:

(Figures in US$'000)	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
	7,975	6,227
Marketing costs and legal fees	4,663	2,134
New ventures	294	90
Stock based compensation	1,754	2,257
Net general and administrative expenses	14,686	10,708

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:

(Figures in US$'000)	**2008**	**2007**
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:

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

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).

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

(i) 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:

(Figures in US$ '000)	2008	2007
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
	7,740	53,717

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:

(Figures in US$'000)	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
Working capital	9,727	7,299

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:

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

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

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

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:

Number of options ('000)	**Options**
As at 31 December 2007	2,847
Issued	–
Exercised	–
Forfeited	(33)
As at 31 December 2008	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$'000 except where otherwise stated)	**2008**				**2007**			
	Q4	*Q3*	*Q2*	*Q1*	*Q4*	*Q3*	*Q2*	*Q1*
Financial								
Revenue	6,371	7,301	4,826	5,284	5,562	6,363	3,021	3,831
Profit/(loss) after taxation	12	816	(10,208)	(143)	284	1,942	(609)	128
Operating netback *(US$/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$)*	0.00	0.03	(0.35)	0.00	0.01	0.07	(0.02)	0.00
Capital expenditures								
Geological, geophysical and well drilling	(987)	419	2,851	1,190	16,323	10,426	13,723	10,657
Pipeline and infrastructure	2,217	705	979	246	469	314	1,205	279
Power development	13	4	21	-	4	7	26	109
Other equipment	31	51	-	-	-	108	35	32
Operating								
Additional Gas sold - industrial *(MMscf)*	392	425	336	322	364	442	397	301
Additional Gas sold - power *(MMscf)*	2,149	2,097	956	1,983	2,152	1,974	745	1,356
Average price per mcf - industrial *(US$)*	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:

(Figures in US$'000 except per share amount)	**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:

(Figures in US$'000)	**2008**	**2007**	**2006**
Current assets			
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
Fixed assets			
Exploration and evaluation assets	648	6,881	-
Property, plant and equipment	60,818	61,157	18,951
Total assets	85,248	92,789	43,904

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.

Management's Report to Shareholders

The accompanying consolidated financial statements of Orca Exploration Group Inc. are the responsibility of the Directors. The financial and operating information presented in this annual report is consistent with that shown in the consolidated financial statements.

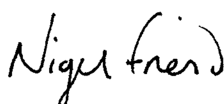
The consolidated financial statements have been prepared by management, on behalf of the Board, in accordance with the accounting policies disclosed in the notes to the consolidated financial statements. Where necessary, management has made informed judgments and estimates in accounting for transactions which were not complete at the balance sheet date. In the opinion of management, the consolidated financial statements have been prepared within acceptable limits of materiality and are in accordance with International Financial Reporting Standards appropriate in the circumstances.

Management, with the participation of the Chief Executive Officer and Chief Financial Officer, has evaluated the effectiveness of the Company's disclosure controls and procedures and has concluded that such disclosure controls and procedures are effective.

Management maintains appropriate systems of internal controls. Policies and procedures are designed to give reasonable assurance that transactions are properly authorized, assets are safeguarded and financial records are properly maintained to provide reliable information for the preparation of financial statements. An independent firm of Chartered Accountants, as appointed by the Shareholders, examines the consolidated financial statements in accordance with International Financial Reporting Standards and provides an independent professional opinion.

The Board of Directors carries out its responsibility for the financial reporting and internal controls principally through an Audit Committee. The committee has met with external auditors and Management in order to determine if Management has fulfilled its responsibilities in the preparation of the consolidated financial statements. The consolidated financial statements have been approved by the Board of Directors on the recommendation of the Audit Committee.

P. R. Clutterbuck
President & Chief Executive Officer
28 April 2009



Nigel Friend
Chief Financial Officer
28 April 2009

Auditors' Report

Report on the consolidated financial statements

We have audited the accompanying consolidated financial statements of Orca Exploration Group Inc. and its subsidiaries (the 'Group'), which comprise the consolidated balance sheet as at 31 December 2008 and 31 December 2007 and the consolidated income statements, consolidated statement of cash flows and statements of changes in shareholders' equity for the years then ended, a summary of significant accounting policies and notes to the consolidated financial statements.

Management's responsibility for the financial statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with International Financial Reporting Standards. This responsibility includes: designing, implementing and maintaining internal controls relevant to the preparation and fair presentation of the financial statements that are free from material misstatements, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

Auditors' responsibility

Our responsibility is to express an opinion on these consolidated financial statements based on our audits. We conducted our audits in accordance with the International Standards on Auditing. Those standards require that we comply with the relevant ethical requirements and plan and perform the audit to obtain a reasonable assurance whether the financial statements are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on our judgement, including the assessments of the risks of material misstatements of the financial statements, whether due to fraud or error. In making those risk assessments, we consider internal controls relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Opinion

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2008 and 31 December 2007, and of its consolidated financial performance and its statement of consolidated cash flows for the years then ended in accordance with International Financial Reporting Standards.

KPMG LLP

Calgary, Canada
28 April 2009

COMMENTS BY AUDITORS FOR CANADIAN READERS ON INTERNATIONAL – CANADIAN REFERENCES

Canadian reporting standards may differ from International Standards on Auditing in the form and content of the auditors' report, depending on the circumstances. However, had this auditors' report been prepared in accordance with Canadian reporting standards, there would be no material differences in the form and content of this auditors' report. Furthermore, an auditors' report prepared in accordance with Canadian standards on the aforementioned consolidated financial statements would not contain a qualification of opinion.

Calgary, Canada
28 April 2009

Consolidated Income Statements

YEARS ENDED 31 DECEMBER (thousands of US dollars except per share amounts)	NOTE	2008	2007
Revenue	5	23,782	18,777
Cost of sales			
Production and distribution expenses		(1,477)	(1,193)
Depletion expense	12	(4,716)	(4,476)
Impairment of exploration and evaluation assets	11	(9,520)	-
		8,069	13,108
Administrative expenses		(14,686)	(10,708)
Net financing income/(charge)	7	(439)	1,375
(Loss) /profit before taxation		(7,056)	3,775
Taxation	8	(2,467)	(2,030)
(Loss)/profit after taxation		(9,523)	1,745
(Loss)/profit per share Basic and diluted (US$)	17	(0.32)	0.06

See accompanying notes to the consolidated financial statements.

Consolidated Balance Sheets

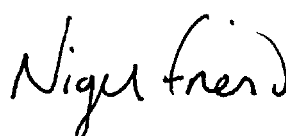
AS AT 31 DECEMBER (thousands of US dollars)	NOTE	2008	2007
ASSETS			
Current assets			
Cash and cash equivalents	9	10,586	16,515
Trade and other receivables	10	13,196	8,236
		23,782	24,751
Exploration and evaluation assets	11	648	6,881
Property, plant and equipment	12	60,818	61,157
		61,466	68,038
		85,248	92,789
LIABILITIES			
Current liabilities			
Trade and other payables	13	14,055	17,452
Non current liabilities			
Deferred income taxes	8	5,510	3,205
Deferred additional profits tax		971	588
		20,536	21,245
SHAREHOLDERS' EQUITY			
Capital stock	15	66,537	66,538
Capital reserve	16	3,715	1,023
Accumulated (loss)/income		(5,540)	3,983
		64,712	71,544
		85,248	92,789

See accompanying notes to the consolidated financial statements.
Contractual obligations and committed capital investment (Note 21)
Post balance sheet events (Note 22)

The consolidated financial statements were approved by the Board of Directors on 28 April 2009.

Director

Director



Consolidated Statements of Cash Flows

YEARS ENDED 31 DECEMBER *(thousands of US dollars)*	2008	2007
CASH FLOWS FROM OPERATING ACTIVITIES		
(Loss)/profit after taxation	(9,523)	1,745
Adjustment for:		
Depletion and depreciation	4,792	4,631
Impairment of exploration and evaluation assets	9,520	–
Stock-based compensation	2,419	1,062
Deferred income taxes	2,305	1,976
Deferred additional profits tax	383	324
Interest income	(145)	(628)
Foreign exchange gain	–	(414)
	9,751	8,696
Increase in trade and other receivables	(4,960)	(3,961)
Increase in trade and other payables	394	6,032
Net cash flows from operating activities	5,185	10,767
CASH FLOWS USED IN INVESTING ACTIVITIES		
Exploration and evaluation expenditures	(3,014)	(6,322)
Property, plant and equipment expenditures	(4,453)	(46,836)
Interest income	145	628
(Decrease)/increase in trade and other payables	(3,791)	6,897
Net cash used in investing activities	(11,113)	(45,633)
CASH FLOWS FROM FINANCING ACTIVITIES		
Normal course issuer bid	(1)	(220)
Shares issued	–	30,366
Foreign exchange gain	–	414
Proceeds from exercise of options	–	143
Net cash flow from financing activities	(1)	30,703
Decrease in cash and cash equivalents	(5,929)	(4,163)
Cash and cash equivalents at the beginning of the year	16,515	20,678
Cash and cash equivalents at the end of the year	10,586	16,515

See accompanying notes to the consolidated financial statements.

Statement of Changes in Shareholders' Equity

(thousands of US dollars)	Capital stock	Capital reserve	Accumulated (loss)/Income	Total
Note	*15*	*16*		
Balance as at 1 January 2007	34,469	1,182	2,238	37,889
Shares issued	31,971	(675)	–	31,296
Options exercised	143	–	–	143
Stock-based compensation	–	691	–	691
Normal course issuer bid	(45)	(175)	–	(220)
Profit for the year	–	–	1,745	1,745
Balance as at 31 December 2007	66,538	1,023	3,983	71,544
Shares issued	–	–	–	–
Options exercised	–	–	–	–
Stock-based compensation	–	2,692	–	2,692
Normal course issuer bid	(1)	–	–	(1)
Loss for the year	–	–	(9,523)	(9,523)
Balance as at 31 December 2008	66,537	3,715	(5,540)	64,712

See accompanying notes to the consolidated financial statements.

Notes to the Consolidated Financial Statements

General Information

Orca Exploration Group Inc. ("Orca Exploration" or the "Company") was incorporated on 28 April 2004 under the laws of the British Virgin Islands. The Company is a participant in a gas-to-electricity project in Tanzania. The Company's operations at the Songo Songo gas field in Tanzania include the operation of six producing wells and two 45 MMscfd dehydration and refrigeration gas processing units on Songo Songo Island on behalf of Songas Limited ("Songas"). Gas produced and sold from the Songo Songo field is classified as either Protected Gas or Additional Gas. Protected Gas is 100% owned by Tanzania Petroleum Development Corporation ("TPDC") and is sold to Songas under a twenty year Gas Agreement primarily for use at the Ubungo power plant and the Wazo Hill cement plant. The Protected Gas is principally used as feedstock for specified turbines and kilns. Gas sales in excess of the Protected Gas users' requirements is classified as Additional Gas. The Company has the exclusive right to explore, develop, produce and market all Additional Gas. Revenues from the sale of Additional Gas, net of transportation tariff, are shared with TPDC in accordance with the terms of the Production Sharing Agreement ("PSA") until October 2026.

Basis of preparation

These consolidated financial statements are measured and presented in US dollars as the main operating cash flows are linked to this currency through the commodity price. Management is required to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenue and expenses during the period. Actual results could differ from these estimates.

1 SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

A) STATEMENT OF COMPLIANCE

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards ("IFRS") issued by the International Accounting Standards Board ("IASB") and interpretations issued by the Standing Interpretations Committee of the IASB. These principles differ in certain respects from those in Canada as described in note 18.

B) BASIS OF CONSOLIDATION

i) Subsidiaries

The consolidated financial statements include the accounts of the Company and all its wholly owned subsidiaries (collectively, the "Company"). Subsidiaries are those enterprises controlled by the Company. The following companies have been consolidated within the Orca Exploration financial statements:

Subsidiary	Registered	Holding	functional currency
Orca Exploration Group Inc	British Virgin Islands	Parent Company	US dollar
Orca Exploration Ventures Inc	British Virgin Islands	100%	US dollar
Orca Exploration Uganda (Holdings) Inc	British Virgin Islands	100%	US dollar
Orca Exploration Uganda Inc	British Virgin Islands	100%	US dollar
PAE PanAfrican Energy Corporation	Mauritius	100%	US dollar
PanAfrican Energy Tanzania Limited	Jersey	100%	US dollar

ii) Transactions eliminated upon consolidation

Inter-company balances and transactions, and any unRealized gains arising from inter-company transactions, are eliminated in preparing the consolidated financial statements.

C) FOREIGN CURRENCY

Foreign currency transactions are recorded at the rate of exchange prevailing at the date of the transaction. Monetary assets and liabilities in foreign currencies are translated at period-end rates. Non-monetary items are translated at historic rates, unless such items are carried at market value, in which case they are translated using the exchange rates that existed when the values were determined. Any resulting exchange rate differences are taken to the income statement.

D) EXPLORATION AND EVALUATION ASSETS, PROPERTY, PLANT AND EQUIPMENT

Exploration and evaluation assets

Exploration and evaluation costs are capitalized as intangible assets. Intangible assets includes lease and license acquisition costs, geological and geophysical costs and other direct costs of exploration and evaluation which the directors consider to be unevaluated until reserves are appraised as commercial, at which time they are transferred to property, plant and equipment following an impairment review and depleted accordingly. Where properties are appraised to have no commercial value or are appraised at values less than book values, the associated costs are treated as an impairment loss in the period in which the determination is made.

Property, plant and equipment

Property, plant and equipment comprises the Company's tangible natural gas assets, development wells, together with leasehold improvements, computer equipment, motor vehicles and fixtures and fittings and are carried at cost, less any accumulated depletion, depreciation and accumulated impairment losses. Cost includes purchase price and construction costs for qualifying assets. Depletion of these assets commences when the assets are ready for their intended use. Only costs that are directly related to the discovery and development of specific oil and gas reserves are Capitalized. The cost associated with tangible natural gas assets are amortised on a field by field unit of production method based on commercial proven reserves. The calculation of the unit of production amortisation takes into account the estimated future development cost of the field.

Impairment of exploration and evaluation assets, property, plant and equipment

At each balance sheet date, the Company reviews the carrying amounts of its property, plant and equipment and intangible assets to determine whether there is any indication that those assets have suffered an impairment loss. Individual assets are grouped together as a cash generating unit for impairment assessment purposes at the lowest level at which there are identifiable cash flows that are independent from other group assets. In the case of exploration and evaluation assets, this will normally be at the Company's field level. If any such indication of impairment exists, the Company makes an estimate of its recoverable amount. The recoverable amount is the higher of fair value less costs to sell and value in use. Where the carrying amount of a cash generating unit exceeds its recoverable amount, the cash-generating unit is considered impaired and is written down to its recoverable amount. In assessing the value in use, the estimated future cash flows are adjusted for the risks specific to the cash-generating unit and are discounted to their present value with a discount rate that reflects the current market indicators. Where an impairment loss subsequently reverses, the carrying amount of the asset cash-generating unit is increased to the revised estimate of its recoverable amount, but so that the increased carrying amount does not exceed the carrying amount that would have been determined had no impairment loss been recognized for the cash-generating unit in prior years. A reversal of an impairment loss is recognized as income immediately.

E) OPERATORSHIP

The Company operates the gas field, flow lines and gas processing plant on behalf of Songas at cost. The cost of operating and maintaining the wells and flow lines is paid for by Orca Exploration and Songas in proportion to the respective volumes of Protected Gas and Additional Gas sales. The costs of operating and maintaining the wells and flow lines are reflected in the accounts to the extent that the costs were incurred to accomplish Additional Gas sales. The cost of operating the gas processing plant and pipeline to Dar es Salaam is paid by Songas. When there are Additional Gas sales, a transportation tariff is paid to Songas as compensation for using the gas processing plant and pipeline. This transportation tariff is netted off revenue.

F) TRADE AND OTHER RECEIVABLES

Trade and other receivables are stated at their recoverable amount.

G) CASH AND CASH EQUIVALENTS

Cash and cash equivalents include cash on deposit and highly liquid investments with original maturities of three months or less.

H) EMPLOYMENT BENEFITS

i) Pension

The Company does not operate a pension plan, but it does make defined contributions to the statutory pension fund for employees in Tanzania. Obligations for contributions to the statutory pension fund are Authorized as an expense in the income statement as incurred.

ii) Stock options

The share option plan allows Company officers, directors and key personnel to acquire shares at an exercise price determined by the market value at the date of grant. When the options are exercised, equity is increased by the amount of the proceeds received. The fair value of stock options is expensed to the income statement in accordance with the specific vesting periods. The fair value of the options is calculated, on the grant date, using the Black-Scholes option pricing model.

iii) Stock appreciation rights

Stock appreciation rights are issued to certain key managers, officers and employees. The fair value of stock appreciation rights is expensed to the income statement in accordance with the service period. The fair value of the stock appreciation rights is revalued every reporting date with the change in the value expensed to the income statement.

i) Asset retirement obligations

No provision has been made for future site restoration costs since the Company has no legal or contractual obligation under the PSA to restore the fields at the end of their commercial lives.

J) REVENUE RECOGNITION, PRODUCTION SHARING AGREEMENTS AND ROYALTIES

The Company recognizes revenue from natural gas sales when title passes to a customer. The Company conducts operations jointly with the Tanzanian government and "parastatal entities" in accordance with production sharing agreements ("PSA"). Under these agreements, the Company pays both its share and the parastatal's share of operating, administrative and capital costs. The Company recovers all the operating, administrative and capital costs including the parastatal's share of these costs from future revenues over several years ("Cost Gas"). The parastatal's share of operating and administrative costs, are recorded in operating and general and administrative costs when incurred and capital costs are recorded in 'Property, plant and equipment'. All recoveries are recorded as revenue in the year of recovery. The Company is entitled to a share of production in excess of the Cost Gas ("Profit Gas"). Operating revenue represents the Company's share of Cost Gas and Profit Gas during the period, net of the transportation tariff.

K) 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 to the Government of Tanzania. This tax is considered to be a royalty and is netted against revenue. APT is provided for by forecasting the total APT payable as a proportion of the forecast Profit Gas over the term of PSA license.

L) TAXATION

Income tax on the profit for the year comprises current and deferred tax. The Company is liable for Tanzanian income tax, but this is recovered from TPDC through the profit-sharing arrangement. Where current income tax is payable, revenue is adjusted for the tax and the income tax is shown as current tax. Deferred tax is provided using the balance sheet asset and liability method, providing for temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for taxation purposes. The amount of deferred tax provided is based on the expected manner of realisation or settlement of carrying amounts of assets and liabilities using tax rates substantively enacted at the balance sheet date. A deferred tax asset is recognized only to the extent that it is probable that future taxable profits will be available against which the asset can be utilized. Deferred tax assets are reduced to the extent that it is no longer probable that the related tax benefits will be realized.

M) SEGMENTAL REPORTING

The Company currently operates only in Tanzania.

O) DEPRECIATION

Depreciation for non-natural gas properties is charged to the income statement on a straight line basis over the estimated useful economic lives of each class of asset. The estimated useful lives are as follows:

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

P) NEW ACCOUNTING STANDARDS AND INTERPRETATIONS

Certain new accounting standards and interpretations have been published that are not mandatory for the 31 December 2008 reporting period. The Company's assessment of the impact of these new standards and interpretations which have not been adopted is set out below.

IAS 1 (Amendment), Presentation of Financial Statements: effective for accounting periods commencing on or after 1 January 2009. The revised standard requires the financial statements to clearly identify operating results attributable to owners of the parent and non controlling interests. All of the companies consolidated within the Orca Exploration's financial statements are 100% owned by Orca Exploration. As a result the additional disclosure requirements around non controlling interests, does not apply. The previous version of IAS 1 used the titles "income statement" and "balance sheet" and "cash flow statement". IAS 1 uses "statement of comprehensive income", "statement of financial position" and "statement of cash flow". The change in terminology only applies to the annual statements for the year end 31 December 2009 and not the interim statements for 2009. Management's assessment of IAS1 is that it will only impact the presentation of financial information within the main financial statements.

The following standards are assessed not to have any impact on the Company's financial statements:

- IAS 23 (Amendment), Borrowing Costs: effective for accounting periods commencing on or after 1 January 2009;
- IAS 27 (Amendment), Consolidated and Separate Financial Statements: effective for accounting periods commencing on or after 1 July 2009;
- IFRS 2 (Amendment), Share based payment Vesting Conditions and Cancellations: effective for accounting periods commencing on or after 1 January 2009;
- IFRS 3 (Amendment) Business Combinations: effective for accounting periods commencing on or after 1 July 2009;
- IFRS 8, "Operating segments" (effective from 1 January 2009)

2 CRITICAL ACCOUNTING ESTIMATES

In applying the Company's accounting policies, which are described in note 1, management makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, vary to the actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are discussed below:

I) RESERVES

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.

Reserves are integral to the amount of depletion charged to the income statement.

II) EXPLORATION AND EVALUATION ASSETS

Under the Company's accounting policy expenditures incurred on the exploration for, and evaluation of, reserves are capitalized as intangible assets. These intangibles assets are then assessed for impairment when circumstances suggest that the carrying amount may exceed its recoverable value. Such circumstances include but are not limited to:

- the period for which the Company has the right to explore in the specific area has expired during the period, or will expire in the near future, and is not expected to be renewed;
- no further expenditure on exploration and evaluation is budgeted or planned;
- no reserves have been encountered;
- the evaluation of seismic data indicates that the reserves are unlikely to be of a commercial quantity;
- the quantity of mineral reserves are deemed not to be of commercially viable quantities and the entity has decided to discontinue further activities;
- sufficient data exists to indicate that, although a development in the specific area is likely to proceed, the carrying amount of the exploration and evaluation asset is unlikely to be recovered in full from successful development or by sale.

The assessment for impairment involves estimates as to (i) the likely future commerciality of the asset and when such commerciality should be determined, (ii) future revenues and costs associated with the asset, and (iii) the discount rate to be applied to such revenues and costs for the purpose of deriving a recoverable value.

III) FAIR VALUE OF STOCK BASED COMPENSATION

All stock options issued or stock appreciation rights granted by the Company have to be valued at their fair value. In assessing the fair value of the equity based compensation estimates have to be made as to i) the volatility in share price, ii) risk free rate of interest and iii) the level of forfeiture. In the case of stock options, this fair value is estimated at the date of issue and is not revalued, where as the fair value of stock appreciation rights is recalculated at each reporting period.

3 RISK MANAGEMENT

The Company, by its activities in oil and gas exploration, development and production, is exposed to the risk associated with the unpredictable nature of the financial markets. The Company seeks to manage its exposure to these risks where ever possible.

I) FOREIGN EXCHANGE RISK

Foreign exchange risk arises when transactions and Authorized assets and liabilities of the Company are denominated in a currency that is not the U.S. dollar functional currency.

The Company operates internationally and is exposed to foreign exchange risk arising from currency exposures to U.S. dollars. The main currencies to which the Company has an exposure are: Tanzanian shillings, British pounds sterling and Canadian dollars.

The majority of the expenditure associated with the operation of the gas distribution system is denominated in Tanzanian shillings. The majority of the consultant's contracts are denominated in British pounds sterling. All of the capital stock, equity financing and any associated stock based compensation are denominated in Canadian dollars. All of the operational revenue and the majority of capital expenditure are denominated in US dollars.

There are no forward exchange rate contracts in place.

II) COMMODITY PRICE RISK

The Songo Songo gas field is the first gas field to be developed in East Africa. The Company 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 Heavy Fuel Oil ("HFO"). The price of HFO is exposed to the volatility in the market price of oil.

III) INTEREST RATE RISK

The Company currently does not have any debt or borrowings so is therefore not exposed to any interest rate risk.

IV) CREDIT RISK

All of the Company's production is currently derived in Tanzania. The sales are made to the power sector and the industrial sector. In relation to sales to the power sector, the Company has a short term contract with Songas for the supply of gas to the Ubungo power plant and a contract with TANESCO to supply Wärtsilä power plant. The contracts with Songas and TANESCO accounted for 49% of the Company's operating revenue during 2008 and US$8.9 million of the receivables at the year end. Songas itself is heavily reliant on the payment of capacity and energy charges by TANESCO for its liquidity. TANESCO is dependent on the Government of Tanzania for some of its funding. Whilst some payments have been delayed, the Company has subsequently received all the amounts due from Songas and TANESCO in respect of the amounts due at 31 December 2008. Sales to industrial sector are subject to an internal credit review to minimize the risk of non payment. The Company does not anticipate any default with these customers.

V) LIQUIDITY RISK

Liquidity risk is the risk that the Company will not have sufficient funds to meet its liabilities. Cash forecasts identifying liquidity requirements of the Company are produced on a quarterly basis. These are reviewed on a regular basis to ensure sufficient funds exist to finance the Company's current operational and investment cash flow requirements. The Company has no financial liabilities other than the trade and other payables indentified in note 13 which are all due within 12 months. The Company currently has a short term US$5 million overdraft facility. 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.

VI) CAPITAL RISK MANAGEMENT

The Company's objectives when managing capital are to safeguard the Company's ability to continue as a going concern in order to provide returns for shareholders and benefits for other stakeholders and to maintain an optimal capital structure to reduce the cost of capital. The Company currently has no borrowings.

4 SEGMENTAL INFORMATION

The Company has a single class of business which is international exploration, development and production of petroleum and natural gas. The Company currently operates in Tanzania having ceased its operations in Uganda during the year.

(Figures in US$'000)	External revenue	Segment income/(loss)	Total assets	Total liabilities	Capital additions	Depletion & depreciation
2008						
Tanzania	23,782	(3)	85,248	20,536	5,101	4,792
Uganda	–	(9,520)	–	–	2,639	9,520
	23,782	(9,523)	85,248	20,536	7,740	14,312
2007						
Tanzania	18,777	1,745	85,908	21,245	46,837	4,631
Uganda	–	–	6,881	–	6,881	–
	18,777	1,745	92,789	21,245	53,718	4,631

5 REVENUE

YEARS ENDED 31 DECEMBER *Figures in US$'000*	2008	2007
Operating revenue	23,916	19,023
Current income tax adjustment	249	78
Deferred additional profits tax	(383)	(324)
Revenue	23,782	18,777

The revenue reported is the Company's proportionate share of revenue as calculated in accordance with the accounting policy 1(j).

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.

6 PERSONNEL EXPENSES

The average number of employees during the year was 21 (2007: 15). The costs are as follows:

YEARS ENDED 31 DECEMBER *(Figures in US$'000)*	2008	2007
Wages and salaries	1,434	1,550
Social security costs	288	237
Other statutory costs	385	272
	2,107	2,059

7 NET FINANCING INCOME/(CHARGE)

YEARS ENDED 31 DECEMBER *Figures in US$'000*	2008	2007
Finance income		
Interest income	145	628
Foreign exchange gain	56	832
	201	1,460
Finance charges		
Overdraft charges	(62)	-
Foreign exchange loss	(578)	(85)
	(640)	(85)
Net financing income/(charge)	(439)	1,375

8 TAXATION

Under the terms of the Production Sharing Agreement with TPDC, the Company is liable to pay income tax at the corporate rate of 30% on profits generated in Tanzania. The amount paid is then recovered in full from TPDC by adjusting their share of profit gas.

The tax charge is as follows:

YEARS ENDED 31 DECEMBER *(Figures in US$'000)*	2008	2007
Current tax	162	54
Deferred tax	2,305	1,976
	2,467	2,030

Tax Rate Reconciliation

YEARS ENDED 31 DECEMBER *(Figures in US$'000)*	2008	2007
(Loss)/profit before taxation	(7,056)	3,775
Provision for income tax calculated at the statutory rate of 30%	(2,117)	1,133
Add the tax effect of non-deductible income tax items:		
Administrative and operating expenses	1,187	676
Stock-based compensation	504	450
Other income	(22)	(331)
Impairment of exploration and evaluation assets	2,856	-
Permanent differences	59	102
	2,467	2,030

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. Accordingly a deferred tax liability has been recognized for the year ended 31 December 2008.

The deferred income tax liability includes the following temporary differences:

AS AT 31 DECEMBER (Figures in US$'000)	2008	2007
Differences between tax base and carrying value of property, plant and equipment	6,338	3,542
Provision for stock option bonuses	(2)	(360)
Income tax recoverable	221	230
Other liabilities	(196)	(31)
Additional profits tax	(291)	(176)
Tax losses	(560)	-
	5,510	3,205

9 CASH AND CASH EQUIVALENTS

AS AT 31 DECEMBER (Figures in US$'000)	2008	2007
Cash and cash equivalents	10,586	16,515

Included in the cash and cash equivalents is US$529,000 advanced from Songas under the terms of the Operatorship Agreement to pay for the costs of operating the wells and gas processing plant. This amount is also included in trade and other payables.

10 TRADE AND OTHER RECEIVABLES

AS AT 31 DECEMBER (Figures in US$'000)	2008	2007
Trade receivables	11,896	7,275
Prepayments	950	801
Other receivables	350	160
	13,196	8,236

The Company's exposure to credit, currency and interest risk related to trade and other receivables is disclosed in note 3.

11 EXPLORATION AND EVALUATION ASSETS

Figures in US'000	Tanzania	Uganda	Total
Costs			
As at 1 January 2008	–	6,881	6,881
Additions	648	2,639	3,287
As at 31 December 2008	648	9,520	10,168
Depletion/Depreciation			
As at 1 January 2008	–	–	–
Impairment	–	(9,520)	(9,520)
As at 31 December 2008	–	(9,520)	(9,520)
Net Book Values			
As at 31 December 2008	648	–	648
As at 31 December 2007	–	6,881	6,881

TANZANIA

The exploration and evaluation asset relates to initial evaluation of the Songo Songo West prospect which is pending the determination of proven and probable reserves.

UGANDA

As a result of the seismic acquired in 2007, it was decided in June 2008 not to progress with the drilling of two exploration wells. Accordingly, the Company did not exercise its option to acquire a 50% working interest in Exploration Area 5 in Uganda. A total cost of US$9.5 million was subsequently recognized as an impairment during the year and written off in full to the income statement. This included US$0.6 million of general administrative expenses (2007: US$1.2 million) that were capitalized in the year in relation to the Ugandan exploration and evaluation asset.

12 PROPERTY, PLANT AND EQUIPMENT

Figures in US'000	Tanzania	Leasehold improvements	Computer equipment	Vehicles	Fixtures & Fittings	Total
Costs						
As at 1 January 2008	68,362	156	164	139	41	68,862
Additions	4,370	29	43	–	11	4,453
Disposals	–	–	–	(17)	–	(17)
As at 31 December 2008	72,732	185	207	122	52	73,298
Depletion/ Depreciation						
As at 1 January 2008	7,356	156	84	68	41	7,705
Charge for period	4,716	–	42	34	–	4,792
Depreciation on disposals	–	–	–	(17)	–	(17)
As at 31 December 2008	12,072	156	126	85	41	12,480
Net Book Values						
As at 31 December 2008	60,660	29	81	37	11	60,818
As at 31 December 2007	61,006	–	79	70	–	61,157

In determining the depletion charge, it is estimated by the independent reserve engineers that future development costs of US$89.1 million (2007: US$128.4 million) will be required to bring the total proved reserves to production.

13 TRADE AND OTHER PAYABLES

AS AT 31 DECEMBER *(Figures in US$'000)*	2008	2007
Trade payables	11,799	12,667
Accrued liabilities	2,256	4,629
Related party *(note 20)*	–	156
	14,055	17,452

The Company's exposure to credit, currency and interest risk related to trade and other payables is disclosed in note 3.

14 BANK FACILITY

The Company currently has a short-term undrawn US$5.0 million overdraft facility which expires in May 2009.

15 CAPITAL STOCK

a) Authorized

50,000,000 Class A Common Shares — No par value

50,000,000 Class B Subordinate Voting Shares — No par value

The Class A and Class B shares rank pari passu in respect of dividends and repayment of capital in the event of winding-up. Class A shares carry twenty votes per share and Class B shares carry one vote per share. The Class A shares are convertible at the option of the holder at any time into Class B shares on a one-for-one basis. The Class B shares are convertible into Class A shares on a one-for-one basis in the event that a take over bid is made to purchase Class A shares which must, by reason of a stock exchange or legal requirements, be made to all or substantially all of the holders of Class A shares and which is not concurrently made to holders of Class B shares.

b) Changes in the capital stock of the Company were as follows:

Thousands of shares or US$'000	2008			2007		
	Authorized	Issued	Valuation	Authorized	Issued	Valuation
Class A shares						
As at 1 January and 31 December	50,000	1,751	983	50,000	1,751	983
Class B shares						
As at 1 January	50,000	27,863	65,555	50,000	25,023	33,486
Issue of new stock	–	–	–	–	2,700	31,971
Stock options exercised	–	–	–	–	160	143
Normal course issuer bid	–	–	(1)	–	(20)	(45)
As at 31 December	50,000	27,863	65,554	50,000	27,863	65,555
Total Class A & B shares as at 31 December	100,000	29,614	66,537	100,000	29,614	66,538

In April 2007, 0.2 million Class B shares were awarded to a newly appointed officer. These shares are held in escrow and they vest 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). The shares will be fully vested by 7 April 2009. An expense of US$0.6 million was recorded in 2008 (2007: US$0.9 million).

In July 2007, 2.5 million Class B shares were issued at a price of Cdn$13.80 per share following the conclusion of a private placement, resulting in gross proceeds of Cdn$34.5 million. A total of US$30.4 million net proceeds have been recognized in capital stock. A large proportion of the funds were used for the completion of the SS-10 well in Tanzania and for the funding of the venture in Uganda.

STOCK-BASED COMPENSATION

The stock option plan provides for the granting of stock options to directors, officers and employees. The exercise price of each stock option is determined at 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. 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 traded daily closing share price at the date of issue.

Stock Options

Thousands of options or Cdn$	2008		2007	
	Options	Exercise Price	Options	Exercise Price
Outstanding as at 1 January	2,847	1.00 to 13.55	2,022	1.00 to 6.80
Granted	-	-	1,185	8.70 to 13.55
Forfeited	(33)	12.00	(200)	6.80
Exercised	-	-	(160)	1.00
Outstanding as at 31 December	2,814	1.00 to 13.55	2,847	1.00 to 13.55

The weighted average remaining life and weighted average exercise prices of options at 31 December 2008 were as follows:

Exercise Price (Cdn$)	Number Outstanding as at 31 December 2008	Weighted Average Remaining Contractual Life	Number Exercisable as at 31 December 2008	Weighted Average Exercise Price (Cdn$)
1.00	1,662	5.19	1,662	1.00
8.0 to 13.55	1,152	3.37	392	10.91

There were no new stock options issued during the year. A total charge of US$2.0 million has been recognized for the year in relation to the stock options.

Stock Appreciation Rights

Thousands of stock appreciation rights or Cdn$	2008		2007	
	SAR	Exercise Price	SAR	Exercise Price
Outstanding as at 1 January	1,090	4.00 to 13.55	400	4.00
Granted *(i)*	15	5.30	300	8.00
Granted *(i)*	–	–	300	8.70
Granted *(i)*	–	–	90	13.55
Granted *(ii)*	105	11.05	–	–
Exercised *(ii)*	(400)	4.0	–	–
Outstanding as at 31 December	810	8.0 to 13.55	1,090	4.00 to 13.55

(i) *These stock appreciation rights have a term of 5 years and vest in three equal annual installments, the first third vesting on the anniversary of the grant date. There is no maximum liability associated with these rights.*

(ii) *These stock appreciation rights have a liability of Cdn$3.00 per right or Cdn$0.3 million in total with a two year term. The stock appreciation rights exercised in 2008 also had a maximum liability of Cdn$3.0 per right or Cdn$1.2 million in total.*

The Company records a charge to the income statement using the Black-Scholes fair valuation option pricing model every reporting period with a resulting liability being recognized in the balance sheet. In the valuation of these stock appreciation rights at the reporting date, the following assumptions have been made: the risk free rate of interest equal to 3.50%, stock volatility 110%, 0% dividend yield and a range of forfeiture from 0% to 33%.

As at 31 December 2008, a total liability of US$0.2 million (2007: US$1.9 million) has been recognized in relation to the stock appreciation rights. A total credit of US$0.6 million has been recorded during 2008, as a result of the decline of the share price during the year (2007: US$1.3 million charge).

16 CAPITAL RESERVE

The capital reserve is used to record two types of transactions:

(i) To recognize the fair value of equity settled stock based compensation expensed in the year. In the case of the treasury shares issued in 2007, the reserve has been used to recognize the unexpensed fair value of the treasury shares, as the full fair value of the treasury stock issued has been recorded as capital stock.

(ii) To account for the difference between the aggregated book value of the shares purchased under the normal course issuer bid and the actual consideration.

17 LOSS PER SHARE

The calculation of basic loss per share is based on the net loss attributable to ordinary shareholders of US$9.5 million (2007: US$1.7 million profit) and a weighted average number of Class A and Class B shares outstanding during the period of 29,614,423 (2007: 28,259,382).

In computing the diluted loss per share, the dilutive effect of the stock options was 1,425,253 (2007: 1,543,358) shares. These are added to the weighted average number of common shares outstanding during the year resulting in a diluted weighted average number of Class A and Class B shares of 31,039,676 for the year ended 31 December, 2008. No adjustments were required to the reported earnings from operations in computing diluted per share amounts.

18 RECONCILIATION OF IFRS TO ACCOUNTING PRINCIPLES GENERALLY ACCEPTED IN CANADA

The consolidated financial statements have been prepared in accordance with IFRS, which differ in some respects from Canadian Generally Accepted Accounting Principles ("GAAP"). Any difference in accounting principles as they pertain to the accompanying consolidated financial statements were immaterial except as described below:

A) TAXATION

On 31 August 2004, the Company was spun off from a predecessor company pursuant to a scheme of arrangement. Under Canadian GAAP, a deferred tax liability has to be recognized for the taxable temporary differences arising from the initial recognition of an asset or liability under any scenario. IFRS does not permit the setting up of a deferred tax liability for all taxable temporary differences arising from the initial recognition of an asset or liability except in a business combination.

B) STOCK-BASED COMPENSATION

There were 810,000 stock appreciation rights outstanding as at 31 December 2008 (see note 15). Under IFRS as these rights are a cash-settled share-based transaction, the fair value of the rights is calculated using a Black-Scholes option pricing model every reporting period. Under Canadian GAAP, the fair value is calculated using the intrinsic value method whereby the rights are valued at the quoted market price less the rights price at each reporting period. Under both IFRS and Canadian GAAP, the fair value is expensed over the service period of the rights.

C) EXPLORATION AND EVALUATION ASSETS

Under IFRS 6 there is a requirement for separate disclosure of costs associated with exploration and evaluation assets. There is no such requirement under Canadian GAAP and the costs are aggregated within property, plant and equipment.

As at 31 December (Figures in US$ '000)	2008		2007	
	IFRS	CDN	IFRS	CDN
Current assets	23,782	23,782	24,751	24,751
Exploration and evaluation assets	648	–	6,881	–
Property, plant and equipment	60,818	63,010	61,157	69,500
	85,248	86,792	92,789	94,251
Current liabilities	14,055	13,899	17,452	17,187
Non current liabilities	6,481	8,226	3,793	5,541
Capital stock	66,537	66,537	66,538	66,538
Reserves	(1,825)	(1,870)	5,006	4,985
	85,248	86,792	92,789	94,251
(Loss)/profit before taxation	(7,056)	(7,140)	3,775	3,886

19 OPERATING LEASES

AS AT 31 DECEMBER *(Figures in US$ '000)*	2008	2007
Less than one year	204	102
Between one and five years	714	394
	918	496

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.

20 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 were made at the exchange amount.

21 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 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'.

22 POST BALANCE SHEET EVENTS

There are no post balance sheet events.

23 DIRECTORS AND OFFICERS EMOLUMENTS

						Outstanding		
USD'000 except for number of share options	Year	Base	Bonus	Other	Total	Stock options	Stock appreciation rights	Treasury stock
Directors								
W. David Lyons *(i)*	2008	15	–	–	15	1,000,000	–	–
Chairman	2007	23	–	–	23	1,000,000	–	–
Peter R. Clutterbuck *(i)*	2008	393	135	–	528	490,000	–	–
President and CEO	2007	452	–	–	452	490,000	–	–
Nigel A. Friend *(i)*	2008	353	95	–	448	265,000	90,000	–
Vice President, Executive Officer and CFO	2007	334	–	–	334	265,000	90,000	–
James Smith *(i)*	2008	408	92	–	500	300,000	300,000	66,667
Vice President Exploration	2007	350		–	350	300,000	300,000	133,333
Pierre Raillard	2008	359	125	–	484	325,000	–	–
Vice President Operations	2007	241	–	–	241	325,000	–	–
David W. Ross	2008	–	–	–	–	75,000	–	–
Non Executive Director	2007	–	–	–	–	75,000	–	–
John Patterson *(i)*	2008	67	–	–	67	125,000	–	–
Non Executive Director	2007	49	–	–	49	125,000	–	–

(i) The 'Base compensation' for W.D. Lyons, P.R. Clutterbuck, N. Friend, J. Smith, and J. Patterson are in respect of consultancy fees.

FORWARD LOOKING STATEMENTS

This disclosure contains certain forward-looking estimates that involve substantial known and unknown risks and uncertainties, certain of which are beyond Orca Exploration's control, including the impact of general economic conditions in the areas in which Orca Exploration operates, civil unrest, industry conditions, changes in laws and regulations including the adoption of new environmental laws and regulations and changes in how they are interpreted and enforced, increased competition, the lack of availability of qualified personnel or management, fluctuations in commodity prices, foreign exchange or interest rates, stock market volatility and obtaining required approvals of regulatory authorities. In addition there are risks and uncertainties associated with oil and gas operations, therefore Orca Exploration's actual results, performance or achievement could differ materially from those expressed in, or implied by, these forward-looking estimates and, accordingly, no assurances can be given that any of the events anticipated by the forward-looking estimates will transpire or occur, or if any of them do so, what benefits, including the amounts of proceeds, that Orca Exploration will derive therefrom.

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Chief Financial Officer
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PIERRE RAILLARD
Vice President Operations
Dar es Salaam
Tanzania

JOHN PATTERSON
Non-Executive Director
Nanoose Bay
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DAVID ROSS
Non-Executive Director
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