Outlook for the Oil and Gas Industry in the Deepwater Gulf of Mexico

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Mr. Francis McAllister

Slide 1 – Title Slide

Thank you (John) for the introduction…and good morning. I would like to take this opportunity to thank Scotia Capital for organizing this annual event that offers different views and perspectives on various commodities. By way of introduction, my name is Francis McAllister and I oversee the Investor Relations and Communications for BHP Billiton in the Americas, and am based in Houston, Texas. I would like to talk with you today about the outlook for the oil and gas industry in the deepwater Gulf of Mexico, and how it fits into the overall US supply and demand equation. At BHP Billiton we are very excited about the future prospects for this region of the oil and gas industry. As you will see from the presentation today, we truly believe that the deepwater Gulf of Mexico is currently the hottest play in the global oil and gas industry.

Slide 2 – BHP Billiton – World's largest metals and mining company

Before I begin my discussion on the deepwater Gulf of Mexico, I would first like to answer the question that the majority of you are probably thinking at this time – Why is BHP Billiton, the world's largest metals and mining company, presenting our perspective on the Gulf of Mexico deepwater oil and gas industry? To answer that question, you have to consider that BHP Billiton has been in the oil and gas business for well over 30

years. While it is true that 86% of our assets fall into the metals and mining basket, the 14% of our assets associated with our Petroleum Group accounted for nearly 30% of our EBIT at the end of our fiscal year 2002. The Company is currently developing 10 oil or gas projects representing about $3.5 to $4 billion of capital spending between now and the end of 2006. So you can see that it is a very strategic and profitable business for the overall BHP Billiton Group.

The reason for the significant profitability of our Petroleum Group is due to the excellent quality of our assets. Some of our more noteworthy assets include; a 50 percent interest in the Bass Strait operation in Australia, a one sixth interest in the North West Shelf LNG operations also in Australia, and a 46.1% interest and operatorship of the Liverpool Bay development in the Irish Sea. In addition to these assets, BHP Billiton also operates, or holds interests in operations in Australia, Latin America, Northern Africa, the Middle East, and in the Gulf of Mexico.

Slide 3 – BHP Billiton – A medium sized player in the energy industry

With that as a background to our business, and before I get into the discussion on the Gulf of Mexico, I want to make sure you are aware of where BHP Billiton ranks in the energy and petroleum industry? If you were to rank us in terms of production and reserves, BHP Billiton is modest in size, however we are growing. Of non-state owned producers, we are currently the 19th largest producer of oil and gas in the world and are

the 18th largest in terms of reserves. However, due to the benefit of our metals and mining business, we are able to carry more weight in the industry in terms of market capitalization. We currently rank as the 10th largest energy and petroleum company by market capitalization despite the fact that we are only the 19th largest producer by volume. This provides us with the added benefit that the super majors see us as a good partner due to our significant balance sheet and financial strength that allows us to punch above our weight when it comes to financing our share of projects. To demonstrate this point, we are partners with Exxon Mobil in the Bass Strait operation, with Shell in the North West Shelf, and with Chevron Texaco and BP in the Gulf of Mexico. The ability to partner with these larger companies in the industry helps us to match their margins per barrel of production, which are some of the best margins in the industry.

Slide 4 – Our current operations and exploration

Very briefly, I just want to use this slide as a lead into the Gulf of Mexico. Our strategy around our petroleum business is not to be everything to everyone, but to be a focused player. We realize that we are not a super major and as a result have created a very clear niche business that is centered around a four-part strategy. The four parts include; first, what we term as "sweating our existing assets." This entails maximizing our returns and optimizing our production from our existing assets. As I have already mentioned, the high quality nature of our assets affords significant profitability throughout the price cycles. The second part is called "Access to Discovered Resources." This is where we

farm into already discovered hydrocarbons in resource-rich regions that may offer significant growth options in the longer term. The third part is Gas Commercialization, where we look to further develop our gas and LNG businesses in places like Australia and Pakistan. The last part of the strategy is what I want to focus on here today, and that is what we term High-Margin exploration and production. It is this category where we include our deepwater oil and gas business, and the part of our strategy that offers the most potential growth to our business. This is that part of our strategy where the deepwater Gulf of Mexico business is captured.

Slide 5 - Gulf of Mexico ("GOM") – Location

With all of that as background, let us now focus on the Gulf of Mexico region. Ten to fifteen years ago, the Gulf of Mexico was considered "the dead sea," with limited world-class exploration potential that could be economically developed. However, that view has changed considerably, and a main contributor to that is the size and scope of the opportunities in the deepwater. Over the last several years, companies have come to understand that the deepwater Gulf of Mexico has world-class potential, very attractive fiscal terms, and access to a premium oil and gas market – the United States. In looking at the map, the majority of the exploration activities and higher potential acreage is located in the Central and Western Gulf Planning Areas, with small portions of the Eastern Planning Area just beginning to open up. The Central Planning Area has proven to hold more oil potential, while the Western Planning Area has proven to hold more gas

potential. In addition, the Western Planning Area is not as well developed in terms of infrastructure and markets as is the Central Planning Area. While the deepwater provides a tremendous amount of potential for the companies who invest there, it is not without its risks. Exploration in the deepwater is not just technologically challenging, the deepwater wells are very expensive, with higher rig rates and longer drilling times than other wells.

Slide 6 – Deepwater Gulf of Mexico

Before I move on, I just wanted to make sure we are all on the same page in our understanding of what the term "deepwater" means. What you see here is imagery of the Gulf depicting the three main plays, which include the shelf, the deepwater, and the ultra deepwater plays. The difference between the three plays is obviously determined by the water depth. The shelf runs anywhere from zero to 600 feet of water depth, the deepwater runs from 600 feet of water to 5,000 feet of water, and the ultra deepwater runs from 5,000 feet of water to 10,000 plus feet of water.

Highlighted on this map are two key prospect areas. The first is the Mississippi Canyon area where fields like Thunderhorse, Mars and Ursa have been found. The second region is the Atwater Foldbelt, where finds such as Atlantis, Mad Dog, Neptune, and Shenzi, all with BHP Billiton ownership, have been discovered. In the Atwater Foldbelt region, note the rough sea floor topography where the escarpment can vary by several thousand feet of

relief over a very short distance. It is in this type of environment where BHP Billiton and BP will develop the Atlantis project.

Slide 7 – Gulf of Mexico – Multi play and multi trap

In analyzing the three different plays in the Gulf, you need to also look at the sub surface structures to gain a full appreciation for the technological achievements that allow production from deepwater resources. Let me take a minute to explain the chart, as it is quite complex. First, across the top of the chart is the indication of the play and the associated water depths that I just explained. The top blue line reflects this changing water depth. Second the scales on the left and right of the chart indicate depth in terms of feet below the surface of the water. The various colors in the chart depict the varying geology of the sub surface, with the light blue regions reflecting salt deposits. The important features of the chart are the yellow slivers that are located throughout the chart. These reflect theoretic oil and gas deposits trapped well below the bottom of the ocean. I just want to point out a couple of important facts before I move on from here. First, many people are interested in the depth of the water where we are drilling, but fail to realize that while we may be drilling in 5,000 feet of water, we then drill up to 20,000 feet below the bottom of the ocean before we encounter the hydrocarbon reservoirs that we are targeting. In fact, the most recent well that BHP Billiton participated in called the Atlantis 6 well, was drilled in 5,405 feet of water, and was drilled to a total depth of 20,131 feet. To put this into perspective, that is about 4.2 miles below the surface of the

ocean. Fortunately for us and our partner BP, we encountered 605 feet of gross oil pay and 360 feet of gross gas pay at these depths. BHP Billiton is currently drilling another prospect, Chinook, in water depths of 8,800 feet, and will drill to a total depth of 25,000 feet. Due to the high quality acreage position that we hold in the Gulf, as I will explain in a minute, we are able to manage drilling risk by obtaining financing "carriers" on many exploration wells in return for a piece of the prospect. Chinook is an example of this type of deal.

One last comment on this slide before I move on, while companies are currently drilling to depths of 30,000 feet in the deepwater, drilling on the shelf has only been as deep as 25,000 feet as indicated by the blue dotted horizontal line.. As a matter of fact, many of these companies are going back to the shelf to look for oil and gas deeper than the current producing intervals.

Slide 8 – Competitors decreasing – increasing land costs

The industry began actively leasing in the deepwater Gulf in the mid 1980's. At that time, there were few companies with interest in this region due to uncertainty around the presence of reservoir rock and concerns that there was not adequate technology to economically extract the oil. From 1993 to 1995, there were very few bidders of offshore sales and the average price for a block remained well below $500,000. The region took a turn in 1995 when the industry saw some projects come on stream at prolific flow rates of

10 to 20,000 barrels of oil per day. This proved that the reservoirs would perform and that the technology was there to economically extract the resource once it was discovered. Following this, 1996 became the boom year, and companies began to realize that the deepwater could become the next frontier in the Gulf. Since its peak in 1997, the amount of companies who have participated in the bidding process has fallen sharply. However, this is primarily driven by the amount of industry consolidation that has occurred over the past 5 years. Interestingly enough, even though the amount of bidders has fallen, the average price per block in the Gulf has continued to increase with the exception of 2002. This steady increase in the average price per block demonstrates the willingness of companies to invest in opportunities in the Gulf, and their commitment to the deepwater.

One key point to the acreage in the deepwater, many of the highest potential blocks were taken in the mid 1990's when Shell became the first mover in the region, and BHP Billiton, BP, and Exxon Mobil became the fast second movers in the region. These companies were able to get in first, and realize lower average costs per block for some of the most prime acreage in the deepwater region.

Slide 9 – Gulf of Mexico deepwater leasehold ranking

Since the early 1990's, there have been a number of companies who have strategically focused on the deepwater Gulf of Mexico. BHP Billiton's strategy was to get in early

and tie up some of the most prospective blocks at low prices. We began bidding on blocks in 1993, and have accumulated 270 blocks of some of the most valuable acreage with an average cost per block of only $550,000. This price falls within the lowest quartile of acquisition cost in the industry. One important feature of ownership of deepwater acreage in the Gulf is that it is not about quantity, but it is all about timing and quality. Seeing a play ahead of the pack allows for the acquisition of several strategic adjacent or consecutive blocks in a highly prospective region such as the Atwater Foldbelt or in Mississippi Canyon, which I pointed to earlier. Success in a play with a high degree of dependency has a much higher prospective rate of return than simply purchasing independent prospects in a more scattered fashion. Additionally, these blocks generally have a 10-year primary term, so if at the end of 10 years no drilling has been done with no associated commercial discovery, the acreage will be relinquished and put out once again for auction. It will be interesting to see what happens in the 2005 to 2007 time period when many of the blocks are due to expire.

Slide 10 – Gulf of Mexico Deepwater discoveries

To date, approximately 15 billion barrels of oil equivalent have been found in the deepwater Gulf of Mexico, and the trend is for the success to continue. The reason for the trend of success to continue is due to the size of the discoveries. Typically in a maturing basin such as the Gulf of Mexico Shelf region, the trend is for the average size of discovered fields to become smaller and smaller over time. There is no indication of

this occurring yet in the deepwater, as fields of significant size continue to be discovered. BHP Billiton currently holds interests in six of the deepwater discoveries, of which three, Typhoon, Boris and Genesis, are currently producing, and two others, Mad Dog and Atlantis are being developed. This graph demonstrates one of the major reasons why more and more companies are willing to invest in the deepwater. The size of the discoveries are very substantial and continue to demonstrate attractive upside potential.

Slide 11 – US Natural Gas supply/demand

So what does all of this investment in the Gulf of Mexico provide? As you can see from the graph, there has only been a slight increase in gas production from the Gulf of Mexico since the early 1980's. Production from the shelf region has been able to sustain levels of around 5 trillion cubic feet of gas per year; however, this rate is not forecast to continue. Over the next 10 years, gas output from the shelf region is expected to decline, further exacerbating the domestic supply and demand imbalance. Furthermore, the discoveries in the deepwater Gulf of Mexico have been more oil than gas prone. Therefore, we should not expect the decline in the production of gas from the shelf to be offset by any significant ramp up in production from the deepwater.

However, due to the significant infrastructure in the Gulf region, with its vast network of pipelines and access to refineries, even small deposits of gas are economical to extract. Therefore, as companies continue to drill in the deepwater in the search for oil, when gas

is encountered there is a good possibility that the gas will be considered commercial and will be extracted and produced economically.

Slide 12 – US oil supply / demand

Besides the obvious tremendous gap between annual demand for oil in the US and US oil production, two significant features stand out on this chart. The first feature is the fall off of production in oil in the continental US. The principle reason for this is that the target size of reserves is quite small for onshore drilling. As a result, there is no significant payback to the producer, and little production add through onshore exploration efforts. This is also a reflection of a reduced level of investment in oil exploration in the US in the 1980's and 1990's when the price of oil remained at relatively low levels. The second stand out feature on this chart is the increase in output from the Gulf of Mexico that began around 1995 and continues through today. This demonstrates the attractive economics of deepwater potential. In comparison to onshore drilling, the potential target size in the deepwater approximates 100 million plus barrels of oil equivalent, which at this size would provide significant payback with higher production rates. As a result, in their exploration efforts, companies have been refocusing their business around the higher potential regions in the US, such as the deepwater Gulf of Mexico.

Today, the deepwater play dominates the Gulf of Mexico. Deepwater daily oil production now provides more than 50 percent of the total Gulf of Mexico oil production,

having crossed the 50 percent mark in late 1999. With the current rate of exploration, this percentage of total Gulf of Mexico output will only continue to grow.

Slide 13 – Indicative Margin Analysis

The industry has shown that we can find hydrocarbons in the deepwater and produce them, but how profitable are the barrels? Besides being productive, the Gulf of Mexico is also very profitable with direct access to the US oil and gas energy market. This slide illustrates that the very large fields in deepwater are economically attractive. Returns in excess of $3 per barrel in a flat nominal WTI price environment of $18.50 per barrel are expected after all costs, including a deduction of a notional $1 per barrel for exploration cost. At lower prices, reflected by the second bar, which reflects a flat nominal WTI price of $14.50 per barrel, investor returns are still acceptable. At the $25 per barrel case, cash margins are an impressive $7 per barrel. Given our current environment, with oil prices above $30 per barrel, production from the Gulf of Mexico can make a very healthy contribution to the bottom line of any company.

The important point to note here is that the government take in the US does not disproportionately increase as prices and volumes increase. This analysis includes the benefit of royalty relief. Under royalty relief, leases issued between 1996 and 2000, in water depths greater than 2,625 feet, are automatically exempt from royalty on the first 87.5 million barrels produced. If a lease was issued prior to 1996, companies can apply

for royalty relief. Royalty relief lowers the US government take from an already low 43 percent to 35 percent of taxable income, which is the US corporate tax income rate.

Slide 14 – Competitive positions in the Gulf of Mexico

The sum total of early recognition and capture of quality acreage, competitive costs for land and drilling is that we have had a very strong absolute and relative performance in the Gulf of Mexico. This graph is from an extensive deepwater Gulf of Mexico industry report prepared from Wood Mackenzie data. Wood Mackenzie maintains and updates an exhaustive deepwater Gulf of Mexico field database with reserves, costs and economics. This particular graph plots the full cycle net present value add since 1995 on the X axis with full cycle internal rate of return on the Y axis. On the far right of the chart, you can see that the Gulf of Mexico deepwater has been very profitable for Shell and BP in particular. In terms of the independents, BHP Billiton and Kerr McGee have been able to outperform the pack demonstrating both high returns and significant scale. The most important feature of this chart is the fact that the majority of companies operating in the Gulf of Mexico are able to demonstrate financial success in terms of Net Present Value and Internal Rate of Return. However, deepwater is not a panacea. From the chart you can see that there have been some very big winners, and also some very big losers. The difference between success and failure comes back to the companies exploration program. The ability to find significant volumes with a low exploration cost defines the difference between success and failure in the region.

Slide 15 – Deepwater production systems

So we have discussed the fact that companies are seeing success in their discovery of reserves in the deepwater Gulf of Mexico, however, one of the questions that you may have been asking yourself throughout this presentation is – finding fields in the deepwater is fine, but has the technology been developed to a point where the reserves can be extracted? Development of fields in the deepwater is unquestionably a challenge. This slide illustrates how the industry has continuously pushed the limits of deepwater development in the region through technological innovation. It took 15 years to get production to move from the 1,000 foot of water depth to the 3,000-foot level to extract production from Auger. However it took only four years to go from Auger at 3,000 feet to Mensa, which is located in 5,000 feet of water. The current record depth for deepwater production is held by Petrobras, which is producing from a field in 6,000 feet of water offshore of Brazil.

Our view is that developments in water depths ranging from 7,000 to 10,000 feet will be technically and commercially feasible within the next few years. The reason for this is that the hull forms are known and are well understood, and drilling and completion has always led developments by several years. Drilling is currently being undertaken at this point in depths of up to 9,000 feet, meaning that production from these depths will soon follow. The principle challenge in these water depths is how to moor the hulls and

connect the wells to the surface. Essentially, we are comfortable with what we are going to put on the surface of the water, and we are also comfortable with what we will put on the seabed, however, the connection of the two is the real engineering challenge.

Slide 16 – Transportation Infrastructure

In addition to the technology and the production platforms needed to extract the reserves from the deepwater, transportation systems also need to be developed in order to get the gas and the oil on shore to the market. Currently, as you can see from the slide, there is ample infrastructure on the shelf, but little infrastructure that extends into the deepwater region.

BHP Billiton is currently a part of a consortium that is building the Caesar and Cleopatra oil and gas pipelines that will eventually extend out to our Mad Dog and Atlantis operations in the deepwater. These pipelines will help connect the deepwater infrastructure to the shelf pipelines, allowing for the oil and gas to get to the market. A key to the development of the infrastructure is the first mover advantage. It is a challenge and a costly endeavor to build pipelines in the deepwater, however, the pipelines that are being built now to support large discoveries will become the hubs for future development. Those companies who invest now and own the infrastructure will be able to receive transportation fees to get the oil and gas ashore using their pipelines. It is

worth mentioning that this infrastructure development model is simply a repeat of the last 50 years on the shelf.

The level of sophistication of the Gulf's offshore and onshore infrastructure allows for the production from the Gulf to access virtually all refining operations throughout the US with the exception of the far west Rockies and the west coast. As a result, there will always be an accessible market for oil and gas production out of the Gulf of Mexico.

Slide 17 – Gulf of Mexico Deepwater Potential

In conclusion, strategically, the deepwater Gulf of Mexico is a growing region of exploration and production as a domestic US supply source. The exploration and development that is going on in the region continues to grow as more and more reserves are being added to the total reserves from the deepwater. When compared to the growth that occurred in the shelf region, the deepwater is already outpacing the growth in reserves that was seen during the infancy of the shelf's life. This chart depicts this steeper growth curve in the deepwater as compared to the growth of the shelf. The blue curve shows the cumulative reserves found to date in the shallow waters of the Gulf of Mexico since the inception of the play many decades ago. Note how the reserves added per field was very significant for the first 500 or so fields, and has now leveled off after approximately 40 billion barrels of oil equivalent have been found. The red curve shows the similar history for the deepwater Gulf of Mexico. The steepness of the curve

indicates the play is in its very early days. Where it will level off is open to conjecture but it would not surprise anyone if it had the same kind of potential as the shallow water Gulf of Mexico.

With just over 60 discoveries in the deepwater since 1995, the cumulative resource in this region currently stands at approximately 15 billion barrels of oil equivalent, and with the prospects of BHP Billiton and the other oil companies, this number looks to continue to increase, and the deepwater's contribution to the US market will continue to grow as these resources are developed. At this time, the oil and gas industry truly believes that the deepwater Gulf of Mexico is the hottest play in the global industry.

Thank you for your time and I would like to take any questions.