PTTEP Q3 2016 Analyst Meeting

Edited Transcript

Venue: *Synergy Hall 6th Floor, Energy Complex Building C, Bangkok, Thailand*
8 November 2016
15:30 – 17:00 Hours

Speakers: Khun Somporn Vongvuthipornchai
President and Chief Executive Officer

Khun Montri Rawanchaikul
Acting Executive Vice President, Strategy and Business Development Group

Khun Pannalin Mahawongtikul
Executive Vice President, Finance and Accounting Group

The slides of the presentation, as referenced throughout the transcript, can be found here

PART 1: INTRODUCTION

Moderator

Welcome to PTTEP Q3 2016 Analyst Meeting for the announcement of the Company's operating performance in the third quarter of 2016. Before we commence the session, please allow me to introduce the Company's executives who will be giving reports on PTTEP's operating performance.

1. Dr. Somporn Vongvuthipornchai, President and Chief Executive Officer

2. Mr. Montri Rawanchaikul, Acting Executive Vice President – Strategy and Business Development Group

3. Ms. Pannalin Mahawongtikul, Executive Vice President - Finance and Accounting Group

And without further ado, please join me in welcoming Dr. Somporn to begin the presentation.

Khun Somporn Vongvuthipornchai
President and Chief Executive Officer

First of all, please allow me to introduce Khun Montri, who is now in the position of Acting Executive Vice President – Strategy and Business Development, in replacement of Khun Suchitra, who is still in the position of Executive Vice President, but her key responsibility has now been temporarily shifted to focus on concession bidding, as well as another task concerning LNG business opportunities that we have to cooperate with PTT. These two areas; concession bidding, and LNG, are considered critical issues for the company and thus having a dedicated person to be accountable for them is very important.

Khun Montri has been working abroad for several years. He used to work as a geophysicist at PTTEP a long time ago before he made a decision to join a geophysics company and then returned to PTTEP once again. Here at PTTEP, he has been in charge of business development, project management in Iran, Bahrain, Oman and Australia, before landing in his current role in overseas joint venture, strategy and business development.

As usual, Khun Montri will be sharing industry highlights, followed by financial results by Khun Pannalin, and I will be concluding with the outlook and lastly the Q&A session.

PART 2: SAFETY PERFORMANCE

Khun Somporn Vongvuthipornchai
President and Chief Executive Officer

Slide 3

Our priority on safety and environment

The first topic I would like to address is our safety performance. Statistically, it can be seen that PTTEP's safety performance is better than industry average. However, over the past few months; September to October, we had 2 times of Lost time injury incident frequency (LTIF), from a total of 3 times for the whole year. The high frequency of LTIF represents both leading and lagging indicators to more prone of accidents. Given safety is our priority, the management had immediate action by arranging meetings and workshop with all operating contractors to ensure that the company's safety standard and procedure has been identically implemented by both the contractors and our employees.

Another point to be noted, the higher in LTIF is due to the seasonal of monsoon with strong wind wave during this time of the year. This leads to short window of working period; thus, working team has to accelerate the operation. We have been strongly emphasized contractors and operators in the fields that, the working process shall consider safety as first priory. Moreover, the clarification of our safety policy is that if there is any unsafety issue during the working process, the company gives authority to working team for temporary suspension to find safer operating solution and reduce prone to any accident.

PART 2: SAFETY PERFORMANCE (continued)

Despite our safety performance's being higher than the industry average; we still need to keep priority to maintaining our good record on a continuous basis.

In terms of the environment, in 2012, we have set the target to reduce greenhouse gas emission by 20% by the year 2020. At current stage, the GHG emission is significantly reduced and close to our target. The company is on the process of consideration to revise the target and activities to support the reduction. To sum, I would like to emphasize that the company give importantly attention on the safety and environment issues.

Now I would like to pass on to Khun Montri to give a briefing on the industry highlights as well as further introduction on his experiences.

PART 3: INDUSTRY HIGHLIGHTS

Khun Montri Rawanchaikul
Executive Vice President,
Strategy and Business Development Group

As mentioned by the CEO, 12 years ago I was working abroad and had been involved in intensive operations in many countries. It is a great opportunity indeed to join PTTEP once again and my role is to take responsibility of strategies and business development.

Slide 5

Oil prices

Speaking of the industry highlights, all of us are now closely watching out the crude oil price movement. The Dubai price had bottomed out in Q1'16 at around 22 USD/barrel, it has gradually been increasing over the course of the year 2016. The key reason for the price increase is the demand-supply mechanism. The next slide will illustrate that the imbalance of demand and supply still persists, though the difference has quite subsided compared with the past few years.

Regarding positive and negative factors that we should keep our eyes on, key negative factors are, for instance, high level of production from OPEC which is approximately 34 million barrels/day, continuing supply ramp-up from Iran after the sanction has been lifted and potential production recovery in the USA from increasing rig counts over the past 3-4 months, as well as the influence of the Brexit referendum in June which seems to negative impact to global economic and oil demand outlook.

PART 3: INDUSTRY HIGHLIGHTS (continued)

On the other hand, a potential positive factor is that the potential of production freeze from OPEC's producer which they had meetings twice in the end of October and in the beginning of November, but the conclusion has not yet been agreed. There will be another meeting of OPEC's producer by the end of November. If the production control solution successfully achieved, it is likely that the supply glut will be narrowed. In the meantime, if the oil price recovers, US production is also likely to increase. In summary, the key point affecting the oil price is the imbalance of global supply and demand. Another potential positive indicator is the distress from the unrest situation in Syria if escalates.

Slide 6

Global Oil Supply: Remains Fragile

The graph on the left illustrates that the gap between demand and supply in recent months has narrowed down. OPEC producers are the key player determining global crude demand and supply conditions. If the production capacity from OPEC still remains high, oversupply conditions is likely to carry on.

Another critical factor that should closely monitor is the US production. As you can see from the graph on the right, it represents the sensitivity of oil price and US production; the higher in oil price will lead to an increase in US production.

To conclude, the oil price outlook from 4Q16 through to the year 2017 seems to remain stable; dependent upon the demand and supply scenarios.

Slide 7

M&A Updates

The global M&A transactions had slightly increased over the course of the past 9 months of 2016, compared with 2015. Taking a closer look, the proportion of conventional and unconventional M&A deals is almost about half, with the majority of unconventional transactions occurring in North America. As shown in the bar charts on the right, more than half of deal values take place in US, whilst the transaction values in Asia Pacific is relatively low. In conclusion, the global M&A market has showed a sign of improvement which mainly remain in US unconventional and the consolidation of oil sands position in Canada.

Slide 8

Thailand Updates

Talk about Thailand's natural gas supply and consumption, the most sources of domestic energy supply is still a natural gas which majority of natural gas supply is produced domestically in the Gulf of Thailand and followed by natural gas imported from Myanmar and LNG, respectively. For LNG, we see it was imported since 2011. The volume of LNG supply over the past 9 months of 2016 has increased slightly, but on the whole, domestic gas is still the main source of energy consumed in Thailand.

Major purposes of energy consumption in Thailand are for; electricity generation, followed by industrial use, while there has not been a significant change in terms of NGV consumption.

PART 3: INDUSTRY HIGHLIGHTS (continued)

Another factor impact our operation performance is the foreign exchange (FX), whereby Thai Baht has appreciated against US dollar over the past few months. Going forward to the end of the year, the average FX is likely to be around 35 Baht/USD. Currently THB/USD rate is difficult to predict but we expect a broad range of potential fluctuation. We have to closely monitor the possibility of FED to hike the interest rates at the end of the year which will directly impact THB/USD rate.

Lastly, we would like to update on the bidding of the expiring concessions. As you may aware from the news that the re-tendering process of expiring concession in the Gulf of Thailand may slightly delay and target to open the data within early of 2017. The process still align with our expectation to award the concession around the end of 2017

PART 4: FINANCIAL RESULTS

Khun Pannalin Mahawongtikul
Executive Vice President,
Finance and Accounting Group

Slide 10

Sales volume & unit costs

Our sales volume for the first nine months of 2016 is 320,600 BOED, which is less than that of FY2015 by about 0.5%. In this regard, 75% of sales volume is from domestic assets, which is slightly higher than that of FY2015, mainly from Contract 4 and B8/32 & 9A projects. On the other hand, 18% of sales volume is from Southeast Asia, which decreased slightly, mainly due to the planned shutdown of Yetagun and Zawtika projects. The remaining sales volume is from the rest of the world; which is Algeria Bir Seba and Oman 44 projects.

Moving over to price, gas price as of 9M 2016 is 5.75 USD/MMBTU, reducing by 20% from FY2015, which is in accordance with the gas price formula and the lag time in gas price adjustment. Looking forward, the guidance of average gas price for the full year of 2016 will be around the mid-5 range.

Meanwhile, the change in average liquid product price is in line with the change in Dubai crude price. The average liquid product price for 9M 2016 is 39.37 USD/barrel, thus the weighted average selling price is 36.00 USD/BOE, also dropping by around 20% compared with FY2015. Lastly, the volume mix between gas to liquid is 70% to 30%.

PART 4: FINANCIAL RESULTS (continued)

In terms of unit cost, we have successfully reduced our unit cost and cash cost per unit by 23% from FY2015. The unit cost as of 9M 2016 is 29.98 USD/BOE, while cash cost is around 12 USD/BOE. Looking into detail of unit cost components, DD&A for 9M 2016 which has decreased from FY2015due to the impairment of 1,385 million USD in Q3 2015 and the additional reserve added at the end of 2015. Finance cost has also decreased from 2.14 USD/BOE for FY2015 to 2.01 USD/BOE for 9M 2016, mainly due to debt repayment and prepayment of approximately 1.1 billion USD last year and bond buy-back of about 170 million USD this year. For royalties, the decrease in royalty per unit was in line with the decrease in selling price. G&A expenses have reduced significantly from the reduced staff cost and efficient office management. Exploration expenses have also dropped quite significantly due to the lower number of wells written off of 16 wells in FY2015 as compared to 2 wells in 9M 2016, although we had written-off acquisition cost of Kenya asset of 16 million USD in Q3 2016. Lastly, we have achieved in reducing operating expenses from 6.04 USD/BOE to 4.86 USD/BOE, largely owing to the success of the SAVE to be SAFE campaign. In conclusion, our unit cost reduction achievement of 23% exceeds initial target to reduce cost by at least 10% from FY2015.

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Cash flow performance

For our cash flow performance, our operating cash flow for 9M 2016 stood at 1.7 billion USD, with the EBITDA of 2.3 billion USD and EBITDA margin of 73%. For 9M 2016, the recurring net income stood at 345 million USD and net income stood at 388 million USD after adding up with non-recurring income. Our positive non-recurring income came from the Thai Baht appreciation against US Dollar over the first nine months period despite oil price hedging loss. The loss on oil price hedging contracts was from the reversal of mark-to-market gain of oil price hedging at the end of 2015 of approximately 57 million USD and the mark-to-market loss of the outstanding oil price hedging volume at the end of Q3 2016 of around 50 million USD, even though there was gain from cash settlement of the contracts during 9M 2016.

For sources of funds, apart from our operating cash flow of 1.7 billion USD, we had unwounded a cross-currency swap contract and received cash of around 155 million USD. Our cash inflow therefore was around 1.9 billion USD. In terms of uses of fund, we have spent 0.8 billion USD for CAPEX investment, which is quite lower than planned and we will discuss about CAPEX spending estimate for FY2016 a bit later. Our interest expense, dividend payment and other finance costs totaled 429 million USD, and the money uses for bond buy-back was 184 million USD. Total uses of fund therefore amounted to 1.4 billion USD.

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Financial position

With regards to balance sheet and capital structure, our asset as at the end of 9M 2016 has decreased by 580 million USD from the year-end of 2015, mainly due to the reduced PP&E from depreciation while additions were not very high. Account receivable mainly from PTT has also decreased given the lower oil prices. Meanwhile, equity remained pretty much unchanged. Debt to equity ratio has improved slightly to 0.25 which is rather low and healthy. Our debt profile is 100% in US Dollar, while the weighted average cost of debt has increased slightly to 4.37%. The proportion of fixed to floating interest rates is 80% to 20%. The average loan life has improved to 8.40 years as a result of the bond buy-back.

PART 5: OUTLOOK

Khun Somporn Vongvuthipornchai
President and Chief Executive Officer

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RESET Cost Structure for Sustainability

Going forward to the end of the year, it has been projected that our 2016 CAPEX spending should be reduced significantly from the budget. There might be a rescheduling for projects not yet sanctioned and also 'remove' and 'reduce'. The rationale of 'remove' is to cancel projects or activities which are not economic at the current oil price. As for 'reduce', it is our achievement that we have reduced operating cost per unitwhile the number of activities remains unchanged. Even though we cannot provide an exact figure in every activity being carried out, we can get the overall idea as to how our efforts have paid off.

The targeted unit cost for 2016 is approximately 31-32 USD/barrel. Given the current oil price range of 40-50 USD/barrel that seems to remain pretty stable, if there are any potential activities, there is no reason why we cannot execute them since the cost is not overly high.

For 2016 guidance, we still adhere to the same set of guidelines we have provided earlier. The average gas price is approximately 5.5 USD/MMBTU, of which in 4Q16 the average price is around 5 USD/barrel, due to the lag time from the decline of oil price. Meanwhile, we have been trying to push our sales volume to remain at around 322 KBOED as in 2015. As of now, sales volume stood at 320 KBOED. Going forward, taking all the potential shutdowns into consideration, the target for 2016 might be adjusted to 320 KBOED; approximately 1% lower than the initial target. The EBITDA margin is expected to be about 70% and the operating cash flow is approximately 2.3 billion USD.

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REFOCUS for Future Growth

Moving forward, there are a few projects that I would like to highlight. For instance, Mozambique Area 1 is the project that you all have been keeping close attention to for a long time. We expect to reach a conclusion with the government of Mozambique, as well as reach a mutual agreement for most of the relevant contracts, terms and condition, which will allow us to proceed with the discussion on gas sales agreement, LNG gas price sales agreement and financing arrangement. At the same time, we are also giving our best efforts in executing the project in order to achieve the FID by the end of 2017.

The second key project is the Contract 4 (Ubon) which is located in the Gulf of Thailand, close to Pailin field. Ubon is a moderate-size oil field, in which we have 60% stakes. Given the currently fluctuating oil price, we have been trying to find ways to develop the project and optimize costs. All is going well so far, with some changes in the concept here and there. We believe that an in-depth and thorough study is very crucial before proceeding to sanction the project.

PART 5: OUTLOOK (continued)

The third project that you might have heard of in the media and public interviews is the Algeria HBR, which is our second exploration project in Algeria which we entered into joint venture cooperation with CNOOC of China, together with another partner; Sonatrach, an Algerian national oil company. First project in Algeria is currently producing at approximately 18,000 barrels per day. As publicized in the media, we have been successful with the most recent well appraisal results for the last few wells of the campaign. As of now, our alliances and partners, as well as the Algerian government all agreed that we can fasten the development plan for this project, in accordance with the adjustment of our concept 'fast track', in order to accelerate the production process and be able to confirm the potential of the well and its production capacity. Honestly, I do not wish to set a very high expectation, even though the field is large in size, Algeria's fiscal regime is quite tough. In conclusion, these are the 3 projects that we will continue to push forward to monetize in order to add proven reserves and to secure new sources of revenue in the future.

Over the past few quarters, we have been paying attention to executing M&A deals, especially in Thailand and neighboring countries that we are familiar with. As of now, a few proposals have been submitted and we are now in the process of finalizing whether or not the deals can be concluded. In the meantime, our focus is also on fulfilling our exploration portfolio and identifying new investment opportunities. During the first half of this year, we have signed a contract in Malaysia; it is a potential area with good opportunities, surrounded by natural gas fields. Moreover, there are some other bidding initiatives that we are working on to secure business opportunities. In terms of the LNG value chain, it is the endeavor that we put great emphasis on, and we have been working collaboratively with PTT all along.

On the longer term, we have the Mariana Oil Sands project which we are trying to find ways to reduce costs further. With the current low oil price environment, the costs of the industry should also reflect the downward trend. We are in the process of identifying ways to develop and produce at the level of costs that the project can be sanctioned.

Cash Maple is a gas field in Australia which we also have ownership in. As mentioned before, its size is about 3-4 TCF. And due to the fact that it is located in Australia's territorial waters, the costs can be quite high. Thus, we have been trying to find optimized solutions for further development by discussing with nearby operators or operators with suitable capacity for joint development opportunities. Furthermore, since we still have to conduct a feasibility study of this project, we have been approved by the Australian government to extend our retention lease period to 5 years; meaning that we can utilize the site to identify the market, development plans and business viability for another 5 years.

In terms of business enhancement and sustainability, we will be looking into competency, technology and R&D with regards to exploration and production. There are 3 areas that PTTEP places great emphasis on; 1) increase exploration activities of new petroleum fields, which involves the sciences of geology and geophysics; 2) uplift competencies of our current production sites or fields, as well as improve the recovery factor, for instance, the recovery factor of Sirikit field used to be around 20%, if we can increase the figure to 25% or 30%, the amount of oil extracted will subsequently increase. This is the subject that we focus on and have a lot of R&D activities related to it; and 3) sustain our green practices on the environment, such as water treatment and carbon dioxide treatment.

PART 5: OUTLOOK (continued)

Meanwhile, we are also studying the possibility of business diversification opportunities for new businesses in both E&P-related and non-E&P-related sectors. This is also an area that we have assigned a dedicated team to work on.

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Exploration Optimization

It is critical to have a good and effective management of exploration plans and activities, as seen from the Company's postponement of high-risk exploration projects in order to avoid high write-off expenses and to manage our risk appetite. At the moment, we still focus on conducting sufficient and effective exploration activities, but the area of focus will be in Southeast Asia because we are more familiar with the geological conditions, operations and business execution. With this, we have revised our exploration portfolio to reflect the current scenario. In the past, our portfolio was consisted of a lot of high-risk exploration projects, so we have tried to minimize those risks by farming out those projects or finding partners to share risks, while at the same time increase the number of near-production projects, or projects that do not take too long to commercialize in the portfolio. Hence, our current strategy is to go for lower-risk fields in familiar areas, despite higher premiums or bidding expenses in order to reduce risks associated with exploration.

For our existing portfolio, over the course of the year, we have suspended the drilling of high-risk wells and instead we have been doing more of preparation works, such as seismic works, which we have been able to execute with lower costs. We have been able to reduce seismic costs per well by approximately 20% so far in 2016. Currently, our focus on the seismic work optimization and data quality for prospect evaluation can be found in several areas, such as deep water areas (M11, MD-7), on-shore areas (MOGE3 and Barreirinhas AP1 in Brazil). Regarding portfolio rationalization, we have been identifying high-risk exploration blocks and farming them out. In the meantime, we will be considering the concept of cluster exploration; not operating a single, stand-alone field, but rather diversifying risks among several fields in the same area. In sum, this is the overall plan and exploration strategies we will be executing in countries like Malaysia, Indonesia, or other countries in Southeast Asia.

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Key Takeaway

In conclusion, this year it is highly likely that we will achieve our production target, despite a slight drop from 2015 (320 KBOED vs 322 KBOED). However, we still have to actively push forward our efforts in order to achieve target in the most effective way.

On the positive side, we have achieved in having a leaner cost structure, as seen from the average unit cost of 31 USD/barrel this year to drive competitive operating performance. Nonetheless, we might have more business activities in 2017, thus the unit cost might be slightly higher in accordance to that. I do not wish to set an expectation that the unit cost will continue to decrease but this is considered a new baseline for the unit cost, which used to be somewhere around 40 USD/barrel in the past. All in all, the unit cost reduction has enabled us to have a very healthy operating cash flow. At this point, our challenge lies in how best we can seize this opportunity to secure good M&A deals, exploration projects and nurture long-term business growth.

PART 6: QUESTIONS & ANSWERS (Q&A)

Question # 1

What would be the outlook of production and reserves of the company, given low exploration activities and lack of M&A deal execution to date?

Answer from PTTEP Management

The sales volume guidance for FY2016 is around 320 KBOED, slightly lower from FY2015 sales volume of 322 KBOED. The current estimation on FY2017 production volume would be in the range of +/- 5% from this year's level (without M&A). The company would be able to maintain the production and reserves in the short to medium term from the key producing projects in our current portfolio e.g. S1, Arthit, Zawtika projects, even though there are some smaller fields that would decline. There are potential pre-sanctioned projects including Mozambique, Ubon and Algeria HBR which would add sizable reserves and we are working hard towards the FID. There would also be incremental production and reserves contribution from Bongkot project, if the company can successfully secure the concession extension after 2022/2023 expiry. Moreover, the company remains focused on M&A as we have made some proposals and awaited for the results. However, there are still limited M&A deal flows in South East Asia which is our focus area. Last but not least, our exploration strategy is geared towards more mature prospective areas instead of high risk exploration and that would require quite a bit of lead time (from entering to producing).

Question # 2

What is the latest status on the expiring concessions bidding? Could you please share your view regarding the news that the government would like the current operator of Erawan and Bongkot fields to maintain production level until the concession expiry?

Answer from PTTEP Management

The Petroleum Act and Petroleum Income Tax Act are under National Legislative Assembly's review, which target to be concluded by the end of this year. Although this review process has been delayed from the initial target, the government still believes that the re-tendering process of the expiring concessions will be completed within 2017 as planned. We appreciate that the government has placed this issue as the top priority in order to ensure national energy security with the intention to complete the re-tendering process within the timeline. Regarding the news, PTTEP as an operator of Bongkot field has not received any official notification on the production stabilization from the government.

PART 6: QUESTIONS & ANSWERS (Q&A) (continued)

Question # 3

According to the current timeline of expiring concessions, what is the assumption on the company's 5-year investment plan?

Answer from PTTEP Management

The company is under preparation and review of the 5-year investment plan which will be released in December. For the previous plan (announced in December 2015), we assumed no Bongkot extension and did not include any investment requirement for future production beyond the 2022/2023 expiry.

Question # 4

What would be reasonable timeline and breakeven prices for the Marianna Oil Sands project (MOSP) in Canada?

Answer from PTTEP Management

The company considers MOSP as a longer term project. In the meantime, the company has carried out FEED study for cost optimization in order to bring down the costs and accelerate the progress. We need to admit that it would be difficult to commercialize this project at the current $40-50/bbl oil price, however, we hope that the project will come online when the oil prices pick up after demand/supply rebalancing.

Question # 5

How much reserves has been booked from pre-development projects i.e. Mozambique Area 1, Contract 4 (Ubon), Algeria HBR Projects? How much CAPEX is required from such projects?

Answer from PTTEP Management

Hydrocarbons from those projects are currently booked as contingent resources (2C) and will be converted to reserves (P1/P2) once the Final investment decision (FID) has been made. On the CAPEX requirement, given the ongoing work program budget process, we will be able to give more updated details after the 5-year investment plan is announced in December.

Question # 6

Please update the plan of Algeria HBR Project.

Answer from PTTEP Management

Given better than expected result from the Algeria HBR (oil field) drilling campaign, we are now actively working to fasten the project development process. Also, the government of Algeria has shown the positive supports towards the project.

PART 6: QUESTIONS & ANSWERS (Q&A) (continued)

Question # 7

What is the company's view about rig rate in the industry and impact to PTTEP's cost profile?

Answer from PTTEP Management

We don't foresee further significant reduction in rig rate from this current level. However, we still have certain rig contracts that will expire in the near term which will be renegotiated and we should be able to benefit from the lower rig rate that will help optimize our CAPEX spending.

You can reach the Investor Relations team for more information and inquiry through the following channels:

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Forward-looking Information

The information, statements, forecasts and projections contained herein reflect the Company's current views with respect to future events and financial performance. These views are based on assumptions subject to various risks. No assurance is given that these future events will occur, or that the Company's assumptions are correct. Actual results may differ materially from those projected.

Petroleum Reserves and Resources Information

In this transcript, the Company discloses petroleum reserves and resources that are not included in the Securities Exchange and Commission of Thailand (SEC) Annual Registration Statement Form 56-1 under "Supplemental Information on Petroleum Exploration and Production Activities". The reserves and resources data contained in this transcript reflects the Company's best estimates of its reserves and resources. While the Company periodically obtains an independent audit of a portion of its proved reserves, no independent qualified reserves evaluator or auditor was involved in the preparation of reserves and resources data disclosed in this transcript. Unless stated otherwise, reserves and resources are stated at the Company's gross basis.

This transcript may contain the terms "proved reserves", "probable reserves", and/or "contingent resources". Unless stated otherwise, the Company adopts similar description as defined by the Society of Petroleum Engineers.

Proved Reserves *- Proved reserves are defined as those quantities of petroleum which, by analysis of geological and engineering data, can be estimated with reasonable certainty to be commercially recoverable, from a given date forward, from known reservoirs and under current economic conditions, operating methods, and government regulations.*

Probable Reserves *- Probable reserves are defined as those unproved reserves which analysis of geological and engineering data suggests are more likely than not to be recoverable.*

Contingent Resources *- Contingent resources are defined as those quantities of petroleum which are estimated, on a given date, to be potentially recoverable from known accumulations, but which are not currently considered to be commercially recoverable. The reasons for non-commerciality could be economic including market availability, political, environmental, or technological.*