



Press Release

FOR IMMEDIATE RELEASE

MPRL E&P Announces the Successful Conclusion of the Adjustment of Block A-6 Production Sharing Contract and Fiscal Terms in Preparation for Development

16 December 2019, Yangon – MPRL E&P Pte Ltd. (“MPRL E&P”), the only independent upstream energy company led by Myanmar nationals operating in both the onshore and offshore regions of Myanmar, and the PSC Operator of Block A-6, is pleased to announce the successful conclusion and formal Myanmar Government approval of the adjustment of Block A-6 Production Sharing Contract and Fiscal Terms.

MPRL E&P, together with the Block A-6 Joint Venture partners and Myanma Oil & Gas Enterprise (MOGE), successfully executed two agreements consisting of the Fourth Amendment and Supplementary Agreement to the Production Sharing Contract as well as the Agreement on Upstream and Midstream Ratio. Both agreements enable the establishment of the necessary fiscal framework associated with the Block A-6 project that enables the project to best achieve economic viability, further providing a clear line of sight towards the commerciality of Myanmar as well as ASEAN’s first ultra-deep water development project.

The complexities and challenges of the Block A-6 project are underpinned by the fact that the hydrocarbon resources in the asset are predominantly located in water depths of approximately 2,000-2,500 meters (6,500-8,200 feet), referred to as ultra-deep water territory. Operating in an ultra-deep water environment is considered as one of the most challenging operating environments within the international energy industry on the basis of technological requirements, safety, and the significant amount of capital expenses required for the purposes of exploration, appraisal, development, and production. Furthermore, hydrocarbon resources in Block A-6 exists in channelized sandstone bodies located a further 1,500-3,000 meters (5,000-9,800 feet) below the seabed, adding to further increased project capital expenses based on requiring a relatively higher number of wells to find, appraise, and develop these resources.

With the assurances received from the establishment of the necessary fiscal framework, preparations are now underway for the Block A-6 project to commence

Front End Engineering Design (FEED) and to engage with prospective off-takers/buyers of the natural gas to be produced from the asset.

Chief Executive Officer U Moe Myint said: “The execution of the two agreements associated with the adjustment of the Block A-6 Production Sharing Contract and Fiscal Terms is a significant milestone achievement for the project, the joint venture partners, and our key stakeholders, the most important of which being the resource owners consisting of the people of the Republic of the Union of Myanmar. I extend my sincere gratitude and appreciation towards the Ministry of Electricity and Energy as well as the Union Government for their continued support and guidance in collectively achieving this milestone and look forward to delivering the nation and the ASEAN region’s first ultra-deep water development project at these water depths. I am further proud that MPRL E&P, the founding and initially the sole venturer of Block A-6, after achieving the first gas discovery in Block A-6 almost 8 years ago, is one step closer towards realizing the significant potential that lies within this asset together with our joint venture partners. I take this opportunity to reinforce MPRL E&P’s commitment towards furthering the energy security of our nation and provide my assurances towards identifying and pursuing opportunities that will enable rapid development of the project with the intent to be able to achieve first gas production in line with the Union Government’s needs and desires.”

Background

- Block A-6 is located in the Ayeyarwady Region some 80 km West of the City of Patheingyi.
- MPRL E&P signed the Block A-6 Production Sharing Contract (PSC) with Myanmar Oil & Gas Enterprise (MOGE) on 18 January 2007. MOGE is the regulator of the Petroleum Industry in Myanmar, and is also recognized as the National Oil Company (NOC) under the Ministry of Electricity and Energy.
- Block A-6’s location is challenging in that the eastern region of the asset lies in shallow waters (water depths up to 300 meters) whereby the western region of the asset lies in an ultra-deep water environment in water depths of 2,000-2,500 meters (6,500-8,200 feet). There is a steep subsea slope along the seabed between the shallow water and ultra-deep water regions.
- MPRL E&P, as the only venturer in Block A-6 at the time, carried out an extensive data acquisition and interpretation program from 2007-2011, which included

multiple geologic field surveys along the entire western Myanmar coastline, the acquisition of 1,955 line-km 2D seismic survey in both the shallow and ultra-deep water regions of the block, and the acquisition and processing of the block's first 554 sq-km 3D seismic survey, the first such survey acquired in Myanmar for exploration purposes.

- In March 2012, MPRL E&P achieved the first gas discovery in Block A-6 during the Pyi Thar exploration drilling campaign. Exploration well Pyi Thar-1 was drilled in 211 meters (691 feet) of water depth and reached a total depth of 1,398 meters (4,585 feet). Wireline formation evaluation confirmed the presence of a gross gas column of 18 meters (60 feet) and 6 meters (20 feet) of net gas pay in good quality sandstones.
- MPRL E&P, through the first gas discovery achieved in Block A-6 through the Pyi Thar exploration drilling campaign, proved the presence of an active petroleum system in Block A-6 in a new petroleum basin. Geological studies have shown that the reservoir sandstones/channels in Block A-6 trend in an East-West direction indicating their origin to be from an ancient Paleo-Ayeyarwady River system. Accordingly, this is now referred to as the Western Ayeyarwady Basin. By contrast, the Shwe Gas Field involves reservoir sandstones/channels that trend in a North-South direction indicating an origin from the Ganges-Brahmaputra System.
- Woodside farmed-in to Block A-6 to become a coventurer in 2013. In the same year, a new 1,700 sq-km 3D seismic survey was acquired over a large structural lead originally mapped by MPRL E&P on its 2D seismic survey acquired in 2009. Total farmed-in to Block A-6 to become a coventurer in 2015.
- Immediately following the international oil industry downturn in 2015 when oil prices dropped to as low as US\$28/barrel, the Block A-6 joint venture was one of the very few joint ventures in the world that undertook an aggressive back-to-back exploration and appraisal drilling campaign with four additional ultra-deep water wells drilled in the Block during the period of 2015-2018.
- The second exploration well drilled in Block A-6, Shwe Yee Htun-1, was spudded in November 2015 in 2,030 meters (6,660 feet) water depth and reached a total depth of 5,306 meters (17,408 feet). Final wireline formation evaluation confirmed the presence of a gross gas column of 130 meters (426 feet) and 33 meters (108 feet) of net gas pay thickness. Gas samples were collected and tested to officially

confirm the commercially viable gas discoveries with an announcement made on 4th January 2016, Myanmar's Independence Day.

- The 2017 Block A-6 Appraisal Drilling Campaign included the drilling of the Pyi Thit-1 and Pyi Tharyar-1 wells, the third and fourth wells that were drilled in the block.
- Pyi Thit-1 was spudded in June 2017 in 2,001 meters (6,565 feet) water depth and reached a total depth of 4,570 meters (14,993 feet) in a dedicated sidetrack. The well intersected a gross gas column of 65 meters (213 feet) and 36 meters (118 feet) of net gas pay thickness. Well testing in the form of a drill stem test (DST) flowed about 50 million standard cubic feet per day of gas through a 44/64" choke, limited by the capacity of the testing equipment on board, and meeting the threshold for commercial gas flow rates.
- Pyi Tharyar-1 was spudded in August 2017 in 2,449 meters (8,035 feet) water depth and reached a total depth of 3,280 meters (10,761 feet). Pyi Tharyar-1 holds the record for the well drilled in the deepest water depth in the history of the petroleum industry of Myanmar. The well intersected a gas column sub-commercial at this stage.
- Shwe Yee Htun-2, drilled in 2,325 meters (7,628 feet) water depth to a total depth of 4,850 meters (15,912 feet). The well exceeded expectation by showing the presence of 41 meters (135 feet) of net gas sands in a 143-meters (469 feet) gross gas column (all true vertical thicknesses), much of it below the depth of the measured Shwe Yee Htun-1 gas column. The test confirmed a gas flow rate up to 53 MMscf/d through a 40/64" choke, limited by the testing equipment on board the drill ship, and with strong reservoir support. The test also proved excellent communication throughout the reservoir between the two wells, extending the gas column to some 237 meters (778 feet). The results proved to be a strong encouragement for the A-6 joint venture to enter into studies to prove the commerciality of the gas discoveries of Block A-6.
- MPRL E&P is the Operator of the Production Sharing Contract (PSC) of the block with a 20% participating interest along with Woodside Energy (Myanmar) Pte Ltd. and Total E&P Myanmar, each holding 40% participating interest. Under the Joint Operating Agreement, Woodside is the technical joint-operator.

All media enquiries to be addressed to:

U Tint Swe
Executive Director
Government & Public Affairs
MPRL E&P Group of Companies
Email: tint.swe@mprlexp.com
Tel: +95 1 230 7733