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## LEVANT BASIN EASTMED OFFSHORE LEBANON BLOCK 4 PRELIMINARY DRILLING RESULTS

(Total E&P failed to encounter hydrocarbons  
in the Byblos 16/1 exploration well)

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### Drilling Campaign

Late in February, Total's drill ship Tungsten Explorer arrived in the Exclusive Economic Zone of Lebanon for the drilling operations of the first exploration well on Block 4 offshore Lebanon.

Total had signed an exploration agreement for two East Mediterranean blocks, on February 2018.

The agreements for Blocks 4 and 9 offshore Lebanon. The consortium includes Total as operator (40%), Eni SPA (40%), OAO Novatek (20%). (Fig.1) showing block 4 & 9 in green

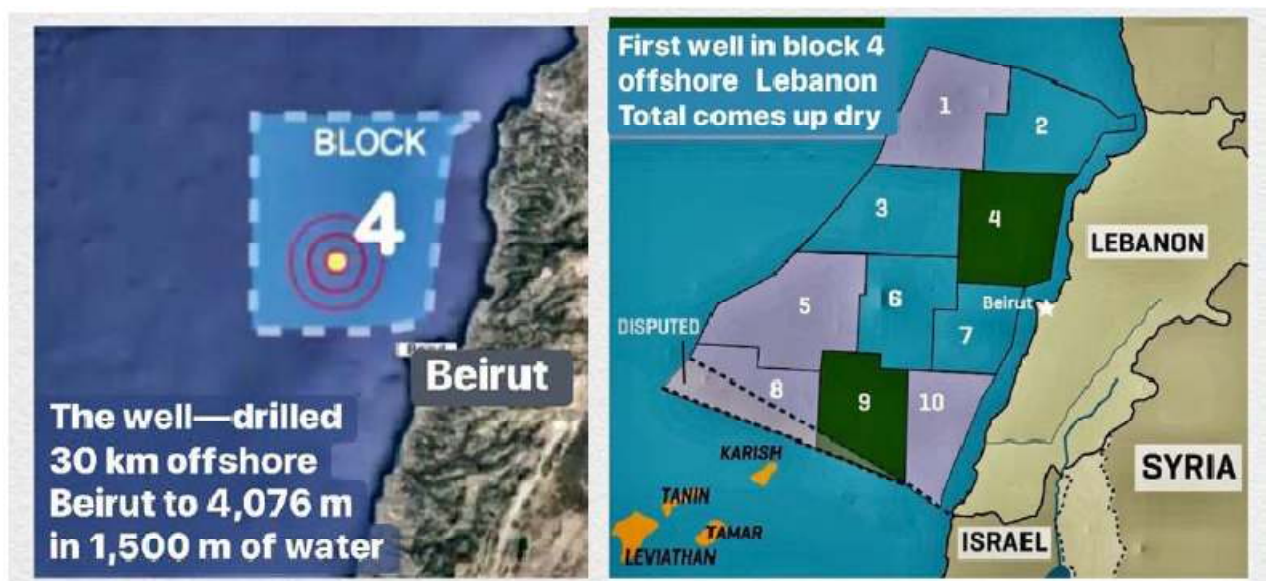


Fig.1 showing blocks 4 & 9 offshore Lebanon and the first exploration well in block 4

It seems that the potential Levant basin of the Eastern Mediterranean which massive discoveries of natural gas fields have been found in southern part of it, have not yet passed through his entire secrets. Now it is the turn of Lebanon to show the results of first well drilled offshore their Exclusive Economic Zone.

Total E&P Liban, operator of the international JV, has completed the drilling of Byblos well 16/1 on Block 4 to a depth of 4,076 meters on April 26th, 2020.

the first well in block 4 is located approximately 30 kilometers offshore from the capital Beirut (Fig.1), showing well location.

The well drilled to total depth of 4,076 m, in 1,500 m of water depth penetrated the Oligo-Miocene target section. Trace gas confirmed presence of hydrocarbons, but the target Tamar formation was not encountered. Based on data acquired, studies will be conducted to understand the results and further evaluate the exploration potential of the Total-operated JV blocks and offshore Lebanon in general.

Energy Minister Raymond Ghajar said Monday that initial results of drilling off the Lebanese coast show that there is gas on different depths in the first well.

The minister added that it has not been proven yet if there is a reservoir in the block.

But he explained, "No gas reservoir, no commercial reservoir, was found." It is assumed that, the detailed final report will be issued by Total within two months.

"We are satisfied to have drilled the first ever exploration well in the Lebanese offshore domain, according to the initial programme," said Total E&P Liban's managing director Ricardo Darré. "Despite the negative result, this well has provided valuable data and learnings that will be integrated into our evaluation of the area."

#### Conclusion and Further work

The well showed the entire Oligocene-Miocene section, found traces of gas confirming a hydrocarbon system offshore Lebanon but no reservoirs were encountered.

Not a clear explanation indicating the reason for lack of success of the drilled well in block 4 from published information, but I would guess that the structure integrity could be the reason behind the negative result.

Further work, drilling should begin in Block 9, at a later time and that hasn't yet been scheduled.

Total's Lebanon managing director Ricardo Darre said in a statement. "Despite the negative result, this well has provided valuable data and learnings that will be integrated into our evaluation of the area,"

My personal opinion, the disappointment results from block 4 will not downgrade the value of the next well in block 9 because it is better suited for reservoir quality improvement, and located close to the existing discoveries just south of the block, having said that we are looking forward for a positive results in block 9