

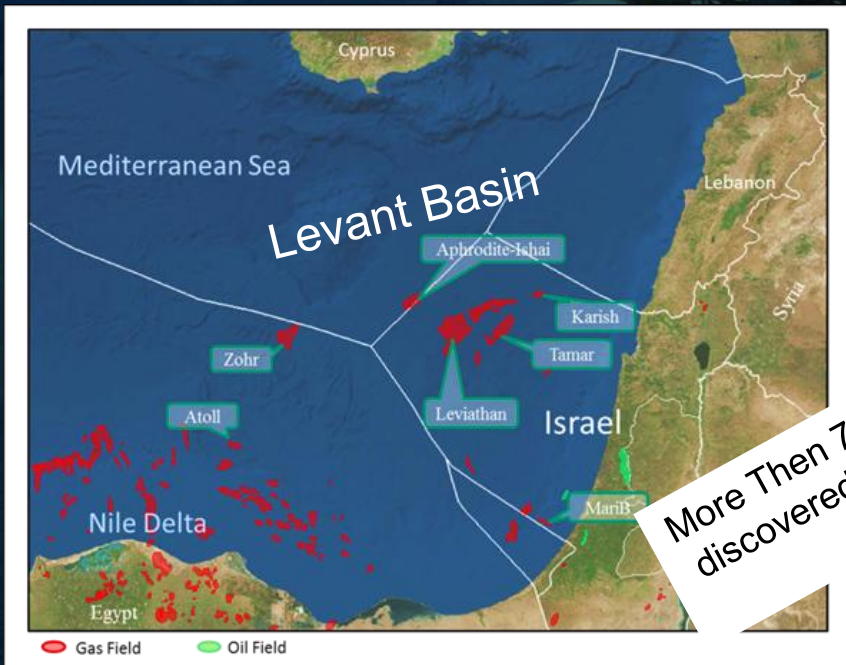
New Opportunities Offshore Israel & Bid round Update

Dr. Michael Gardosh

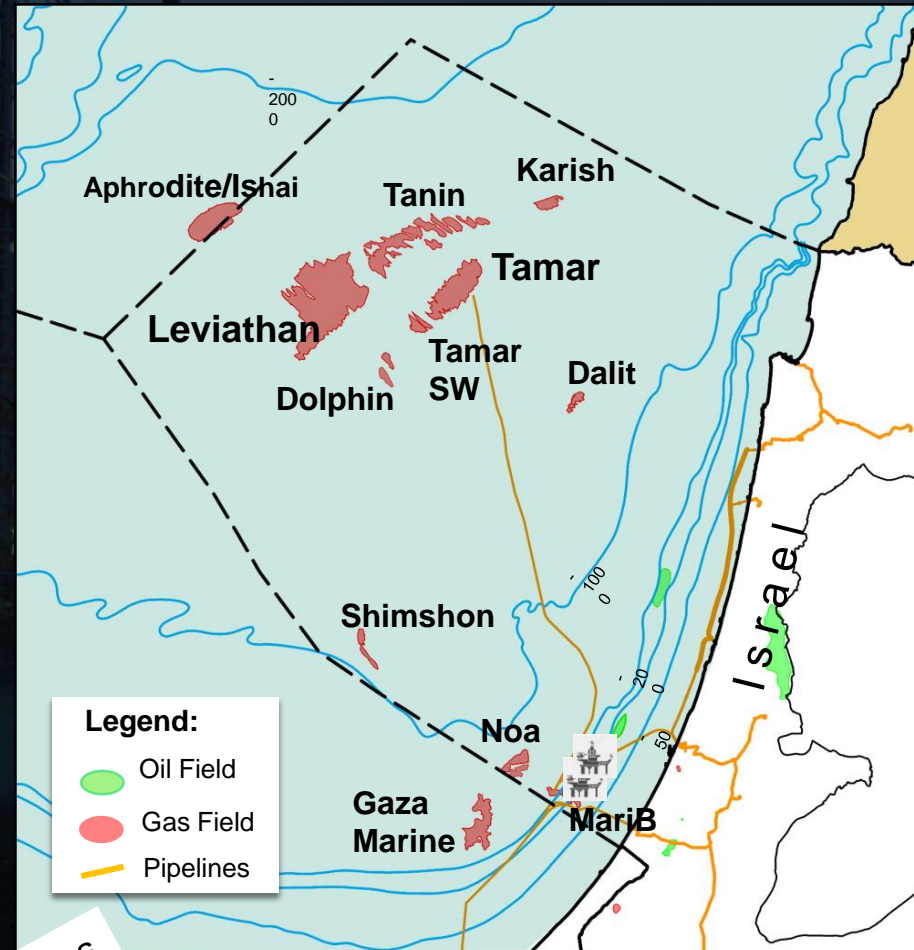
Head of Geology and
Geophysics Department
Ministry of National
Infrastructure, Energy and Water
Resources

Gas and Oil Fields Offshore Israel

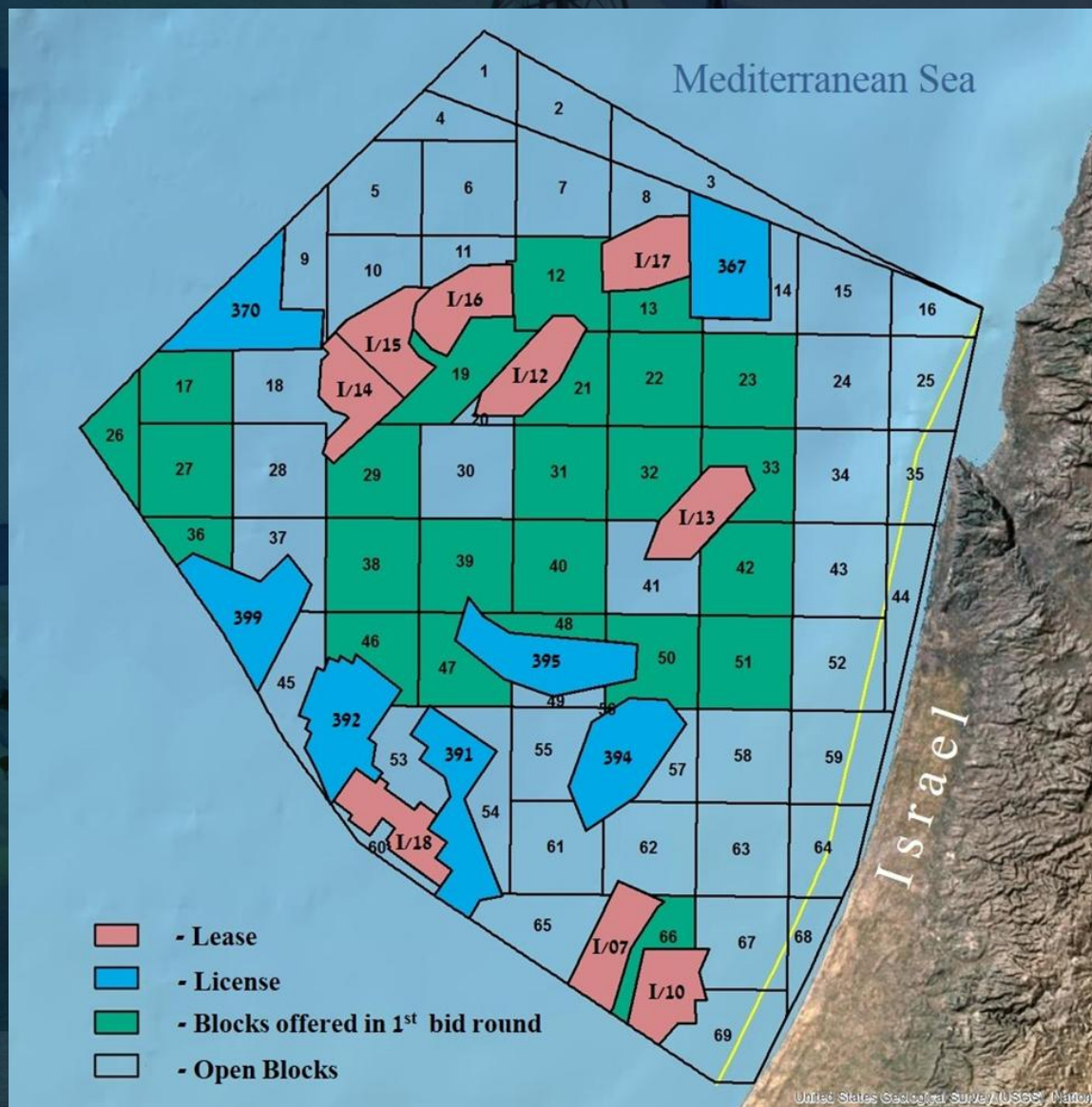
- Gas and oil fields throughout the basin in both shallow and deep water
- Very high rate of success in drilling the gas play (> 60%)
- Sub-commercial (at time of discovery) but important oil fields
- Favorable geologic conditions for generation and accumulation of gas and oil



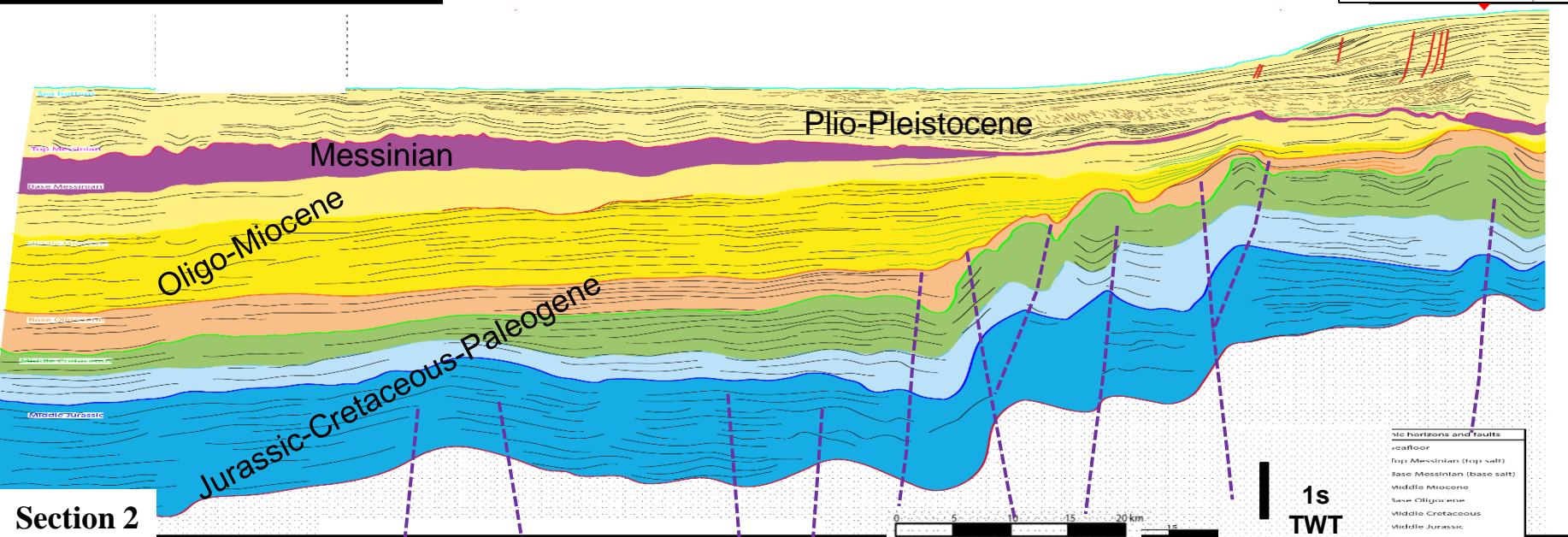
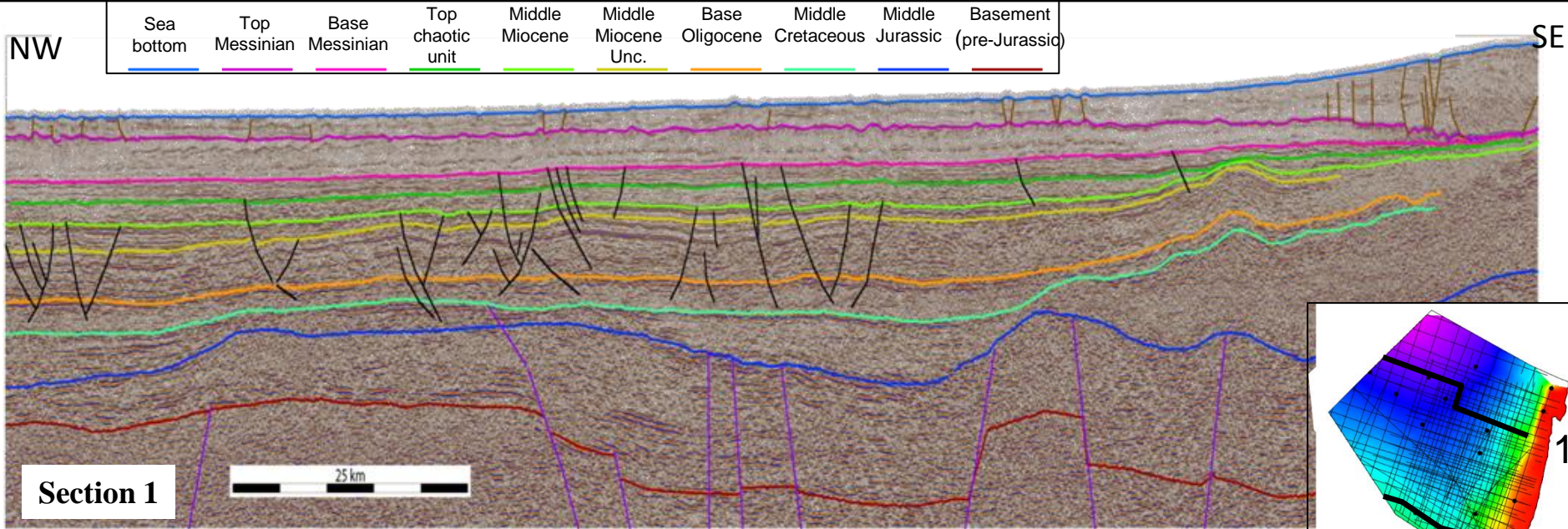
More Than 70 TCF of gas discovered in the past 7 years



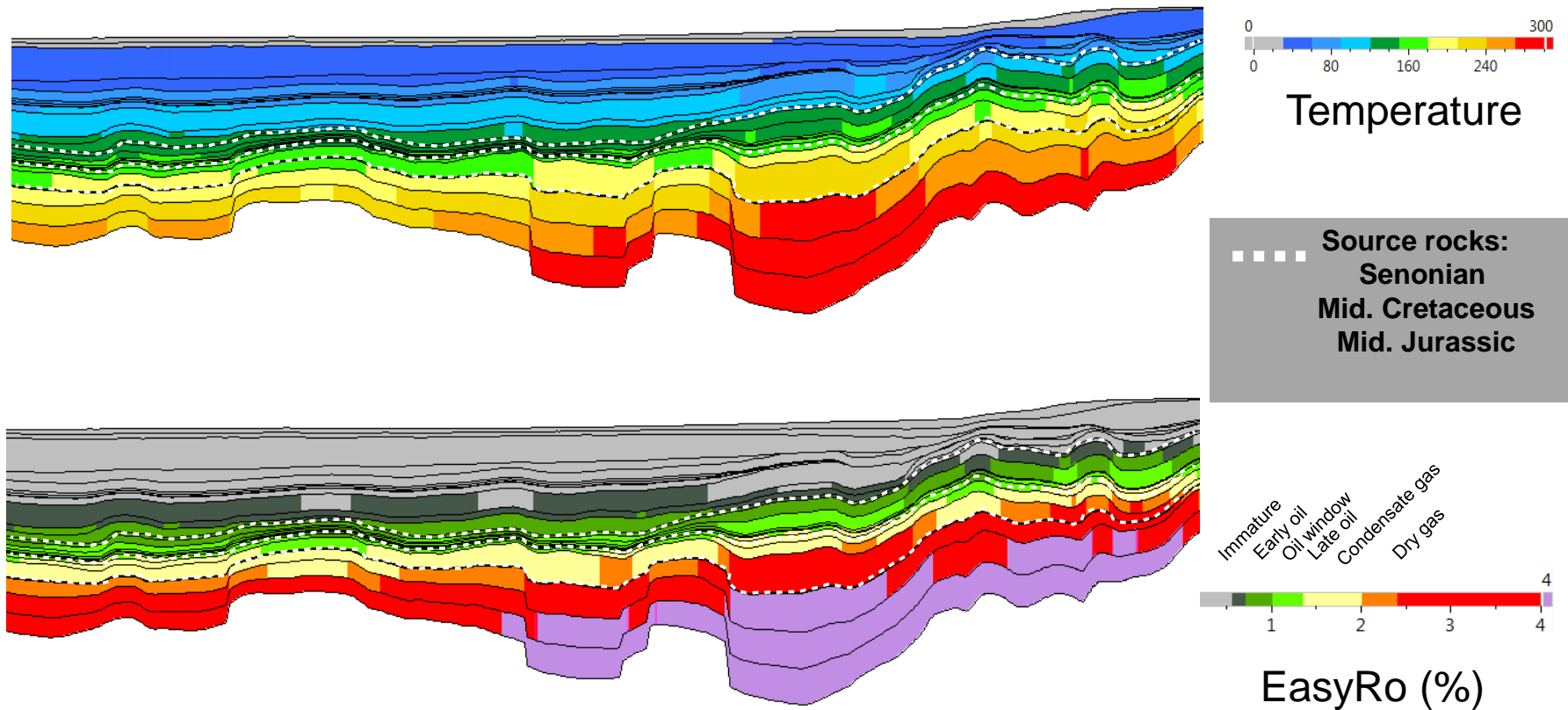
First Offshore Bid Round Launched in Late 2016



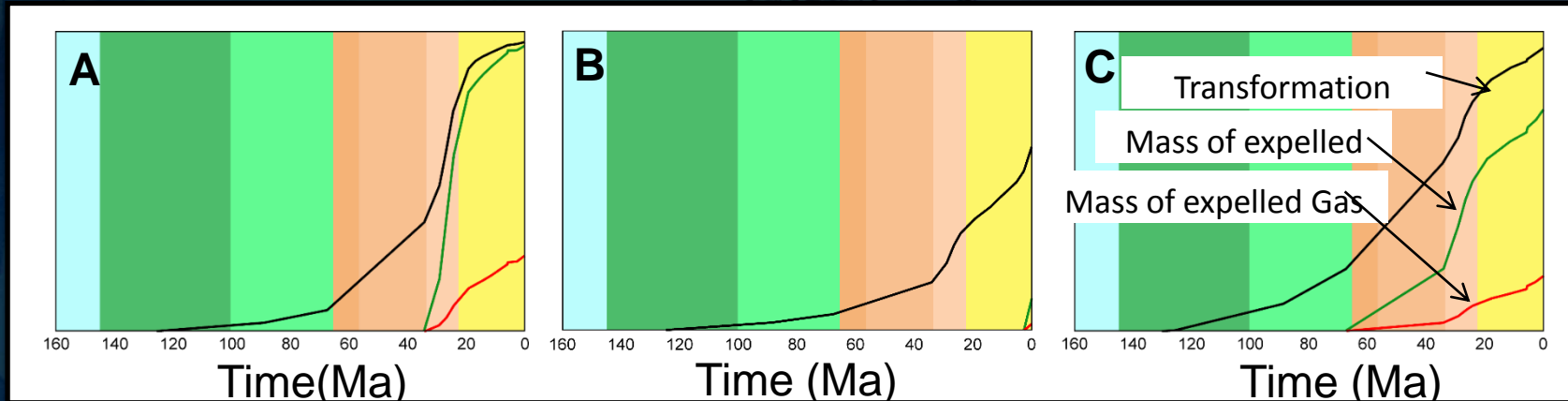
Levant Basin Structural and Stratigraphic Framework



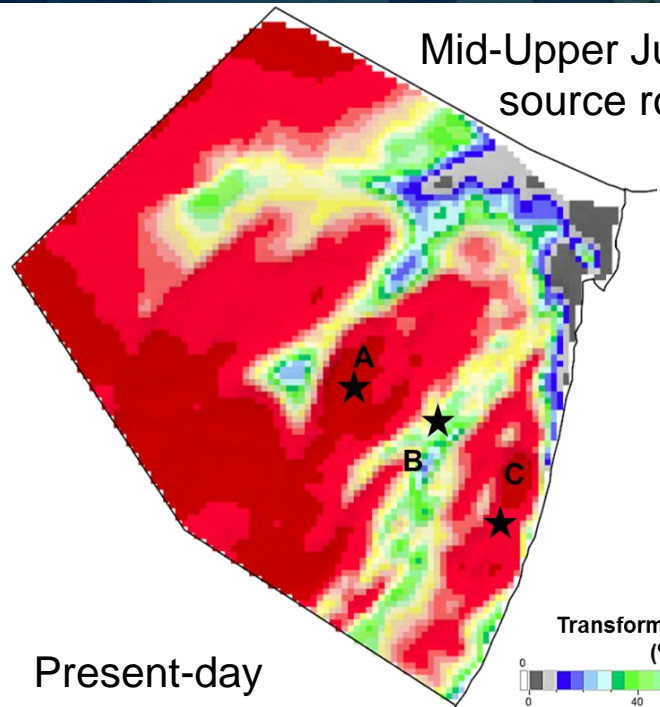
Highlights of Basin Analysis (Beicip-FranLab, 2015)- 2D Maturity and HC generation



Highlights of Basin Analysis (Beicip-FranLab, 2015)- HC Analysis-Maturation and Expulsion



Mid-Upper Jurassic
source rock



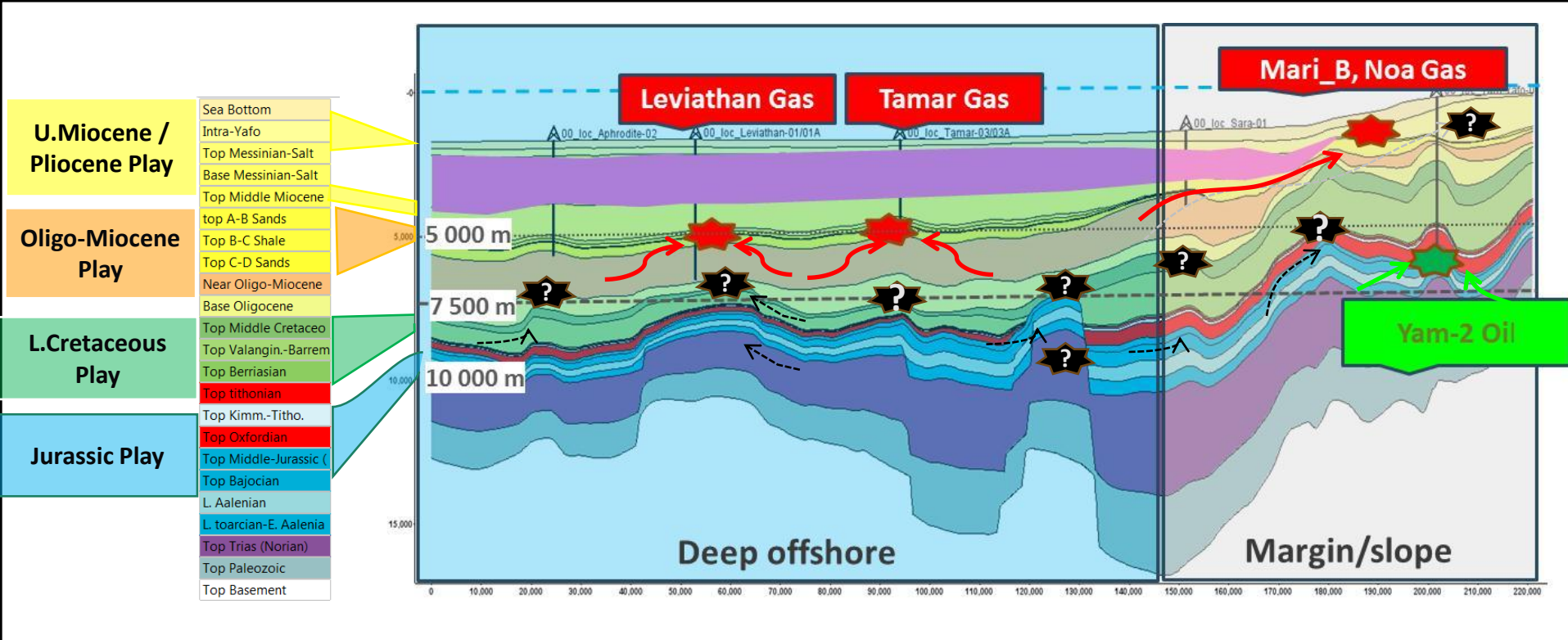
Calculated Gas and Oil Volumes In-Place

Category of Prospective Oil and Gas Resources	OIL		GAS					TOTAL OIL	TOTAL GAS
	Jurassic Middle+ Upper	Lower Cretaceous	Jurassic Middle+ Upper	Lower Cretaceous	Oligo-Miocene (ABCD sands and equivalent)	Middle Upper Miocene	Pliocene		
	Billions bbl	Billions bbl	BCM	BCM	BCM	BCM	BCM	Billions bbl	BCM
(1) UNRISKED Resources Best guess P50 - Possible + probable	8.0	18.0	991	1133	3349	1189	1072	26.0	7023 (248 TCF)
(2) YET-TO-FIND in Place Best Guess P50 (2)	1.2	5.4	149	340	1089	238	321	6.6	2137 (75TCF)



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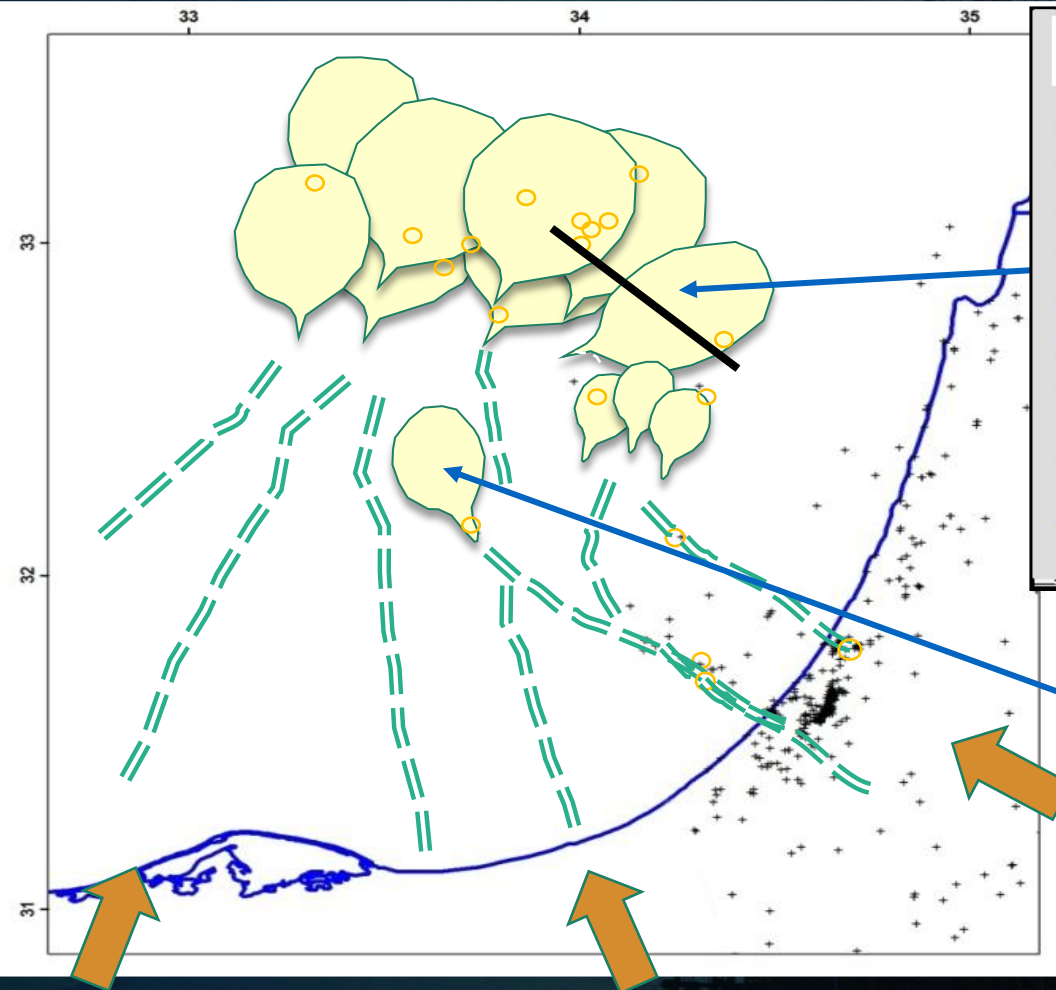
Proven and Potential Hydrocarbon Plays



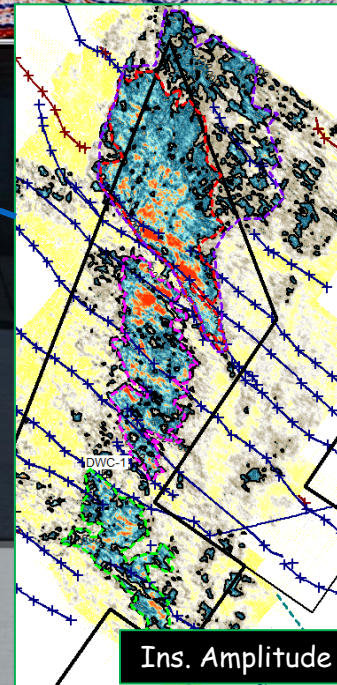
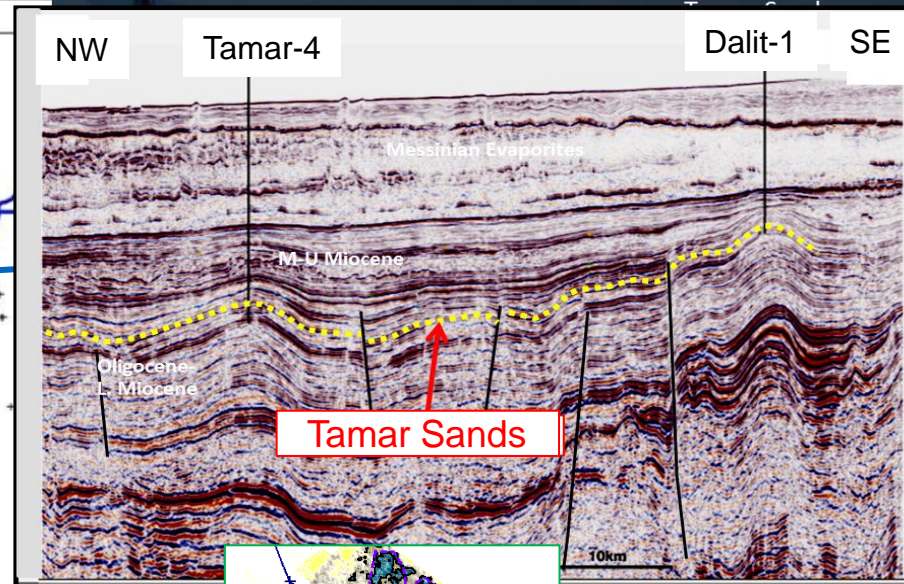
- Oligo-Miocene, Tamar Sand Play (**Proven**)
- Pliocene, Yafo Sand Play (**Proven**)
- Middle Jurassic, Fractured Carbonate Play (**Proven**)
- Lower Cretaceous Sand Play (**Potential**)
- Jonah High Multiple Plays (**Potential**)



Proven, Oligo-Miocene Sands Play (Tamar Sands)

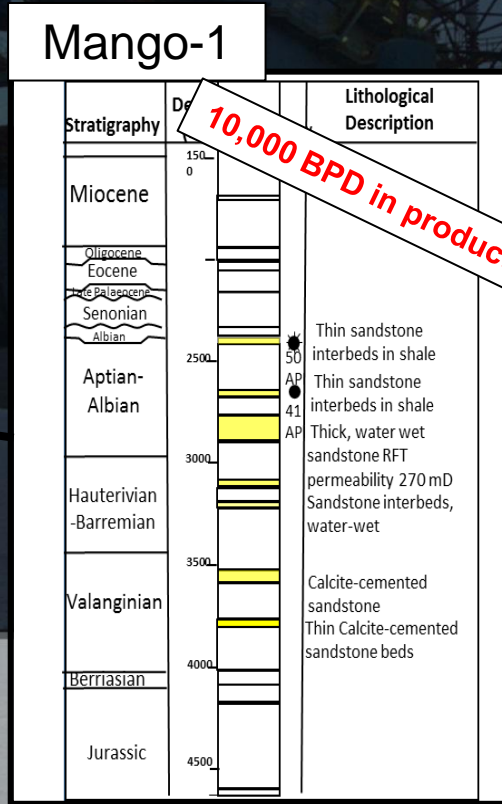
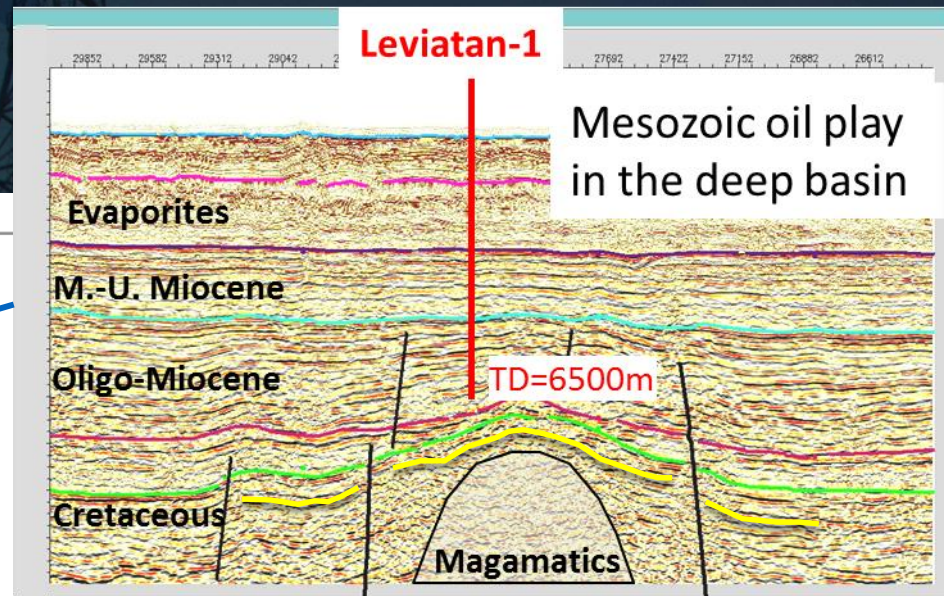
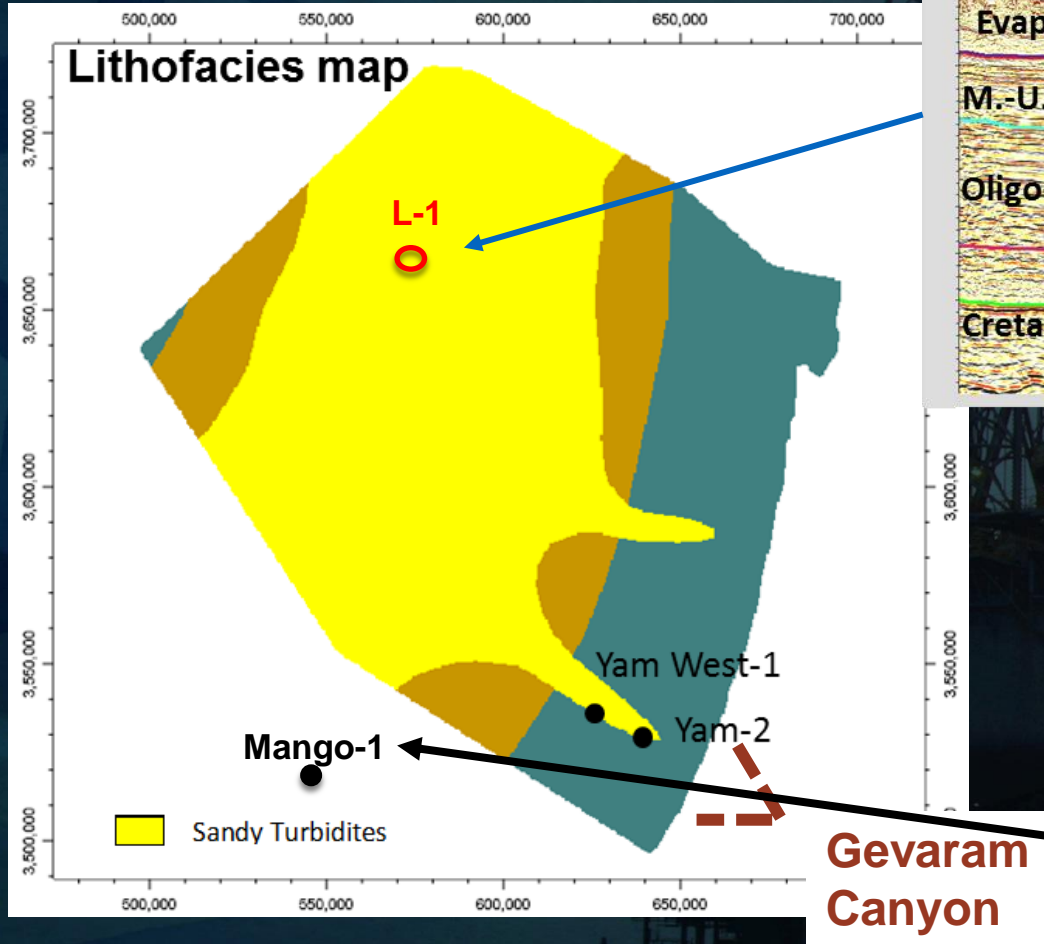


Arabian-Nubian Shield



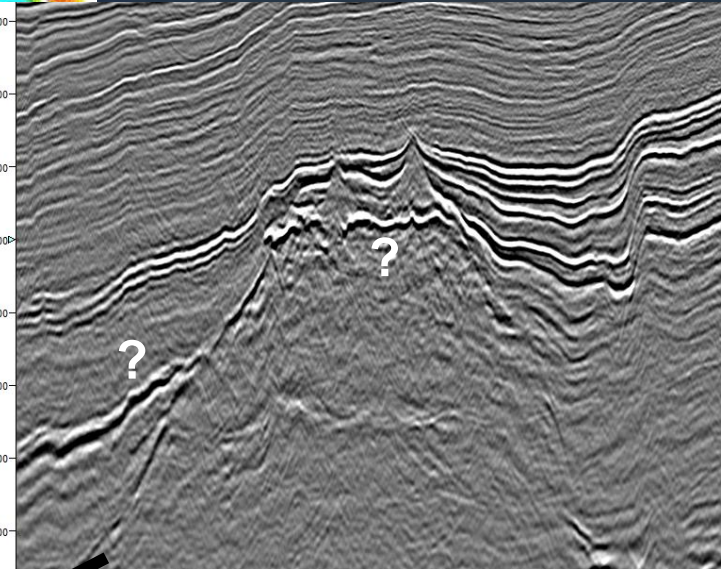
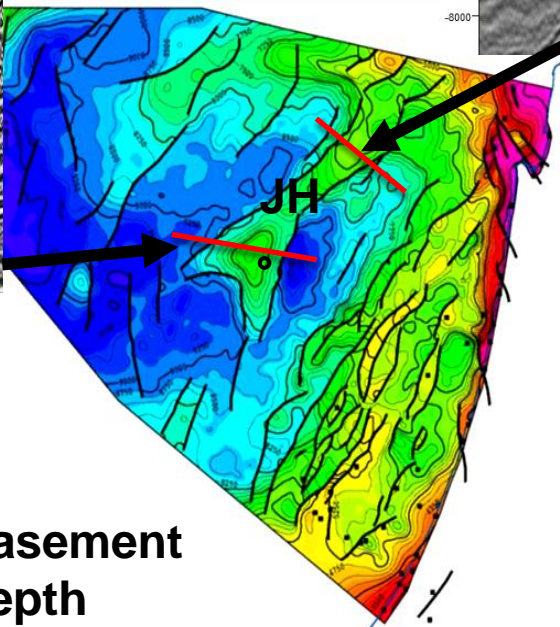
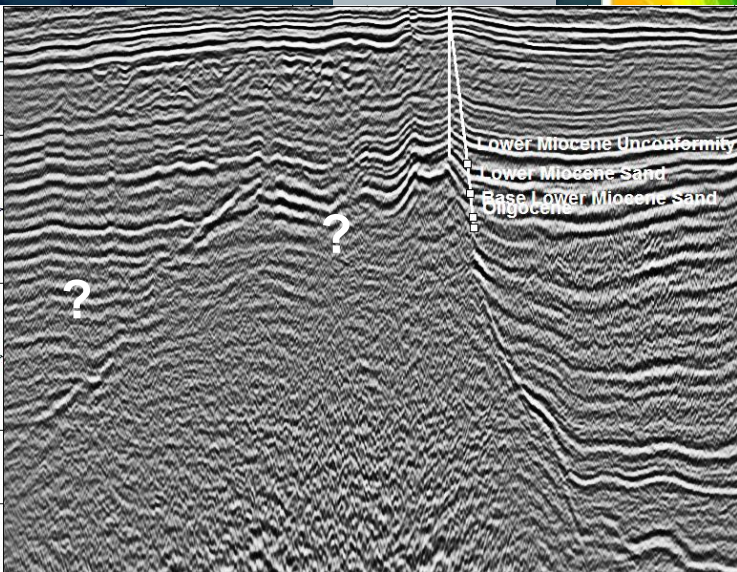
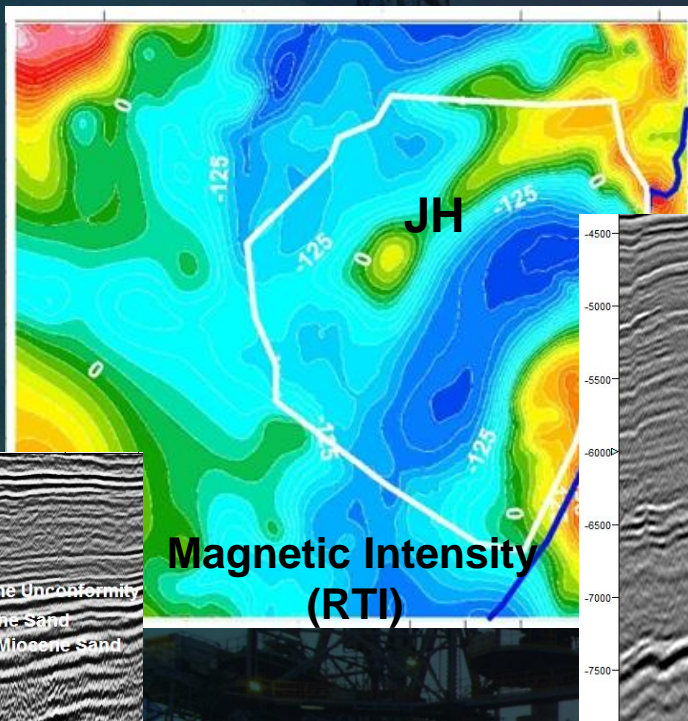
Courtesy of
Isramco
Negev2 LP

Potential, Lower Cretaceous Sands Play



Potential, Jonah High Multiple Plays

Myra-1



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Top Basement
Depth

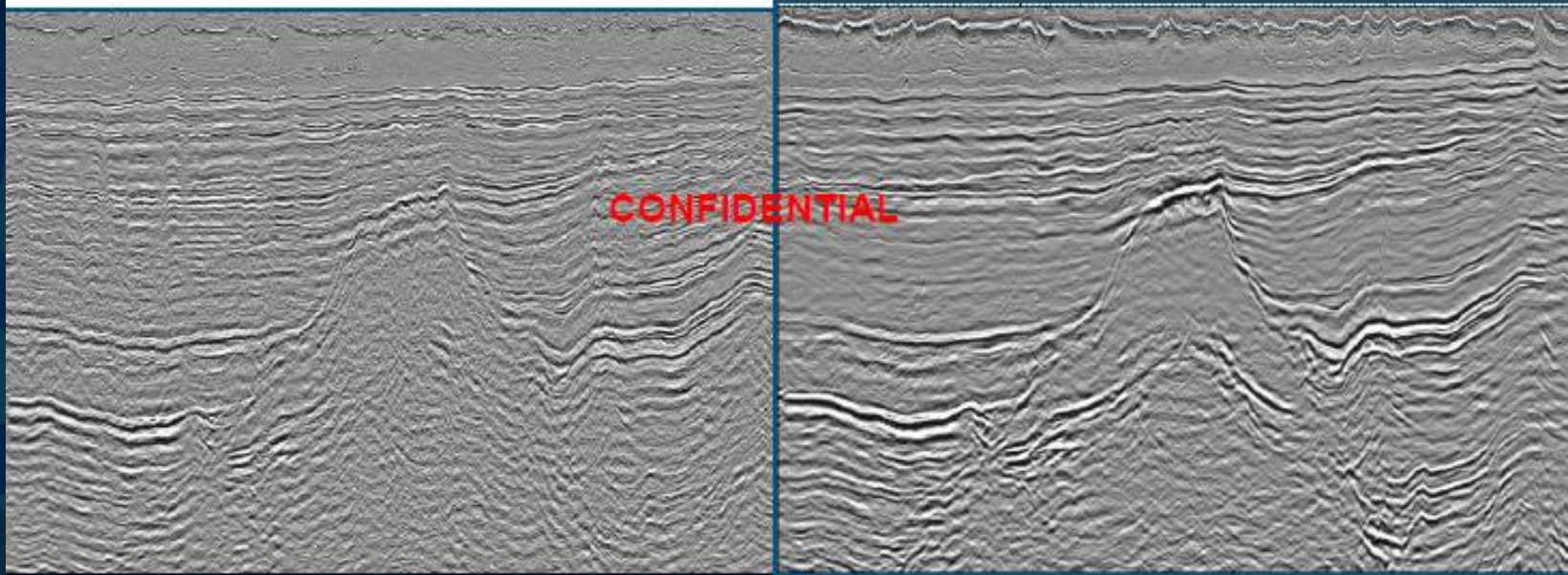
Gardosh et al (2008)

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Jonah High 2D Example

Vintage

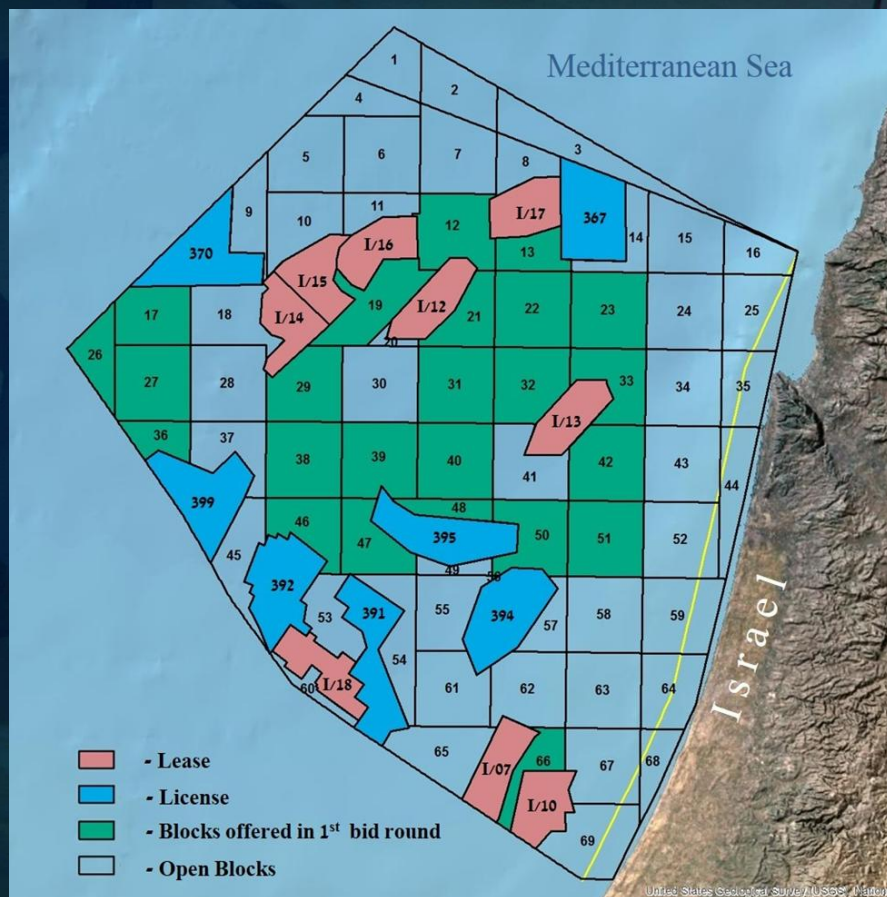
Reprocessed



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TGS

First Offshore Bid Round Highlights:



- Bid Opened- November 15, 2016
- Bid Closes- July 10, 2017
- 24 blocks are offered for bidding
- Each block in up to 400 sqkm
- 3+3 years commitment with drill-or drop decision point after first 3 years
- 90% of scoring is for working program and 5% for signature bonus
- Comprehensive data package
- A royalty-tax system with attractive fiscal regime

Come and visit us in Booth #18



More information and updates in www.energy-sea.gov.il

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