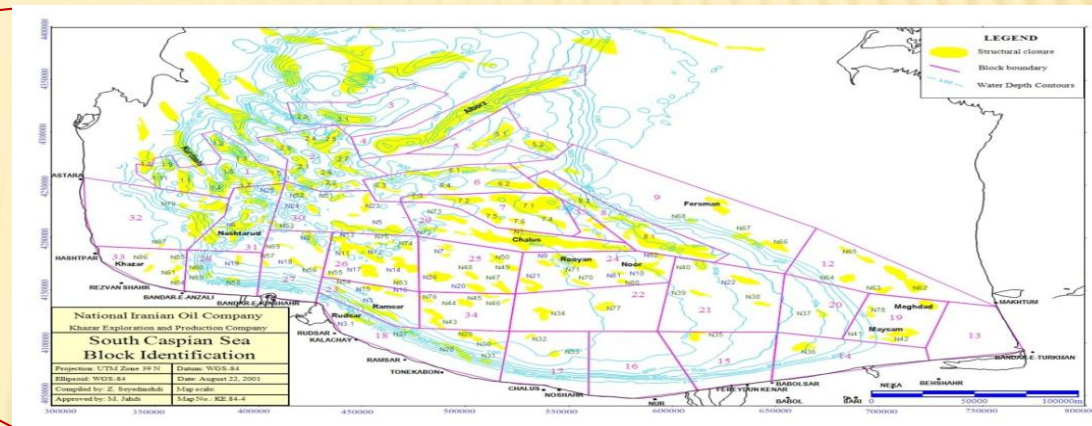
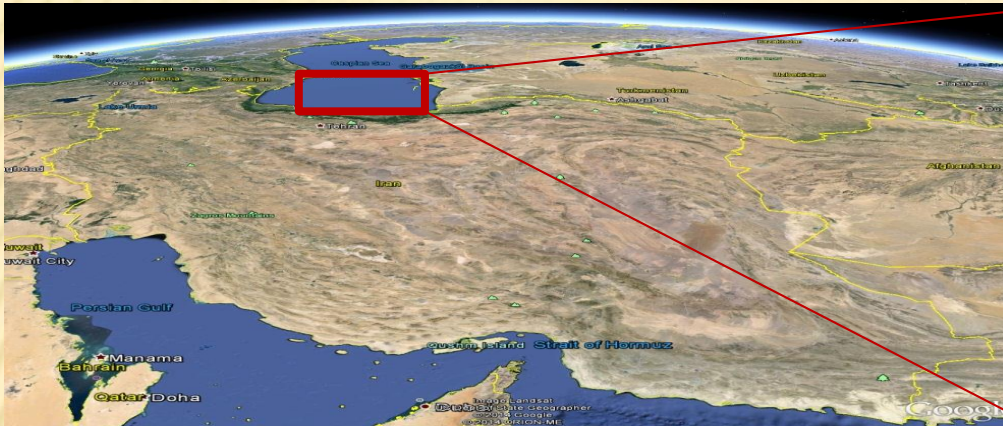




CASPIAN SEA EXPLORATION BLOCKS AND SARDAR-E-JANGAL FIELD



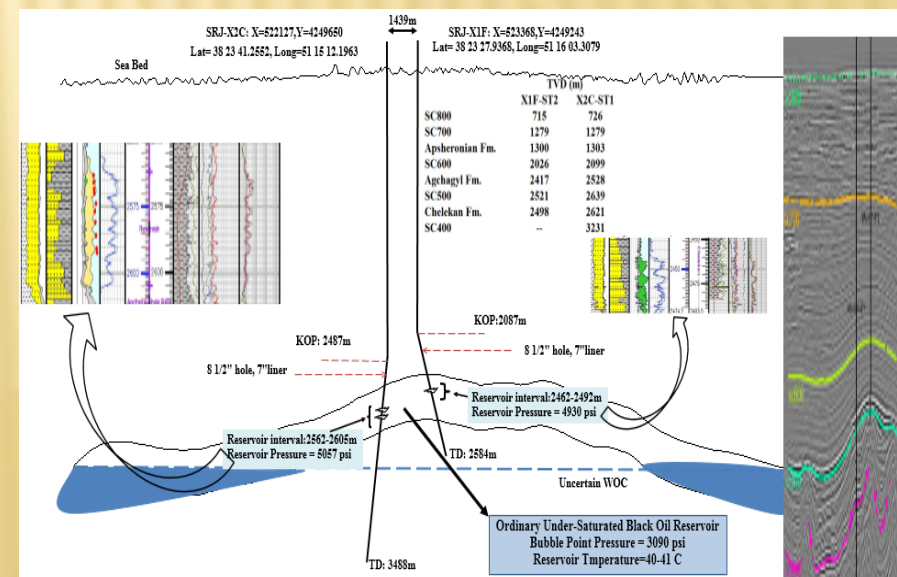
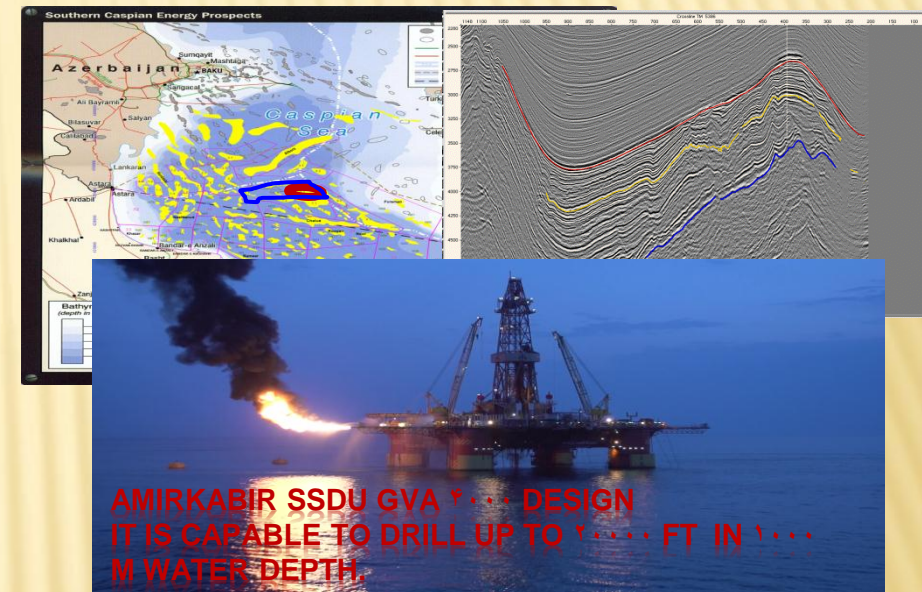
LOCATION OF SOUTH CASPIAN SEA STRUCTURES



- ❑ Caspian sea is divided into three sections of North, Middle and South Caspian Basin.
- ❑ In south of Caspian sea, 30,000 Km. 2D Seismic lines has been acquired.
- ❑ 46 Structures have been identified which 1 of them (6.2, 29, 6.1, 8.1, 7.1, N10, N9 & N3) have the priority
- ❑ 4000 Km² 3D Seismic has been acquired in 6, 7, 8 and 29 Blocks during 2003-2005
- ❑ Blocks 24, 26, 29 and Sardar-e-Jangal field are being introduced for Exploration and Development.

SARDAR-E-JANGAL FIELD GENERAL SPECIFICATIONS

- ❑ Sardar-E-Jangal field in block 9 with dimensions of 24x9 km. is located about 250 Km. of Caspian Sea coastline, in 250 m water depth.
- ❑ It is expected the main prospect is Cheleken. Although the first exploration well in 2012 has discovered hydrocarbon in layers above Cheleken.
- ❑ The second delineation/exploration well has been completed in 2015 and was tested 5157 bbl/d oil with 41.7 Psi WHP.
- ❑ It contains about 200 MMSTB oil with API of 39 and GOR of 987 Scf/bbl.



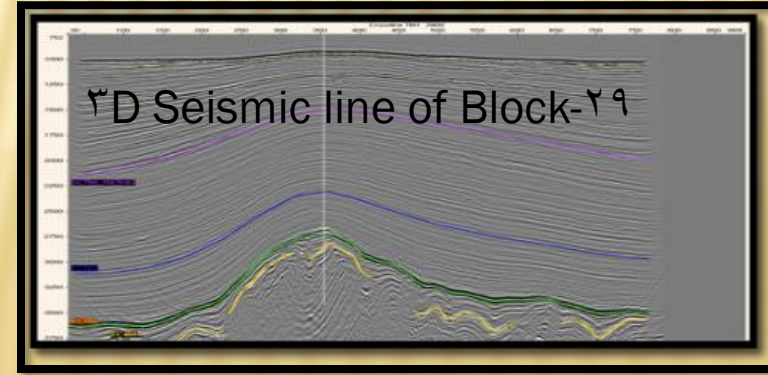
BLOCK-۲۹



Block-۲۹ is situated at ۱۳۵ km to North of Bandar -e-Nowshahr.

Main Structures: N۱, N۷۲ & N۷۳

- N۱ (۸-۱۰x۷۵ km) is the largest
- elongated WNW-ESE
- medium relief anticline
- vertical relief of ۷۰۰ m.



m Sq Km Sq Km Structures

❑ **Hydrocarbon Systems:**

➤ **Seal Rock:**

- Pliocene Evaporate of Surakhani (Upper Productive Series)
- The fine clay of Upper Aghchagyl Formation

➤ **Reservoir Rocks:**

- Aghchaghyl sandstone
- Lower Productive Series sandstone (Balakhany equivalent)

➤ **Source Rock:**

- Lower Shale layers from Maykop Series & base of Aghchagyl Formation

PLEISTOCENE		<i>Iran</i>	
		Neo Caspian	
		Khvalynian	
		Khazarian	
		Bakunian	
		Apsheeronian	
PLIOCENE	Late	Akchagyl	
	Early	Cheleken Series (Continental Red Bed)	
MESOZOIC	Cretaceous		No Scale