

Europa Oil and Gas

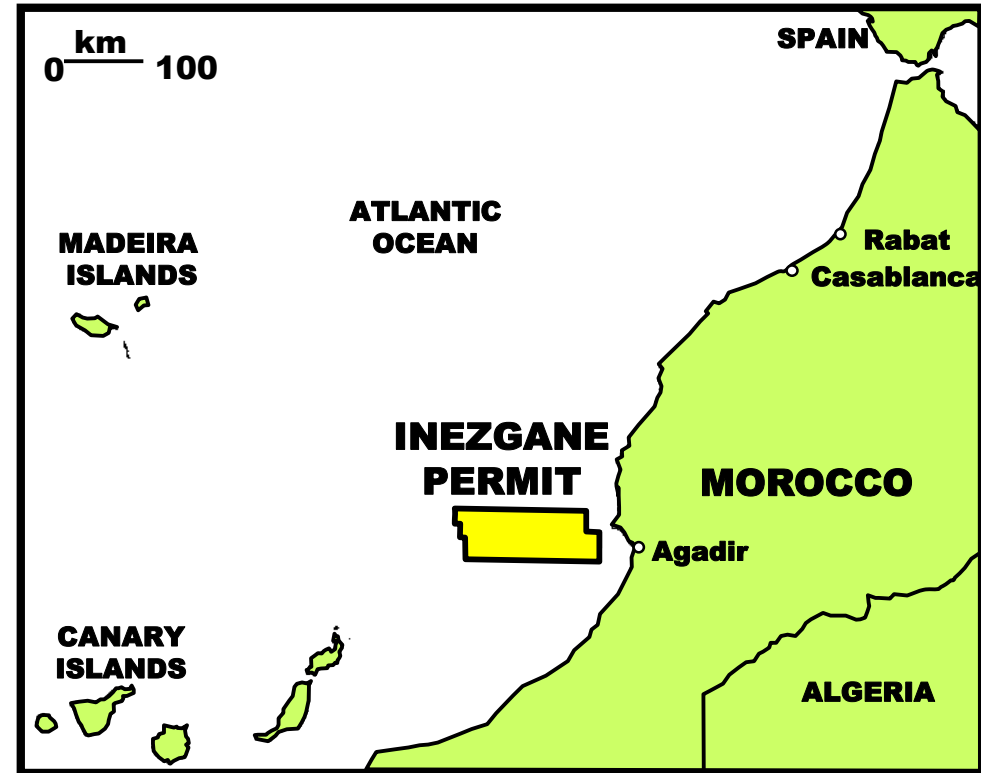
# Inezgane Offshore Permit Morocco



# Overview



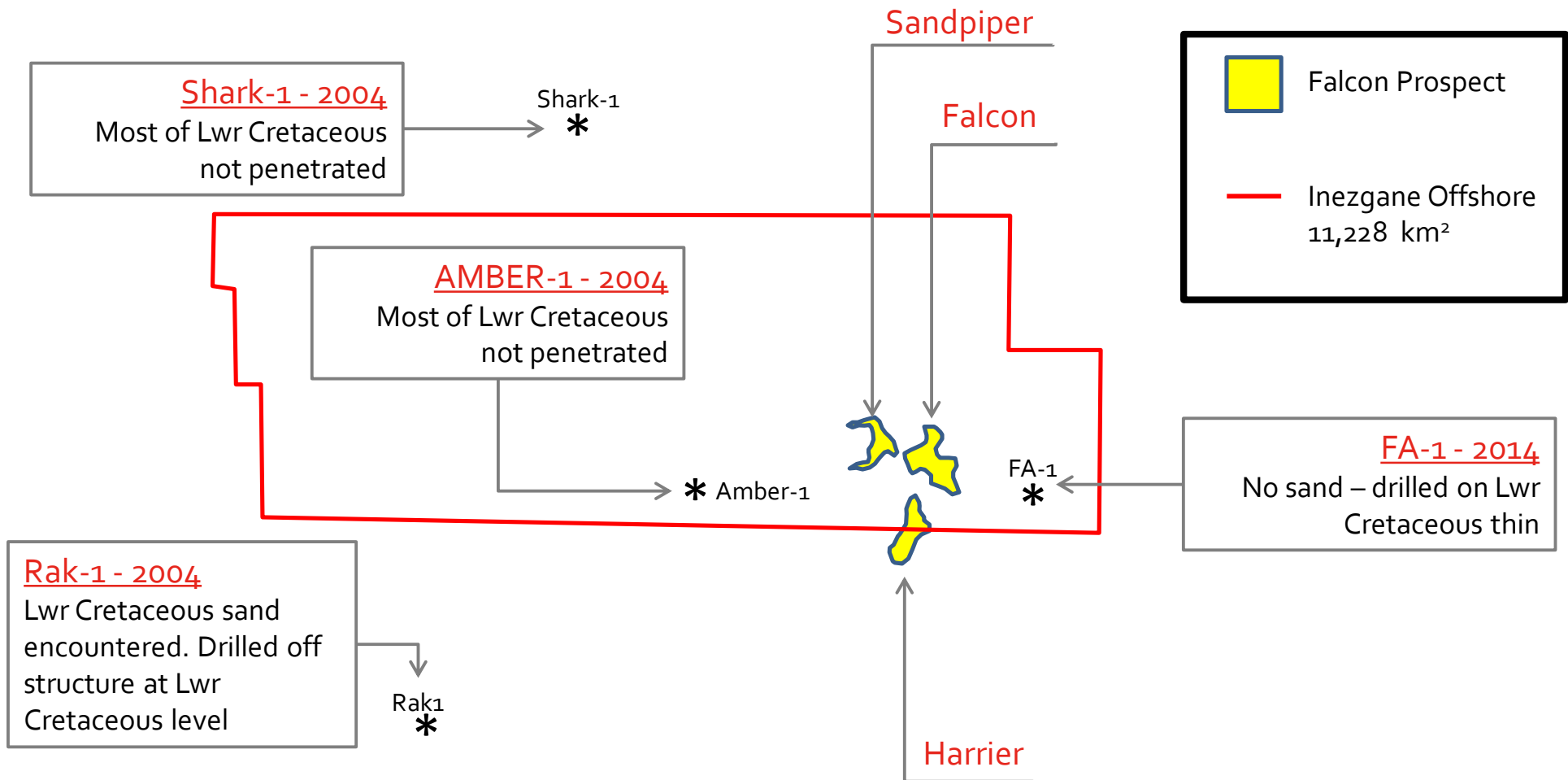
- Awarded the 'Inezgane Offshore' Permit in Morocco covering some 11,228 km<sup>2</sup>
  - Europa (Operator) 75% & ONHYM 25%
- Inezgane Permit lies in the Agadir Basin in water depths of 600m to 2000m
- Potentially large stacked prospects identified with 250 mmbbl plus
- Target to mature identified prospects to drillable status over next 2-years and attract farminee to drill in 2021 or 2022
- Lower Cretaceous is inadequately tested in Morocco - if play can be unlocked enormous upside lies within rest of Inezgane Permit
- Attractive licence and fiscal terms



# Inezgane Offshore Permit



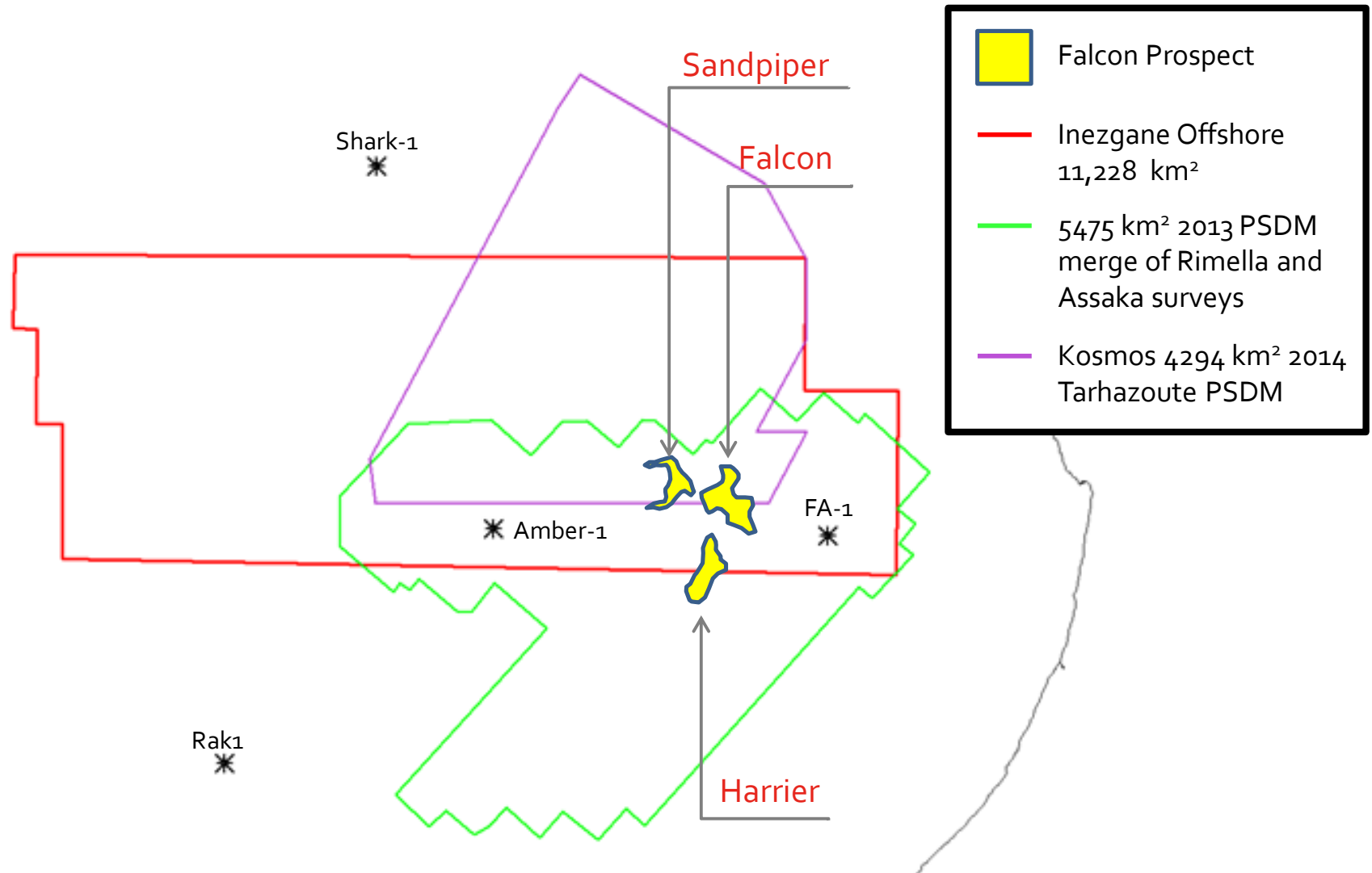
Well Database – Only 2 wells drilled on the Inezgane permit



# Inezgane Offshore Permit



Seismic Database - Extensive 3D seismic data available



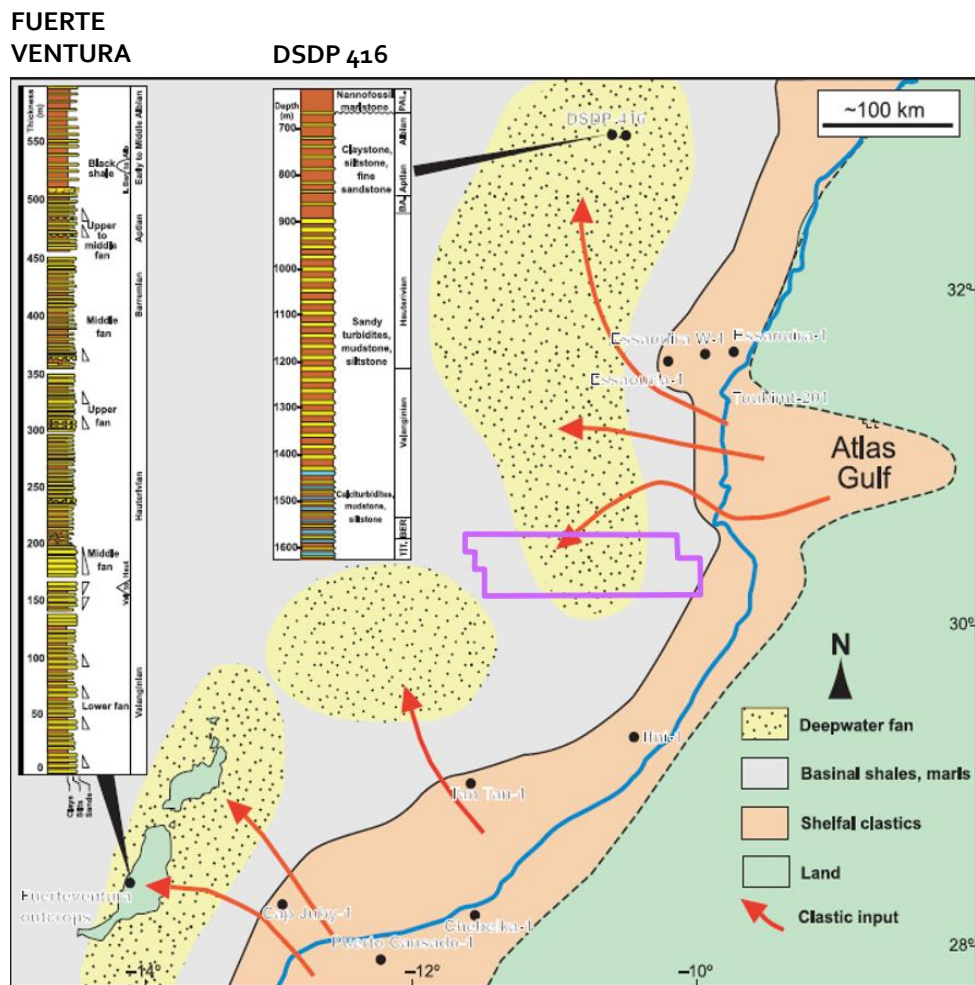
# Deepwater Drilling Exploration History in Morocco



- 10 deepwater wells have been drilled offshore Morocco
  - No commercial discoveries have been made although CB-1, drilled offshore Southern Morocco, did encounter 14m of gas condensate in Albian sandstones
- Of these 10 wells, 8 have targeted clastic reservoirs, essentially turbidite sands, while 2 targeted Jurassic carbonates
- Of the 8 wells targeting turbidite sands only 3 have penetrated below the Base Cretaceous
- Europa's focus on the Inezgane Permit is the Lower Cretaceous which is clearly highly under-explored
- A number of active neighbours to the licence:
  - Genel recently shot 3,500 km of 3D seismic over the Sidi Moussa offshore permit
  - ENI recently farmed out a 30% interest in Tarfaya Offshore to Qatar Petroleum

# Reservoir

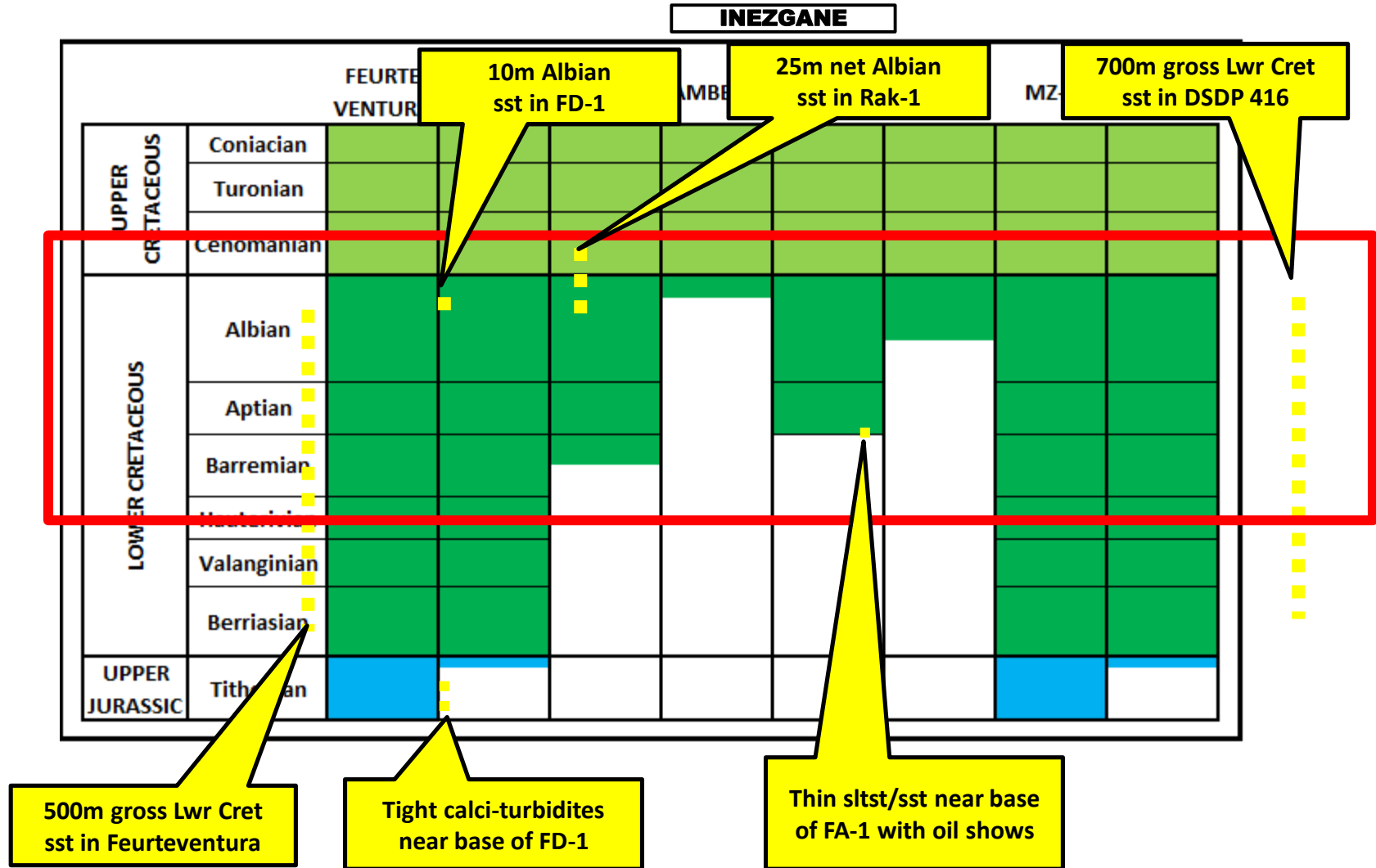
## Lower Cretaceous Play Concept



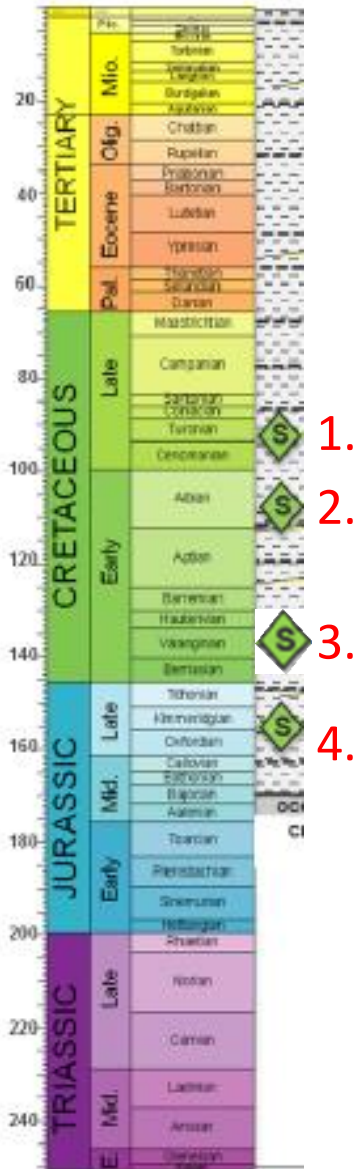
- Europa has built a regional model with Lower Cretaceous sediment input emanating from the onshore Morocco (Atlas Gulf)
- Turbidite sands of Lower Cretaceous age encountered in DSDP 416 and exposed on the island of Fuerteventura
- Thick turbidite sand units in deepwater wells drilled to-date have so far been elusive
  - However wells have targeted salt related structures where the Lower Cretaceous has thinned and where reservoir risk is higher (bald highs)
- Europa has identified some structural traps where the Lower Cretaceous remains thick and where reservoir risk is reduced.

# Reservoir

## Lower Cretaceous Sandstone Occurrence



# Source Rocks



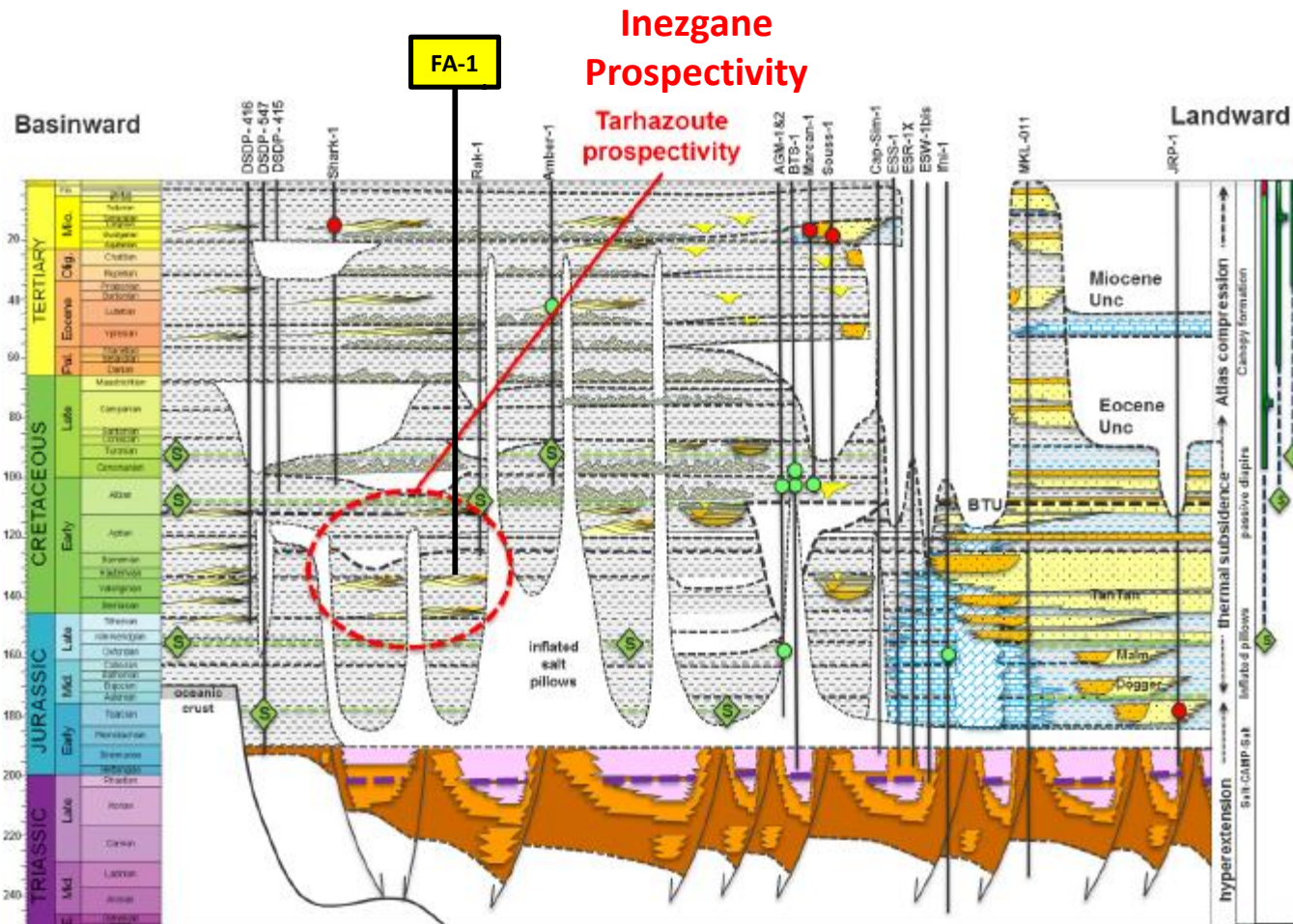
- Number of candidate source rocks at various stratigraphic levels based on samples (well cuttings, oil typing and outcrop) and shows as follows:

1. Cenomanian-Turonian
2. Albian-Aptian
3. Barremian and older
4. Upper Jurassic

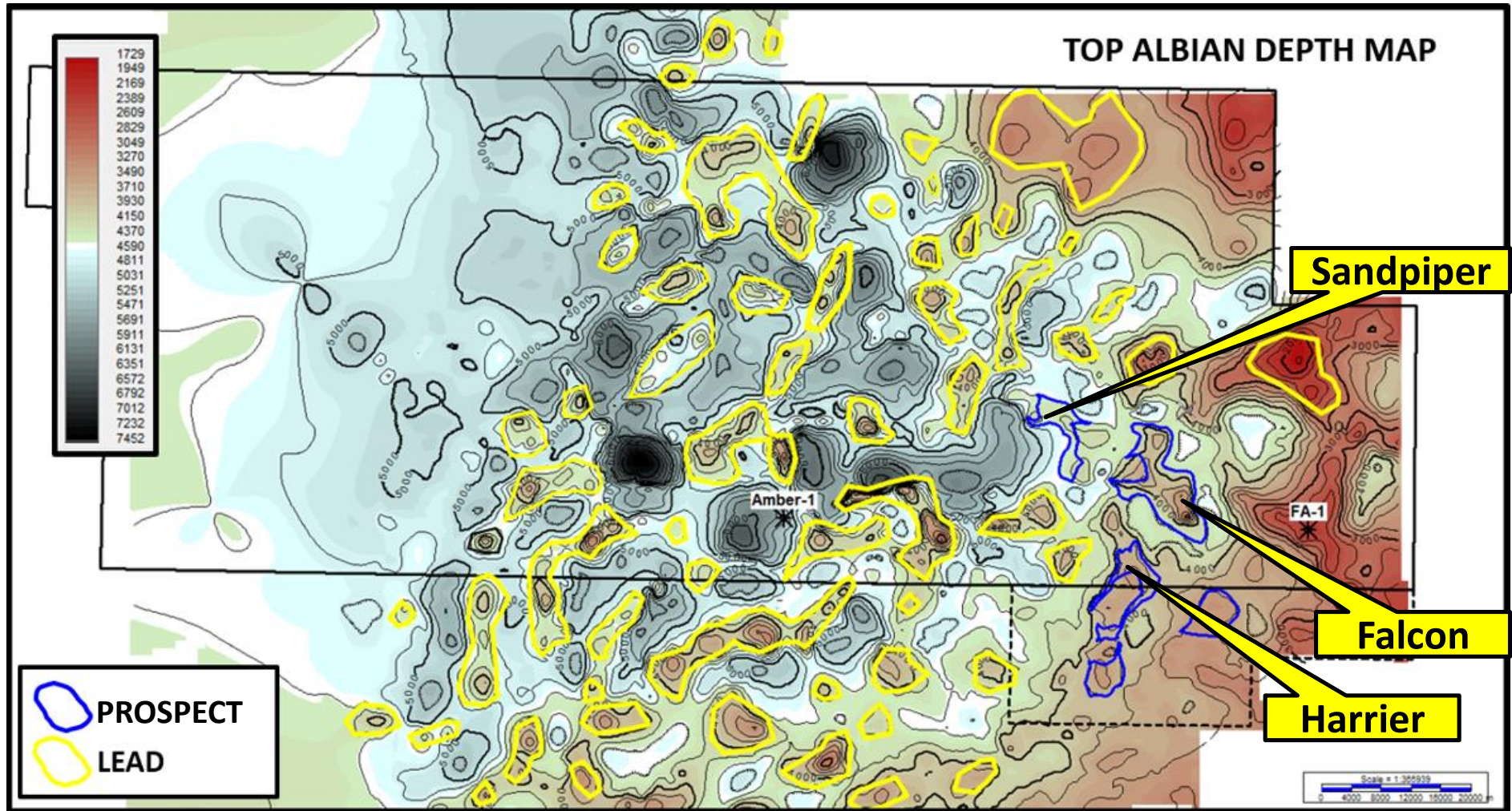


# Seal

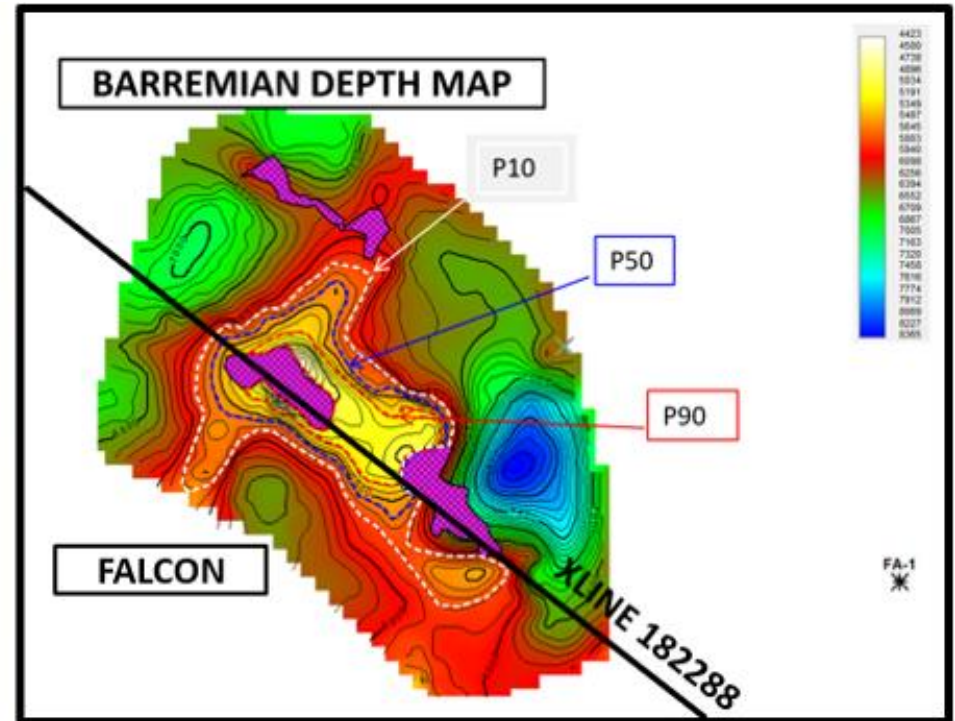
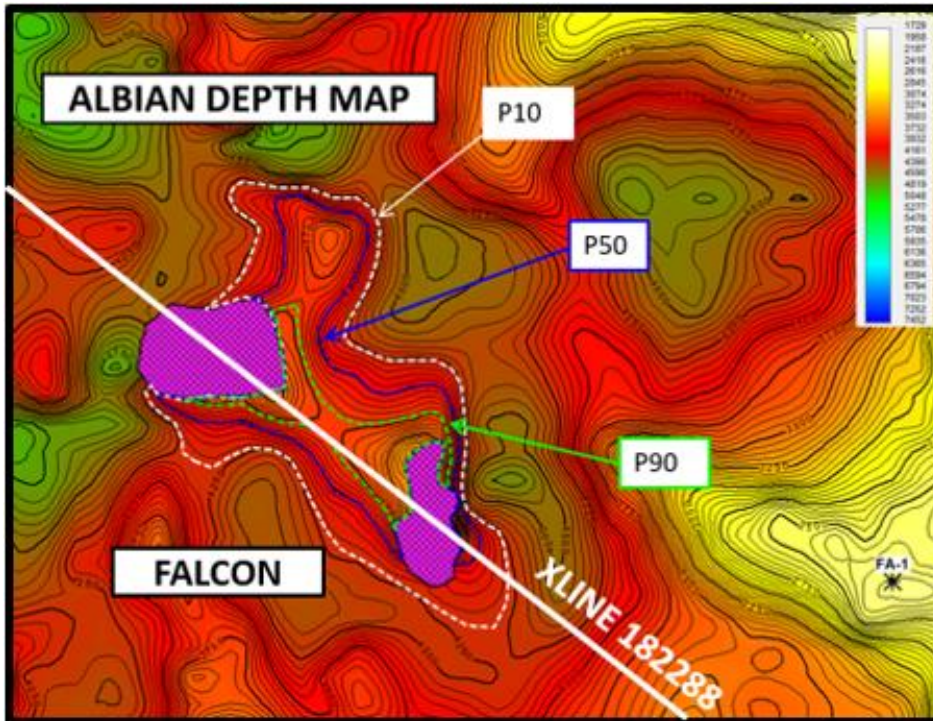
Salt and thick marine shales offer excellent seal potential



# Inezgane Prospects and Leads



# Falcon – Albian & Barremian Depth Maps



Falcon Prospect		Albian Reservoir		
Parameters	Low	Mid	High	
Area (km <sup>2</sup> )	15	41	83	

Falcon Prospect		Barremian Reservoir		
Parameters	Low	Mid	High	
Area (km <sup>2</sup> )	12	25	45	

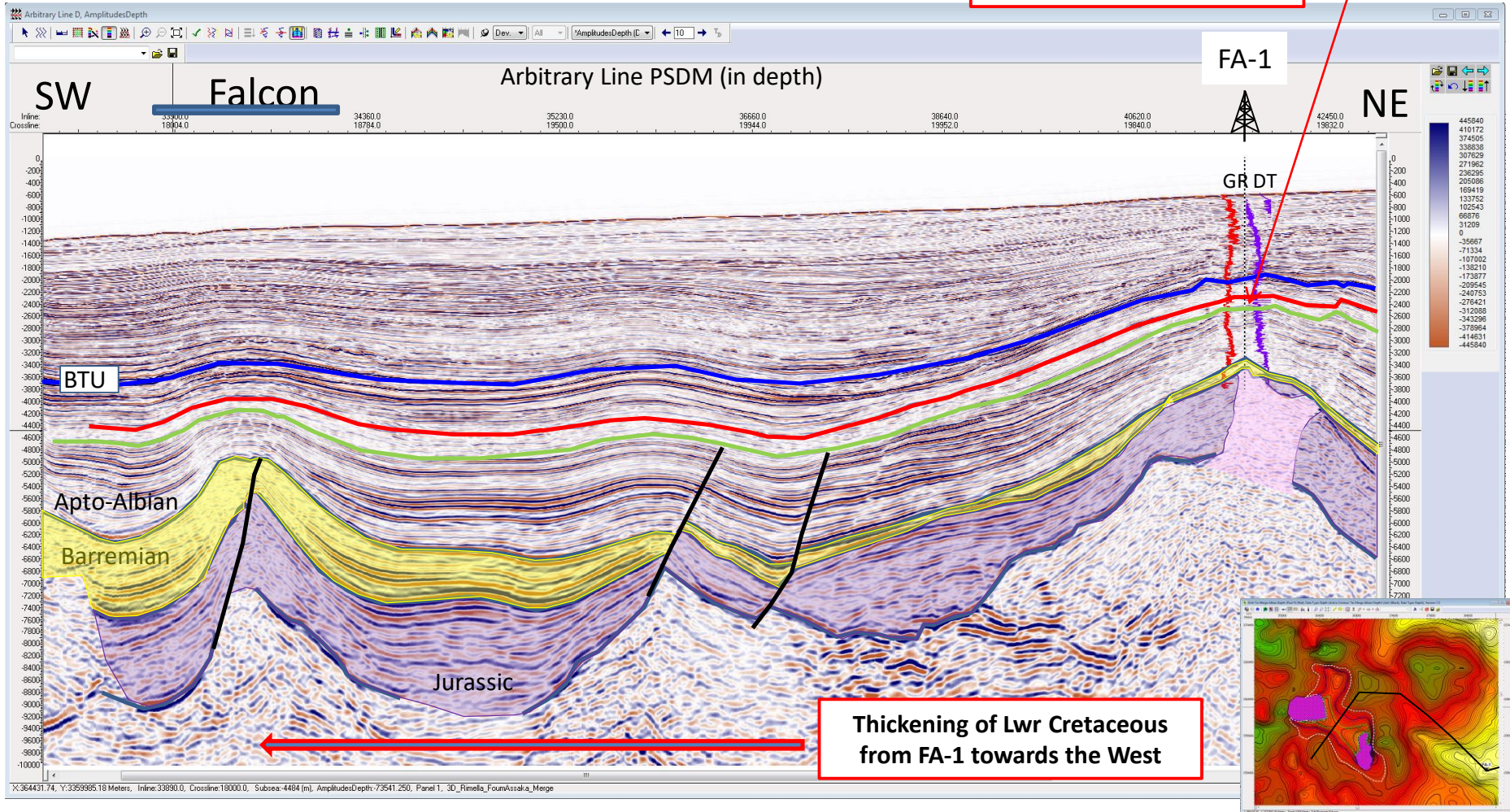
# Line from FA-1 over Falcon Prospect



EUROPA  
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Oil show in Lwr Cretaceous  
Siltstone just above salt

Oil Shows



Thickening of Lwr Cretaceous  
from FA-1 towards the West

# Why Morocco

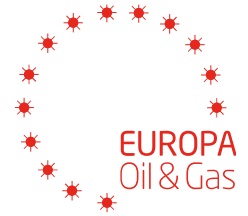
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- ✓ Stable country with a transparent business environment
- ✓ Open and welcoming to new entrants
- ✓ Low cost of entry including access to all legacy seismic and well data
- ✓ A number of major and midcap companies are active in country
  - E.g. Shell, ENI, Repsol, Genel
- ✓ Excellent technical and strategic fit with Europa's acreage in the Porcupine Basin



# Moroccan Petroleum Licence and Fiscal Terms



## LICENCE TERMS

- Petroleum Licence: 3 phases over 8-years
  - First Phase: seismic reprocessing and other studies
  - Second Phase: Exploration well
  - Third Phase: Exploration wells and seismic reprocessing
- Option to relinquish at end of each phase once Work Programme completed
- Production Licence: 25 years

## FISCAL TERMS

**ONHYM has a carried 25% interest in exploration phase and pay own share of development and production costs**

- Rentals
  - None
- Royalties
  - Oil: 0% on first 2.5mmbo and 10% thereafter
  - Gas: 0% on first 10 bcf and 5% thereafter
- Corporate Tax
  - 0% for first ten years and 30% thereafter

# Summary

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Low cost work programme to work-up prospectivity in Inezgane Offshore Permit



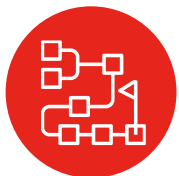
Lower Cretaceous is inadequately tested in Morocco



Potentially large stacked prospects (e.g. Falcon 250 mmbo plus) can be matured to drillable status with a view to attracting a farminee to carry cost of an exploration well in Second Phase



If play can be unlocked enormous upside lies within rest of Inezgane Permit



Plan to mature identified prospects to drillable status over next 2-years and a attract farminee to drill in 2021 or 2022