

## Borj El Khadra Sud, Onshore Tunisia, Ghadames Basin

- 2096 sq. km Exploration Permit located in southern Tunisia
- Near the depocentre of the Ghadames Hydrocarbon Basin
- Infrastructure in place with 24" gas pipeline planned
- Attractive fiscal terms under tax and royalty regime with cost recovery provisions
- Recently Completed 356 sq. km 3D Seismic Acquisition Program

### THE OPPORTUNITY

Voyageur Oil and Gas Corporation, a Canadian Private Corporation, is offering an opportunity to participate in up to 50% of its working interest in the Borj El Khadra Sud Exploration permit, southern onshore Tunisia.

The BEKS permit is located near the centre of the Ghadames Basin where there are several producing oil and gas fields in the proven Silurian Acacus play fairway. There are currently no wells drilled on the property.

Potential partners would earn up to 50% of Voyageur's working interests in any concessions deriving from the BEKS permit through a prescribed work program:

- The drilling of two wells with a TD in the Ordovician (~5000m)
- Additional 3D Seismic to equalize for past costs to date

### BEKS PERMIT

The 2096 sq. km BEKS permit is held through an Association Contract between Voyageur Oil & Gas and the Tunisian NOC, ETAP.

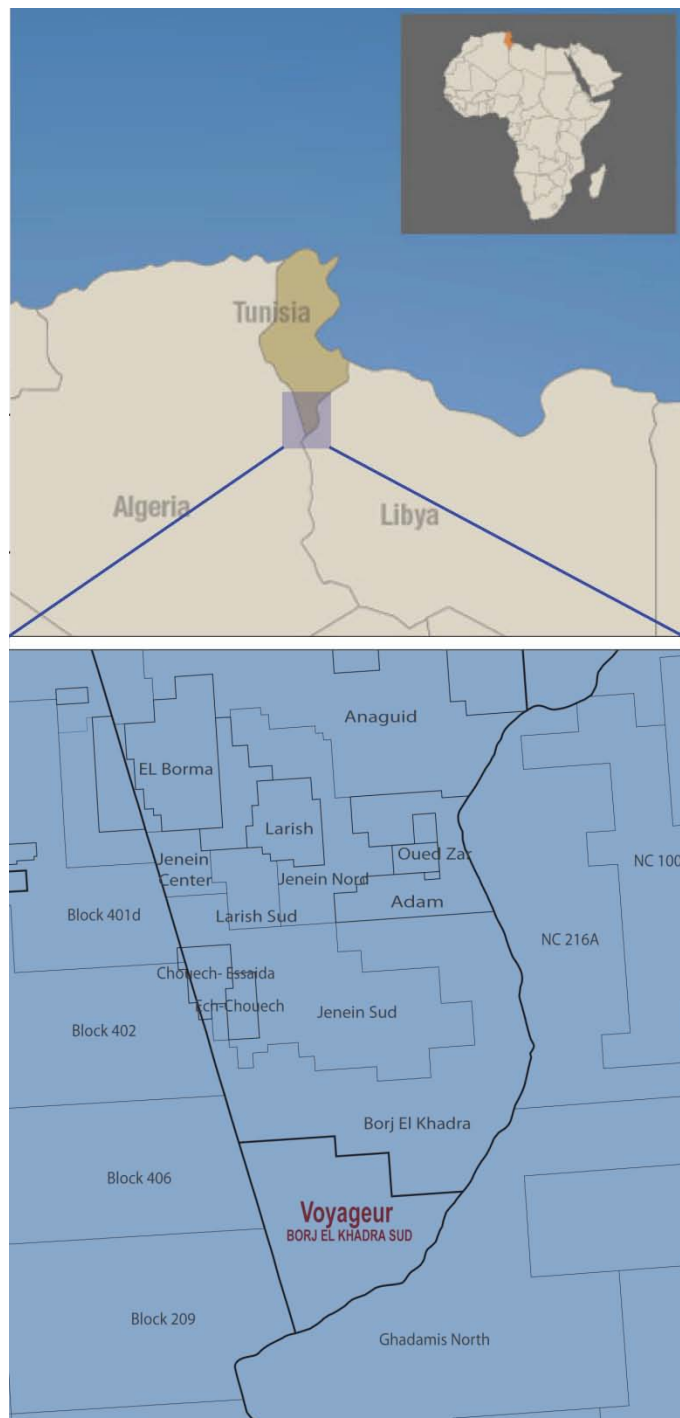
- 45% owned by Voyageur
- 55% owned by ETAP

The term of the Exploration Permit is 5 Years with a 10 mm USD work commitment of 2 wells and either 100 sq. km of 3D seismic or 300 km of 2D Seismic (Voyageur has completed all work except for the 2 wells). Upon successful completion of the 5 year commitment, there are 2 renewal periods of 2.5 years each, with a commitment of 1 well per period. The 2<sup>nd</sup> renewal can be extended if there a discovery is made and the prescribed work commitment has been met

ETAP is carried during the exploration phase, and upon commercial discovery has the opportunity to participate under a JV in up to 55% of the awarded concession. If ETAP chooses to participate, they must reimburse their share of exploration past costs out of their production revenue on a cash call. Exploitation activities governed by JV with ETAP under a tax & royalty regime

### WORK PROGRAM

Voyageur secured the transfer of the BEKS permit in July 2007, and obtained 2100 km of previously acquired 2D Seismic Data. 1300 km of 1991 and 1998 vintage data was reprocessed using CGGVeritas and interpretation helped pinpoint a 356 sq km 3D Seismic for the NE corner of the permit. The 2009 BEKS 3D Seismic acquisition was completed Feb. 20<sup>th</sup>, 2009 by CGGVeritas, and was processed by in their Tunis office. Independent interpretations of the data have been completed and mapping has shown two drill ready prospects in the NW corner of the 3D Survey.



**PETROLEUM SYSTEM**

**Source**

- The Silurian Tanezzuft Shale is the primary source rock of interest
- The Upper Devonian preserved Frasnian sequence also contains oil prone source rock intervals which can communicate to Upper Devonian reservoirs

**Reservoir**

- There are 5 primary zones of interest; TAGI, Upper Devonian, Lower Devonian, Silurian, and Upper Ordovician
- Silurian Acacus Sandstones are good quality porous and permeable reservoirs, well sealed by interbedded shales.
- Significant potential in the Upper Ordovician, Lower Devonian, and Upper Devonian and Triassic sandstones.

**Trapping and Seal**

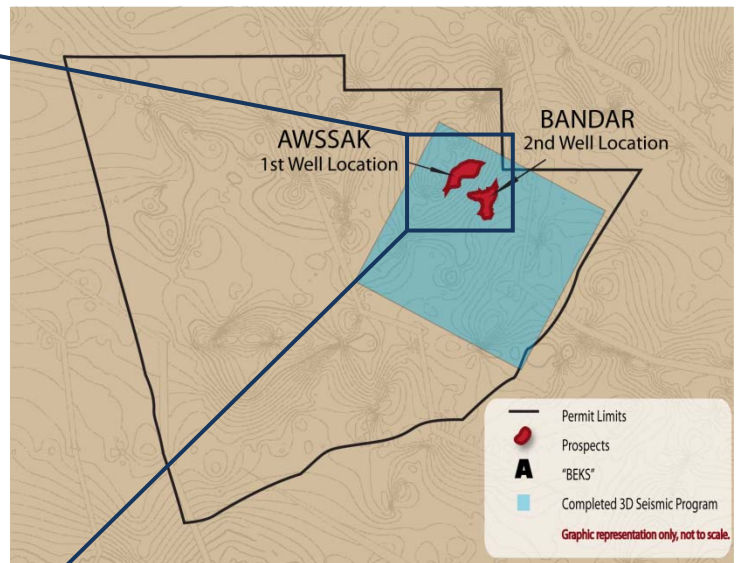
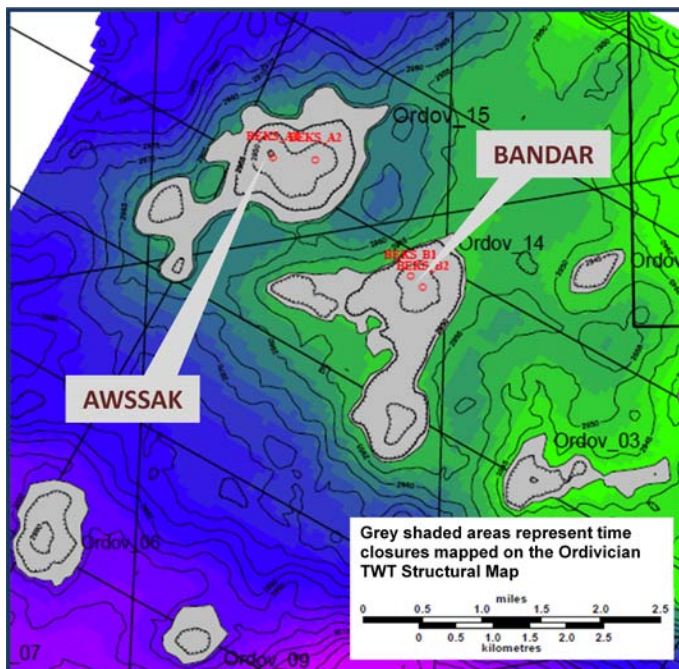
- Structures such as anticlines, block faulting/horst blocks provide most common type of trapping mechanism.
- Stratigraphic seals and interbedded shales as well as impermeable faults

**PROSPECTS AND LEADS**

Interpretation of the 2009 3D seismic program has identified two primary prospects for the 2010 drilling program, as well as several additional prospects and leads based on time closures mapped on the Ordovician. Below is a figure showing the two primary mapped time closures on the Ordovician TWT structural map from the 2009 3D Seismic program. Voyageur plans to drill 1 well in the AWSSAK prospect targeting the Ordovician (TD ~5000m) and testing multiple zones, a 2<sup>nd</sup> well is planned for the BANDAR prospect.

PERIOD	STAGE	BIOZONE	FORMATIONS-UNITS
TRIASSIC	NORIAN		ZARZAITINE INF. BUSCEBA
	CARNIAN		CARBONATEE AZIZIA
	LADINIAN		GRESEUX RAS HAMIA
	ANISIAN		ARGILO-GRESEUX OULED CHEBBI
	SCYTHIAN		BIR AL JAJA
CARBONIFEROUS	LATE CARBONIFEROUS		TIGUENTOURINE
			DEMBABA
			ASSEDJEFAR
	VISEAN	EC3-2	COLLENIA
TOURNAS.	EC1	M' RAR	
DEVONIAN	STANIAN		TAHARA (F2)
	FAMENNIAN	LD3-2	AOUNET OUENINE IV
	FRASNIAN	LD1	AOUNET OUENINE III (CUES)
	GIVETIAN	MD1	AOUNET OUENINE II
	EIFELIAN	MD1	AOUNET OUENINE I-II
	EMSIAN	ED6-7	ENGAVET SHALE
	PRAGIAN	ED6	OUAN KASA
	GEDINNIAN	ED5-1	TADRART
SILURIAN	PRIDOLIAN	LS6-3	ACACUS
	LUDLOVIAN	LS2-1	U.TANEZZUFT SDST
	WENLOCK	WE1	TANEZZUFT SHALE
	LLANDOVER	LLD3-2 LLD1	TANEZZUFT SHALE HOT SHALE
ORDOVICIAN	ASHGILLIAN	L02	MEMOUNIAT
	CARADOCIAN	L01	MELEZ CHOGRANE
	LLANDEIL		
	LLANVRN.		
	ABENIG. TREMADOC.		HAOUAZ

★ Source Rock



**Contact Instructions and Additional Information**

Further information will be made available upon execution of a confidentiality agreement. Thereafter, potential partners may elect to visit a physical data room which will be available in Calgary, London, and Tunis, Tunisia. Parties should contact one of the following to indicate their interest in the opportunity before February 17<sup>th</sup>, 2010.

Matthew Stevenson, Analyst  
[matthew.stevenson@voyageuroil.com](mailto:matthew.stevenson@voyageuroil.com), mobile: +17789978765 (Canada)

Brian Martin, Business Development  
[brian.martin@voyageuroil.com](mailto:brian.martin@voyageuroil.com), mobile: +16047634438 (Canada)