PROJECT UPDATE
Offshore Ghana
Central Tano Block
(Deep Water Tano Basin)

- Central Tano Block awarded to AMNI after statutory acreage relinquishment by Tullow
- New extensive interpretation and seismic attribute work on existing 3D seismic
- Multiple stacked Cretaceous leads and prospects defined, each with 90 – 300+ MMboe resource potential (combined 1,500+ MMboe) all on trend with existing proven plays
- Up to 50% drilling cost reduction with prospect of price uplift concurrent with likely development
- ITLOS Ruling on Maritime Border Dispute expected in September 2017 with no negative impact to Licencees
**Project Overview:** AMNI International Petroleum Development Company Limited (Ghana), (‘AMNI’), holds 90% participating interest and operatorship of the 279 km² Central Tano Block (‘CT Block’) situated in the Tano Basin, along the highly productive part of the transform margin, offshore Ghana. The block is approximately 60 km offshore, in water depths between 300 and 1,500+ metres, and is bounded by the retained areas of the prolific Deepwater Tano and Cape Three Points Blocks. These contain the very large Jubilee, Teak, Akasa and so-called TEN field complex that followed the play opening discovery in 2007 when the deepwater Mahogony-1 well encountered stacked, oil filled Cretaceous post-rift (Turonian) sands. This discovery started an exploration frenzy elsewhere along the African deepwater margin but, to date, only the prolific Tano Basin has proved to be a world class hydrocarbon basin.

AMNI, a successful West African exploration and production company, was awarded the Central Tano Block in March 2014 under a seven year licence period subject to three exploration terms. This followed the statutory relinquishment of part of the pre-existing Tullow-operated Deepwater Tano Block. The remaining 10% of the CT Block is held by the Ghana National Petroleum Corporation (GNPC).

The exploration potential described in this overview and the AMNI farmout presentation of the CT Block is by no means a full and complete description of the opportunities available in the acreage. Additional interpretation and analysis may reveal new potential that may exceed the current resource assessment.
Remapping of the available 3D by AMNI across their acreage has revealed prospectivity in all of the primary reservoirs, from the syn-rift rotated fault blocks of the Albian to the large stratigraphic and combination traps identified by AMNI in the post-rift Cenomanian, primary Turonian and secondary Campanian stratigraphy.

AMNI is now seeking an experienced deepwater operator with a successful track record to join them to advance the ongoing geoscience effort with the goal of drilling the best opportunities from the portfolio of 6 drillable prospects and 11 leads so far identified. Estimated recoverable resource potential of each prospect ranges between 90 and 300+ MMboe. AMNI is offering a material interest in their CT Block in return for a contribution to its past costs and the funding of 2 exploration wells (likely to cost 40-50% less now than originally estimated), which must both have spudded before the end of the current exploration period in December 2018.

Central Tano Prospectivity: As a result of its position in the heart of the most productive area of the Tano Basin, AMNI’s acreage is considered highly prospective with three different play stratigraphies being evaluated:

I. Upper Cretaceous: Campanian fan systems
II. Middle Cretaceous: including two play elements (analogous to the Jubilee field):
   a). Turonian fans &
   b). Cenomanian fan systems
III. Lower Cretaceous: Albian syn-rift clastics in rotated fault blocks

A total of 17 prospects and leads have so far been mapped by AMNI following the comprehensive re-interpretation of the pre-existing 3D data sets and attribute volumes in the Central Tano area. These offer stacked potential in overlying plays that have a total combined mean recoverable resource potential estimated to be in excess of 1.5 Bnboe. The main individual prospects range in resource potential between 90 and 300+ MMboe each.

AMNI’s technical evaluation of the CT Block has identified four multi-target well locations with stacked resource potential in the Mid Albian, Upper Albian, Cenomanian, Turonian and Campanian sections. Follow up prospects and leads within each play type offer significant upside to the drillable prospects already identified.
Project P230 - AMNI International Petroleum Development Company (Ghana)

AVO Evidence: Direct Hydrocarbon Indicator (DHI) and Amplitude Versus Offset (AVO) analysis has now been matured over the key prospects and leads and integrated into targeting and chance factor analysis. Relatively high impedance reservoir sands make some play opportunities dim out when charged with oil, resulting in poorly defined limits to some identified targets, although the example below is just one good exhibit of the AVOs now defined in AMNI’s Central Block.

In this instance a Class 2-3 response is observed in one of the Turonian prospects (T2) updip and along strike from the Jubilee accumulation.

Fiscal & Economic: Under AMNI’s PSC terms the government take, based on a royalty and tax system, is between 40% and 45%. While the potential for sizeable, stand-alone field developments exists, even modest new discoveries will benefit from proximity to nearby infrastructure and much improve their economic viability.

Obligations & Work Programme: AMNI’s Central Tano Block License comprises a 7 year term (including a 1 year extension) which carries commitments and work obligations in three phases of exploration. The initial Phase 1 requires the drilling of two new exploration wells which requires the second well to have spudded before the end of the current Licence Term which expires in December 2018.

ANMI is, therefore, progressing preparations with a view to drilling in early- to mid-2018. Each well is required to reach a depth of 4,400m or 300m into the lower Cretaceous and 4,000m or 150m into the primary objective. Costs are now estimated likely to be 40-50% less than originally estimated due to oil price drop and associated recent rig rate reductions. Much lower costs (in conjunction with the prospect of new oil price rises within the next few years as conventional production continues to decline due to insufficient investment during the downturn) now indicate this is an excellent time to participate in such a prospective project, and in the heart of the most productive transform play area. The licence can subsequently be extended for two additional phases of 1½ years each with one additional well per period once the two obligation wells are completed.

There are no relinquishments required across the licence term. Production permits are granted based on appropriate plans being submitted. AMNI’s government partner, GNPC, is carried until production for 10%, but the licence terms include appropriate cost recovery provisions.

The Opportunity: AMNI is looking for a strategic partner with proven deepwater operating experience to join them and earn a material equity interest in return for a contribution to past costs and the funding of the two exploration wells, each are estimated likely to cost between 40 - 50% less than before the oil price drop and recent day rate reductions.

Additional Information: The following link should open Envoi’s more detailed summary of the opportunity prepared in 2015: Introduction Flyer 2015.

A management presentation on the opportunity is available for seriously interested parties who sign a Confidentiality Agreement (CA) after meeting the Ghanaian qualification requirements. Such parties will subsequently be invited for a presentation and physical data room review of the project in either of AMNI’s Houston or London offices. Available data will include 3D and 2D seismic data (time and depth volumes and derivative products), well data, plus appropriate commercial and overview materials. Seismic data will be on an SMT platform.

All expressions of interest and requests for more information, including a request for authorisation to receive the CA for execution prior to access to the data room, should be made through Envoi.

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