# **Africa Oil Corp Farm-Out**

## Ethiopia & Kenya

May 2010





## Ethiopia

Odagen & Adigala

### Kenya

Block 10A & Block 10BB

### **Opportunity**

The Ethiopia and Kenya farm-in opportunity is being offered by Africa Oil to a limited number of qualified potential partners. This offering constitutes an exciting opportunity to acquire a material, non operated working interest in a highly prospective exploration portfolio in a region currently receiving significant industry attention.



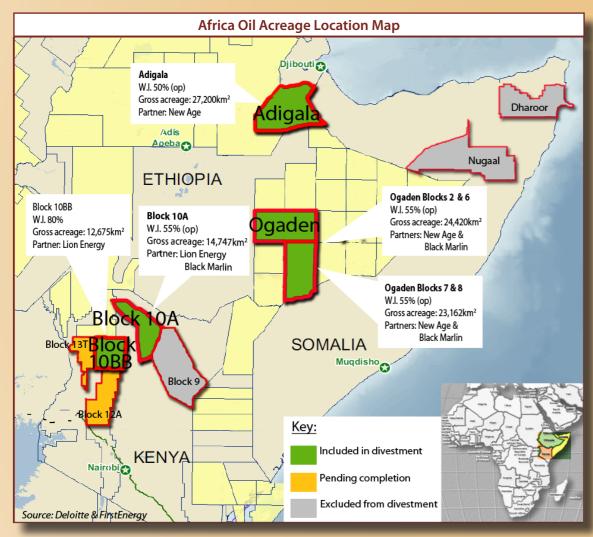


# Africa Oil Corp Farm-out, Ethiopia and Kenya



Africa Oil is a TSX Venture Exchange listed company with a significant exploration portfolio onshore East Africa. The acreage held by the company is located in Kenya, Ethiopia and Somalia and comprises one of the largest exploration portfolios in the region. East Africa is recognized as being greatly under-explored whilst offering world-class exploration potential based upon existing discoveries and analogous basins. Africa Oil Corp ("Africa Oil") or ("the Company") has engaged FirstEnergy Capital LLP ("FirstEnergy") as exclusive financial advisor to the farm-out of certain blocks in Ethiopia and Kenya.

With the exception of Block 9 in Kenya, which is CNOOC operated, the entire portfolio is operated by Africa Oil. The Company has actively managed its portfolio and has initiated exploration work on the acreage whilst continuing to screen and evaluate new business opportunities as demonstrated by the recent acquisition of blocks 12A and 13T in Kenya which are pending government approval.



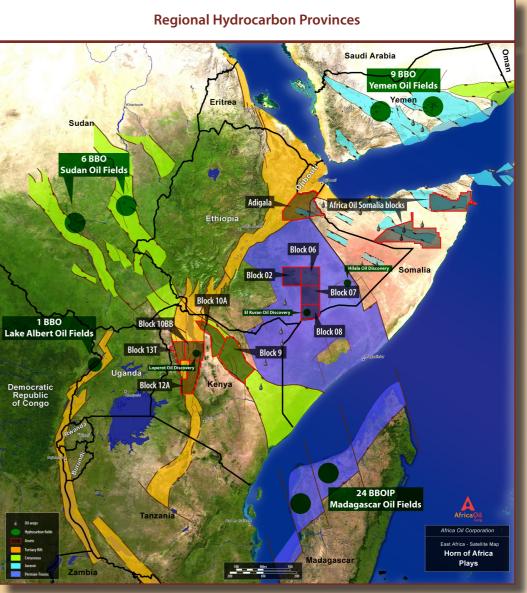
In order to continue the management of the portfolio Africa Oil has mandated FirstEnergy to seek additional partners for its Block 10BB and 10A assets in Kenya and its Ogaden Blocks (Blks 2&6 and 7&8) and the Adigala Block in Ethiopia. The opportunity is being offered to a limited number of qualified potential partners and Africa Oil has a preference for strategic partners who are seeking a position in multiple assets within the divestment portfolio. The preferred deal structure will incorporate a 2 for 1 promote on the work programme (seismic and/or drilling) and a pro-rata share of past costs. Africa Oil is also prepared to have a broader discussion across other elements of its East Africa portfolio. The firm bid deadline for these assets is July 15th, 2010 but consideration will be given to any proposals submitted prior to this date.

## **Key Opportunity Highlights**



- Opportunity to partner with Africa Oil on a number of blocks offering exposure to a variety of plays and having worldclass exploration potential
- An independent assessment of the Company's contingent and prospective resources has been completed by Gaffney, Cline & Associates ("GCA") with net working interest best estimate, which Africa Oil have aggregated to a total prospective resources in excess of 5 billion barrels <sup>1</sup>
- Within the divestment portfolio, GCA recognises prospective resources which Africa Oil have aggregated to a total exceeding 2 billion barrels for the blocks to be partially divested (Ethiopia Adigala and Ogaden Blocks and Kenya 10BB and 10A) 12
- Acreage is located in basins which have proven hydrocarbon potential and/or nearby proven and productive analogues.
- The region is bounded to the north, west and south by established hydrocarbon provinces in Yemen, Sudan, Uganda and Madagascar (see below)
- The operator, Africa Oil, has a strong management team with in-country experience and expertise
- · All of the blocks are governed by contracts offering highly attractive fiscal terms

<sup>1</sup> Note: Whilst volumetric assessments for individual leads and prospects has been made by GCA, (effective 1<sup>st</sup> Dec 09) the stated aggregate values have been calculated by AOC management. Please see AOC's press release dated 7 January 2010 for more detail of the prospective resources contained in the GCA report <sup>2</sup>GCA has not estimated prospective resources for the Adigala Block



Page 2

### Kenya - Block 10BB

Block 10BB is located in the East Africa Rift valley, to the south of Lake Turkana

### **PSA**

PSA 27th January, 2008 with a 4 year Initial Exploration Period and covering 12,675 km<sup>2</sup>

#### **Status and Work Commitments**

- Minimum work commitment for the Initial Exploration Period comprises:
- Review, digitize, analyze, reinterpret all existing seismic and well data completed
- Geological, geophysical and geochemical studies ongoing
- Seismic commitment renegotiated to 600km of 2D data with no 3D
- Drill one exploration well to a minimum vertical depth of 3,000m (planned 2011)

#### Forward Plan/Work Program

- Africa Oil currently preparing for acquisition of 600 km of 2D seismic data in Q3
- Interpretation of newly acquired seismic
- Map new and reprocessed seismic data to risk/rank/select drillable prospect for Q1 2011

#### **Available Data**

- Gravity data acquired by Amoco in 1980s
- Vintage 2D seismic data sparse grids in three sub-basins; recently reprocessed by Africa Oil

#### **Geology/Play Types**

- Three separate N-S trending Tertiary rift basins are present, each with its own depositional history:
- Lockichar Basin: contains the Loperot-1 discovery (Shell 1992/3), which demonstrated the presence of an excellent, active Oligo-Miocene petroleum system. The basin is a half-graben with its depocentre lying in the west of Block 10BB
  - Source Rocks: Oligocene Lokhone Shale organically rich, 200 m thick
  - Reservoirs: Miocene Lokhone Main Sandstone
  - Seals: Lokhone Shales
- Kerio Basin: located in the centre of Block 10BB is a complex, faulted half-graben, containing a thick Oligocene-Pliocene fluvio-deltaic sequence (Turkwel Beds)
  - · Source rocks: Late Oligo-Miocene, lacustrine source rocks similar to those in the Lockichar Basin present

Block 10BB

- · Reservoirs: anticipate high quality clastic reservoirs such as those drilled in nearby Eliye Springs-1 well
- Seal: intra-formational shales
- Southern part of Lake Turkana Basin located in the east of Block 10BB
  - Hitherto undrilled but likely to contain a Late Cretaceous to Tertiary fill of clastics

#### **Analagous Discoveries/Basins**

Lockichar Basin analogous to Tertiary Uganda basin where very large discoveries have been made by Tullow and Heritage in Block 1 and 3A, with similar geology, trapping mechanisms and hydrocarbon

### potential

#### Prospectivity

- Significant potential through Loperot-1 discovery and identified 12 prospects and leads
- Independent assessment by GCA (effective 1st Dec 09) recognised a total 'Net Working Interest Best Estimate' of unrisked propective resources in excess

#### of 1.4 Bboe<sup>1</sup>

#### **Past Costs**

Past costs have totaled US\$ 11.62 MM to date

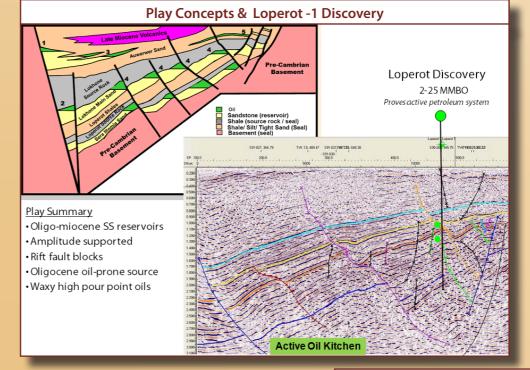
Please see AOC's press release dated 7 January 2010 for more detail of the prospective resources contained in the GCA report. GCA also provided a net Contingent Resources for the Loperot-1 discovery of 4.0 MMbbls (2C)



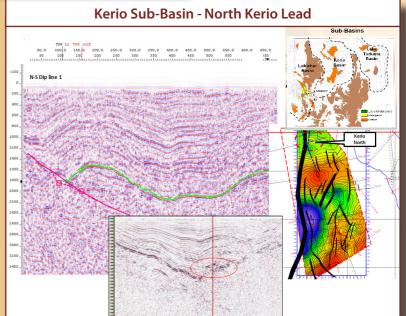


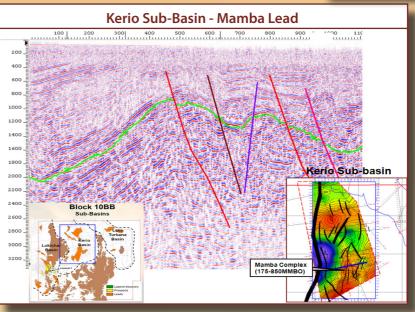
Lokichar Sub-Basin - Chorea Lead complex (375+MMBO)











Page 4

<sup>&</sup>lt;sup>1</sup> Note: Whilst volumetric assessments for individual leads and prospects has been made by GCA, (effective 1st Dec 09) the stated aggregate values have been calculated by AOC management.

Kenya - Block 10A

### AfricaOil Corp.

#### Location

 Onshore in the Chalbi Desert, northern Kenya in the NW-SE trending Cretaceous aged, Anza rift basin

#### PSA

 PSA effective date 2nd Jan 2008 with a 4 year Initial Exploration Period and covering 14,747 km<sup>2</sup>

#### **Status and Work Commitments**

- Minimum work commitment for the Initial Exploration Period comprises:
- Hi Res airborne gravity acquisition completed
- Surface geology study completed
- Review well data and reprocess and reinterpret existing seismic ongoing
- Acquire and interpret 750 line km of 2D seismic data *planned* for 2010
- Drill one exploration well to a minimum vertical depth of 3,000m planned for 2011

#### Forward Plan/Work Program

Reprocessing all vintage 2D seismic data (largely 1980s) and planning to acquire 750km of 2D data following acquisition programme in Block 10BB. New seismic data will be focused on the central and southern areas considered the most prospective. Seismic testing to be conducted for sub-basalt imaging capability across parts of the block

#### **Available Data**

- Three wells drilled between 1988 and 1989 all of which had extensive oil and gas shows and a small volume of paraffinic oil was recovered from well Sirius-1
- Block wide Hi-Res airborne gravity survey acquired 2008
- 2,361km of 2D seismic data (1980s vintage), significant enhancement of seismic imaging, allowed formulation of exciting new play concepts through recent reprocessing of legacy seismic dataset

#### Geology/Play Types

- Proven Cretaceous petroleum system which has not seen any exploration activity since 1990
- Source Early/Late Cretaceous Lacustrine source rock (organic rich and oil-prone) which are in the oil window in multiple sub basins of the Anza Graben
- Evidence for a secondary source rock of marine origin; likely Jurassic source rock
- Reservoir Early/Late Cretaceous fluvial, aeolian and lacustrine littoral sandstones interbedded with the source rocks
- Seal Interbedded shales of Early/Late Cretaceous age
- Trapping configurations Salt induced structural traps salt floored grabens (new Jurassic salt concept)

#### **Analagous Discoveries/Basins**

 Extension of the Muglad and Merlut rift systems in Sudan (in excess of 6 Billion bbls discovered)

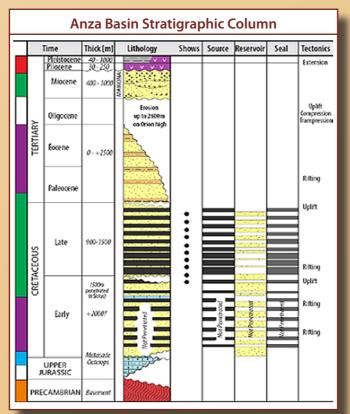
#### Prospectivity

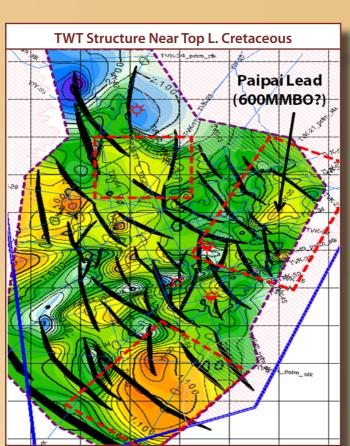
- Independent assessment of the contingent and prospective resources by GCA has recognised 'Net Working Interest Best Estimates' for the four prospects with a total in excess of 135 MMbbls (effective 1st Dec 09) 1
- New salt induced geological model has identified greater prospectivity e.g. Paipai turtle structure 600 MMbbls alone

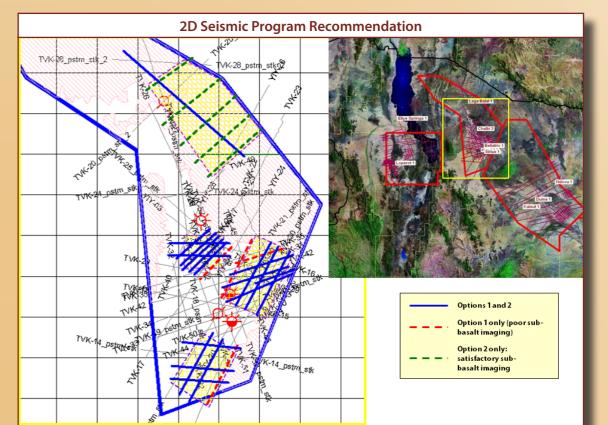
#### **Past Costs**

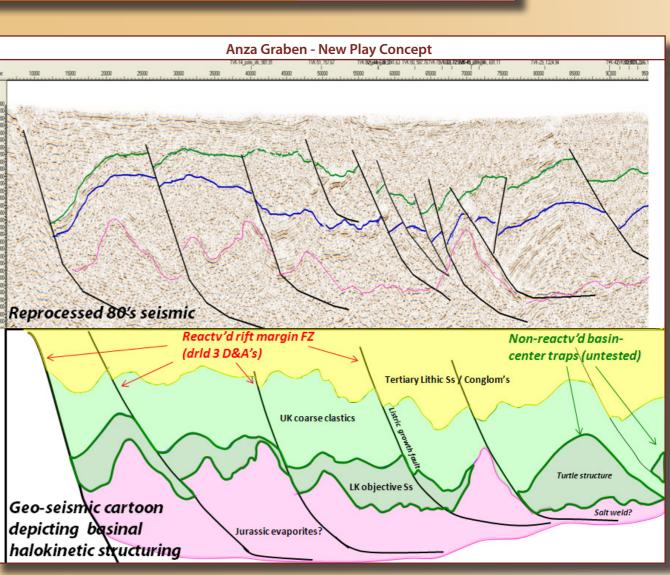
Past costs have totalled US\$ 5.7 MM to date

<sup>1</sup> Note: Whilst volumetric assessments for individual leads and prospects has been made by GCA, (effective 1<sup>st</sup> Dec 09) the stated aggregate values have been calculated by AOC management. Please see AOC's press release dated 7 January 2010 for more detail of the prospective resources contained in the GCA report GCA did not ascribe any Contingent Resources to Block 10A









Page 6 Page 7



### Ethiopia - Ogaden

# Africa Oi

SOUTH WEST ENERG

#### Location

Four contiguous blocks forming two PSAs (Blocks 2&6 and Blocks 7&8) in the Ogaden Basin, SE Ethiopia

#### PSA

- PSA effective date 7 November 2006 with a 4 year Initial Exploration Period and covering 24,420 km<sup>2</sup>
- PSA effective date 11 July 2007 with a 4 year Initial Exploration Period and covering 23,162 km<sup>2</sup>

#### **Status and Work Commitments**

- Minimum work commitment for the Initial Exploration Period comprises:
  - · Review, reprocess and reinterpret all of the existing seismic and well data (all blocks)- completed
  - Acquire a combined 25,000 line km hi-res airborne gravity (all blocks)- completed
  - Acquire and interpret 1,250 km of 2D seismic on each of Blocks 2&6 and Blocks 7&8 (2,500km total) ongoing
    acquisition

recently signed by onia Exp & Prod (FF & F

**Ogaden Basin - Recent Activity** 

• Drill one exploration well to a minimum vertical depth of 3,000m (PSC 7&8)

#### Forward Plan/Work Program

- 1-year extension secured for both PSAs
- Preparation for acquisition of 500 km of 2D seismic survey is currently underway to mature the leads into drillable prospects

#### **Available Data**

- Acquisition of 32,000 line km airborne gravity and magnetic completed and integrated with reprocessed 2D seismic data (1970s Tenneco data)
- Regional database of 23 wells in proximity of acreage.
   Three wells drilled in Blocks 7 and 8:
  - El Kuran-1: Mid Jurassic oil in core and oil flow on test (5 bbls of 32 API) and strong gas shows in Triassic
  - El Kuran-2: Mid Jurassic oil in core and oil flow on test
  - Bodle-1: Fluorescence in Jurassic, gas shows in Triassic

#### **Geology/Play Types**

- Sedimentary basin is broadly divided into the Lower Mega-sequence, comprising continental classics
  - of Permian to lower Jurassic age; and the Upper Mega-sequence, comprising shallow water carbonates and evaporates of Jurassic Cretaceous age
- Source rocks: late Jurassic Urandab Fm, an excellent quality Type II kerogen source rock and the Permian Bokh Shales with Type II/III kerogen source rock.
- Reservoirs: sandstones of Triassic Adigrat Fm sandstones (porosity up to 20%) and Carboniferous Calub Fm (porosity up to 15%); carbonates of Jurassic Middle and Upper Hamanlei Fm. Well Hilala-1 recovered 35 bbls of 32° API oil in the Upper Hamanlei Fm with porosities of up to 20% and K up to 800 mD
- Seals: mainly intra-formational shales and evaporites
- Traps mainly dip/fault closed structures

#### **Analagous Discoveries/Basins**

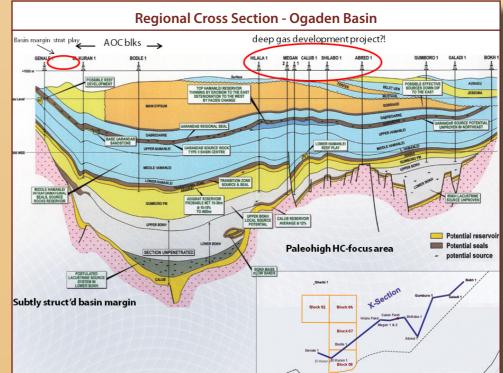
- · Over 4 Tcf gas discovered in the Ogaden Basin with several wells recovering significant amounts of light oil
  - In addition to proven hydrocarbons in Africa Oil blocks, discoveries and field in adjacent acreage:
  - · Hilala-1: 35 bbl oil recovered from Upper Hamanlei and flowed 5.7 MMscfd gas from Adigrat Fm (Ø up to 20%)
  - Magan-1: 31° API oil recovered on DST from Hamanlei Fm
  - Petronas-operated Hilala and Calub gas fields in adjacent Blocks 11 and 12 (ca. 3 Tcf combined), with export of gas envisaged via pipeline to Kenya or Djibouti

#### **Prospectivity**

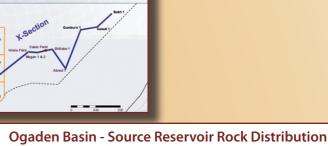
- Independent assessment by GCA (effective 1st Dec 09) of 4 identified leads indicates a total 'Net Working Interest Best Estimate' of unrisked propective resources in excess of 500 MMbbl oil or 3 Tcf gas 1
- Current estimates for the El Kuran discovery indicate reserves in excess of 1 Tcf gas and 25 MMbbl condensate

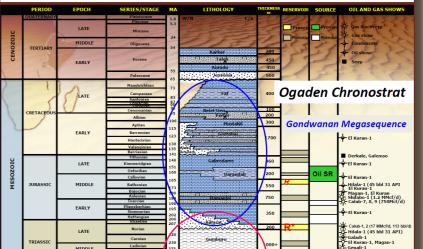
#### **Past Costs**

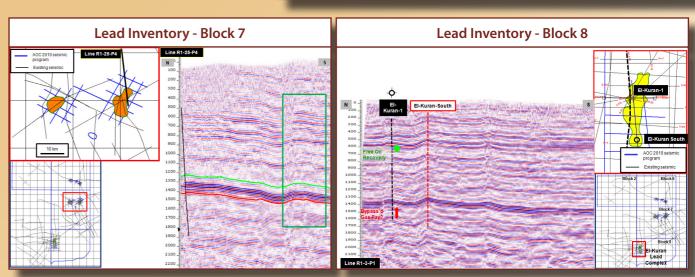
- Past costs have totaled US\$6.7 MM and US\$ 6.5 MM to date for Blocks 2&6 and 7&8, respectively
- Note: Whilst volumetric assessments for individual leads and prospects has been made by GCA, (effective 1st Dec 09) the stated aggregate values have been calculated by AOC management. Please see AOC's press release dated 7 January 2010 for more detail of the prospective resources contained in the GCA report











Page 9

### **Ethiopia - Adigala**

#### Location

• The Adigala Block is located in north-eastern part of Ethiopia, bordering Somaliland and Djibouti



#### PSA

PSA effective date 11<sup>th</sup> July 2008 with a 4 year Initial Exploration Period and covering 27,508 km<sup>2</sup>

#### **Status and Work Commitments**

- Minimum work commitment for the Initial Exploration Period comprises:
  - Acquisition of 5,000 line km of airborne gravity and magnetics - completed
  - Geological field studies, high-resolution satellite image processing and analysis and multi-disciplinary geophysical and geological study - completed
  - Subject to the outcome of studies, may elect to acquire
     500 line km of 2D seismic data acquired 2009

#### Forward Plan/Work Program

- Complete seismic evaluation of 2009 seismic data and integration of seismic, gravity and magnetic data and surface geology to delineate extent and hydrocarbon potential of recognised structural leads
- Partners considering additional siesmic and or drilling exploration well

#### **Available Data**

- Gravity data indicates the presence of a deep and extensive basin
- 500 km of 2D seismic data was acquired in 2009

#### **Geology/Play Types**

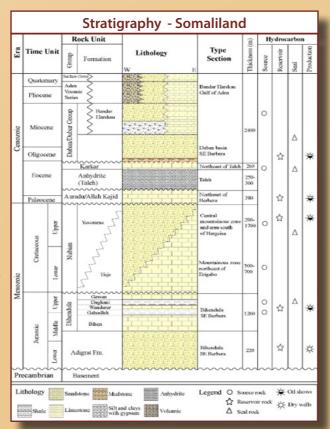
- Stratigraphy and play types in Adigala are considered similar to those in Somaliland
- Reservoirs associated with:
  - Jurassic sandstones (encountered porosities up to 15%)
  - Cretaceous sandstones coarse grained fluvial sands of the Nubian Fm
- Upper Jurassic Urandab source rock outcrops along block boundaries with oil-saturated Jurassic carbonates and high-quality Jurassic sandstone. Block surrounded by oil seeps
- Trapping mechanisms include structural traps in rollover anticlines and stratigraphic traps

#### **Analagous Discoveries/Basins**

- This Jurassic-to-Tertiary basin appears to be on trend with basins in Somalia which have proven hydrocarbon systems (e.g. Berber/ Guban)
- Prospectivity
  - Reconnaisance field geology suggests that source, reservoir and seal rocks are present in the Adigala area
  - Interpretation of gravity and magnetic data indicates the presence of large structures within the Adigala basin
  - 500 km of 2D seismic data was acquired in 2009 and initial evaluations corroborate the presence of a deep, structured basin with potentially large trapping geometries

#### **Past Costs**

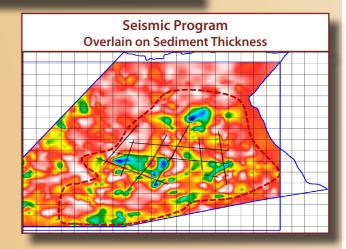
Past costs have totaled US\$ 9.8 MM to date

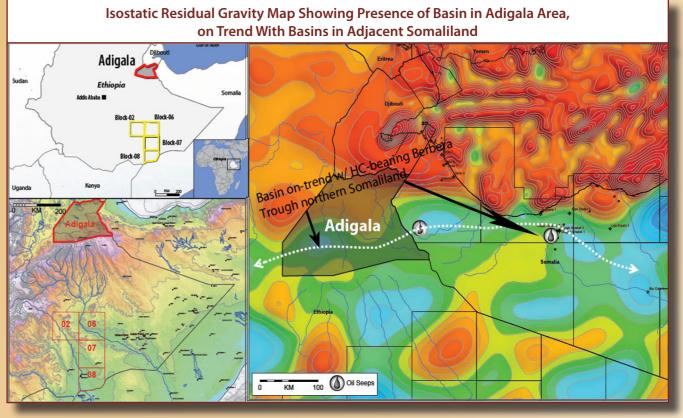




Preliminary Seismic Interpretation Regional Strike Line Adi-06

West 1200.0 100





Page 10 Page 11

For more information please contact:	
Cautionary Statement  This document contains statements about expected or anticipated future events and financial results that are forwal looking in nature and, as a result, are subject to certain risks and uncertainties, such as legal and political risk, civil unregeneral economic, market and business conditions, the regulatory process and actions, technical issues, new legislate competitive and general economic factors and conditions, the uncertainties resulting from potential delays or changing plans, the occurrence of unexpected events and management's capacity to execute and implement its future plantatual results may differ materially from those projected by management.	est ion ge:

For more information please contact:

Mark Llamas
Managing Director
Acquisitions & Divestitures
+44 (0) 20 7448 0224
mwllamas@firstenergy.com

Rolf Bakker Vice President & Director Acquisitions & Divestitures +44 (0) 20 7448 0225 rebakker@firstenergy.com

UNDER NO CIRCUMSTANCES SHOULD AFRICA OIL PERSONNEL BE CONTACTED DIRECTLY WITHOUT THE PRIOR KNOWLEDGE AND APPROVAL OF FIRSTENERGY

All images contained in this document are sourced from the Operator unless stated otherwise