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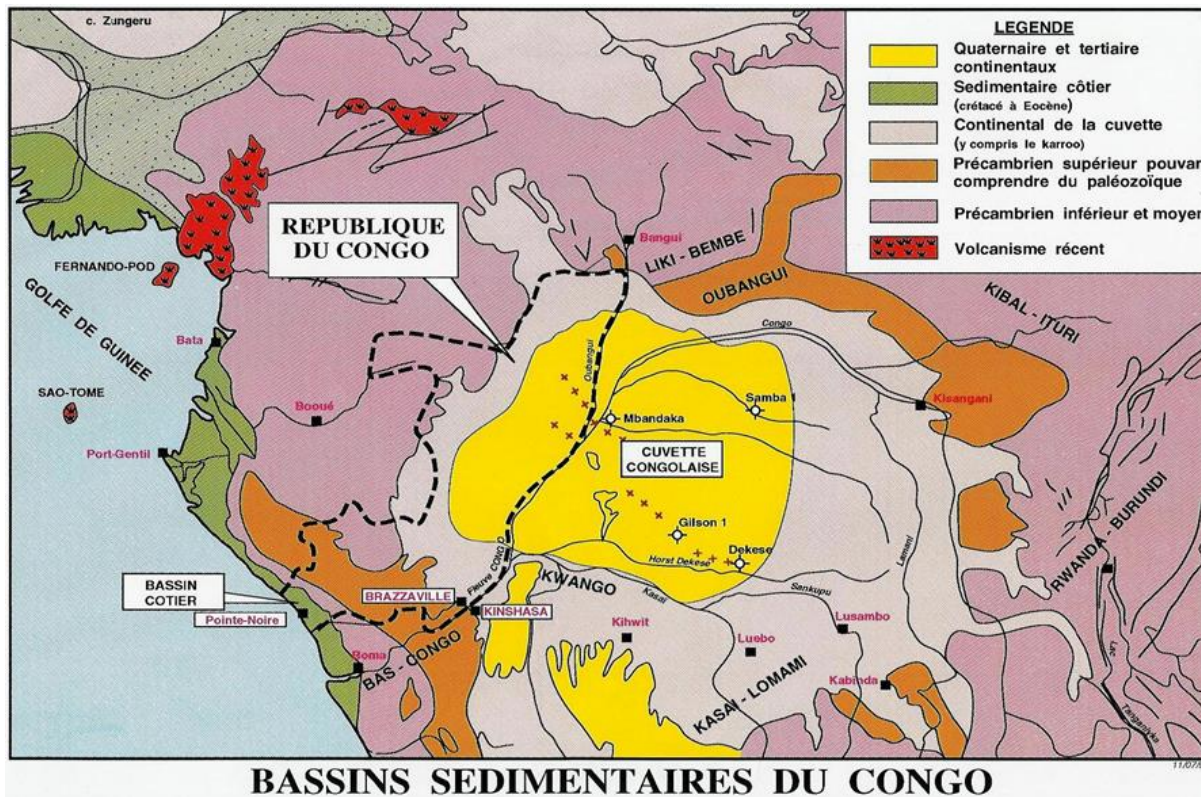
**AAPG ACE 2014**  
**Houston, April 2014**

# **Opportunities in Republic of Congo**

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**Head of Database Department**

# Opportunities in Republic of Congo

## Overview



The Republic of Congo oil landscape consists of two sedimentary basins :

- **Coastal Congo Basin (Bassin Côtier)**, on the Atlantic Ocean coast
- **Interior Basin (Cuvette Congolaise)**, north of Brazzaville to the border with Central African Republic

# Opportunities in Republic of Congo

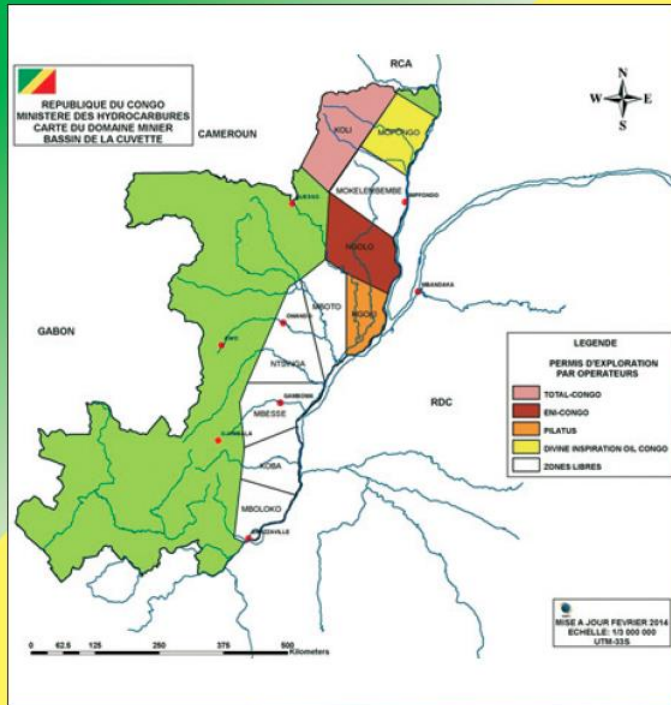
## E&P Overview

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- **Exploration Blocks:** 17
  - **Producing Blocks:** 24
  - **Available Blocks:** 25+
  
  - **Exploration Wells:** 200+
  - **Appraisal Wells:** 130+
  - **Development Wells:** 1,200+
    - 660 producing
    - 130 water injectors
    - 10 gas injectors
  
  - **Current Production:** 240,000 bbl/day (2013)
  - **Estimated Production:** 330,000 bbl/day (2017)
  
  - **Remaining Recoverable Reserves:** 2 billion bbl (oil)  
 (01/01/2013) 7-8 tcf (gas – Marine XII)

# Opportunities in Republic of Congo

## Interior Basin (Cuvette)

### Republic of Congo



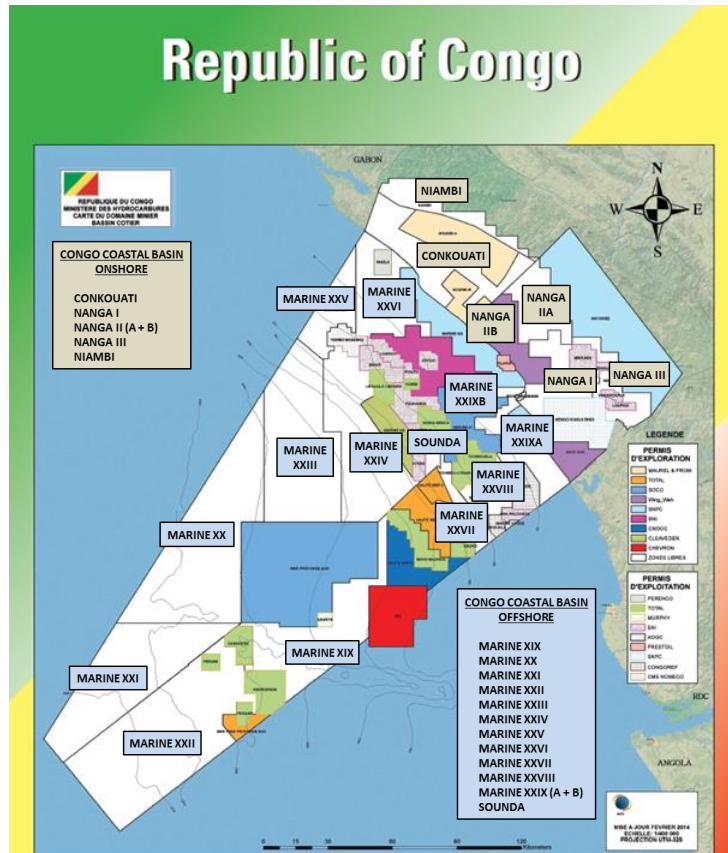
### Interior Basin (Cuvette Congolaise)

6 Blocks available

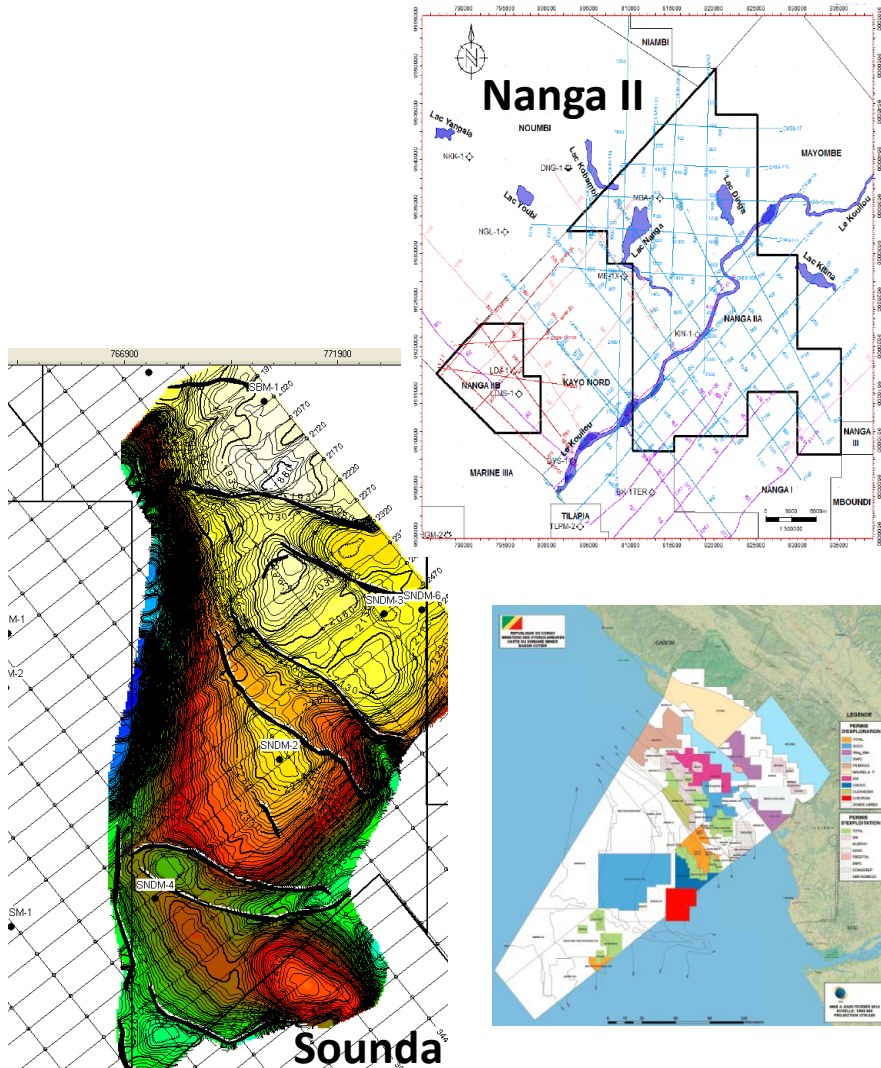
Intra-cratonic basin aged  
from Proterozoic to  
Cenozoic

Evolution linked with  
movement of cratonic  
shield (rifting and thermal  
subsidence, followed by  
flattening, the terminal  
phase of erosion)





Consists of both onshore and offshore areas



## More than 17 open blocks in the Coastal Congo Basin

**Onshore: 5 open blocks with Pre-salt targets  
(Vandji sst , 1700-2000 m TVDSS deep)**

**- Nanga (I, II and III) :**

- Acreage (Nanga II): > 687 sq. km
- Resources : Nanga II\_A (Kitombo prospect 35 Mbbbls unrisked reserves)

**Offshore: 12 open blocks in:**

- Shallow Water (0-500m water depth)
- Deep Water (500-2,000m water depth)
- Ultra Deep Water (>2,000m water depth)

- Sounda

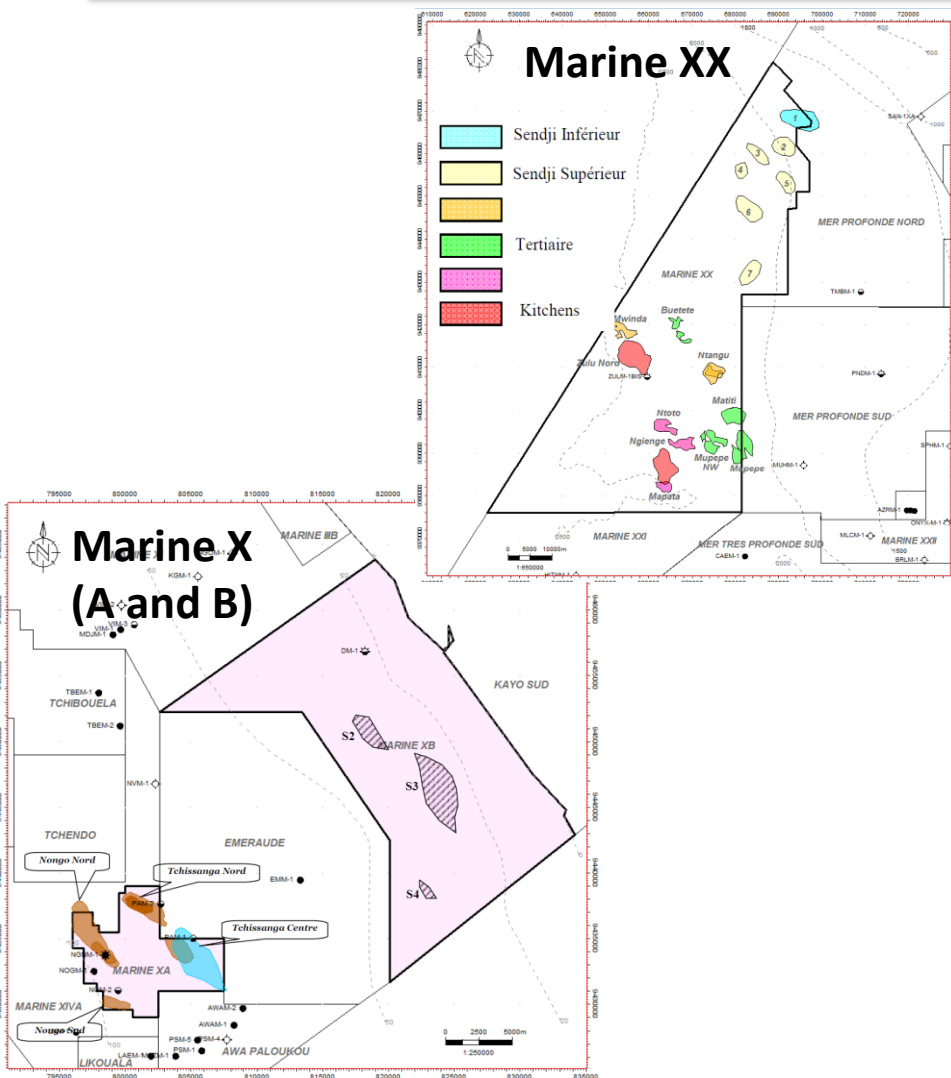
- Acreage : 134 sq. km
- Water depth: 100-200 m
- Targets and depth : Intra-Albian (1,600 m–3,000 m TVDSS)
- Resources : 5,000 Mbbls, RF : 25%

**- Marine XXI**

- Acreage : 2,338 sq. km
- Water depth : Deep Water
- Targets and depth : Tertiary (Oligo-Miocene channels)
- Resources : 100 Mbbls of recoverable reserves

# Opportunities in Republic of Congo

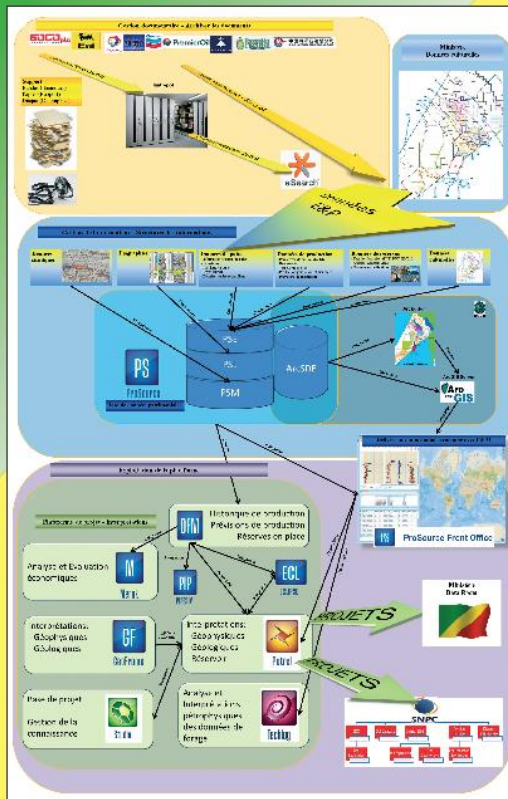
## Coastal Congo Basin (Côtier)



- **Marine XX**
  - Acreage : 3,338 sq. km
  - Water depth : Deep Water area
  - Targets and depth : Tertiary (Oligo-Miocene channels), Lower and Upper Sendji
  - Resources : 646 Mbbls, numerous leads identified
- **Marine X (A and B)**
  - Acreage : A = 66 sq. km and B = 352 sq. km
  - Water depth : < 60 m for Block B and 70-100 m for Block A
  - Targets : Intra-Albian, Cenomanian, Seno-Turonian and Neocomian
  - Resources : 480 Mbbls
- **Other Open Blocks :**
- **Onshore**
  - **Conkouati** : 111.84 sq. km
  - **Noumbi** : 2,187.45 sq. km
- **Offshore :**
  - **Marine XVII** : 274.20 sq. km
  - **Marine XVI** : 341.48 sq. km
  - **Marine XVIII (A and B)** : 70 sq. km and 216 sq. km
  - **Marine XXII** : 2,181.45 sq. km
  - **Haute Mer D** : 113.39 sq. km



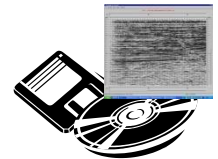
# Republic of Congo



## Database Workflow



## Retrieval of E&P data, in order to set up National Database Repository:



- ✓ Well data : 1,500 wells
- ✓ Seismic : > 100 2D and 3D seismic surveys
- ✓ Well logs : 250,000 well logs of different types
- ✓ Hard copy documents and reports 150,000+





# Opportunities in Republic of Congo

## Exploration Activities

- **Geophysics**

- 2D seismic  $\approx 225,000$  km
- 3D seismic  $\approx 30,000$  sq. km
- 4D seismic  $\approx 150$  sq. km
- AirMag  $\approx 100,000$  km
- AirGravi  $\approx 50,000$  km

- **Wells**

- Exploration  $\approx 200$  wells
- Appraisal  $\approx 130$  wells
- Development  $\approx 1,500$  wells

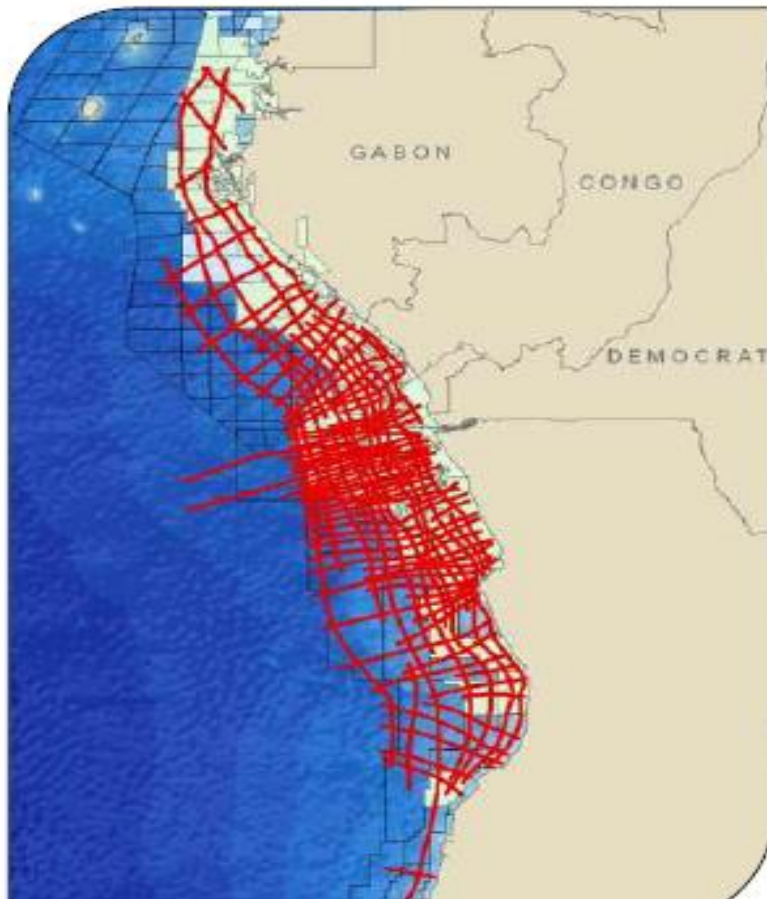
- **Key Projects**

- CongoSpan 2D Project
- Congo MegaSurvey 3D Project

# Opportunities in Republic of Congo

## CongoSpan 2D Project

### CongoSPAN I & II

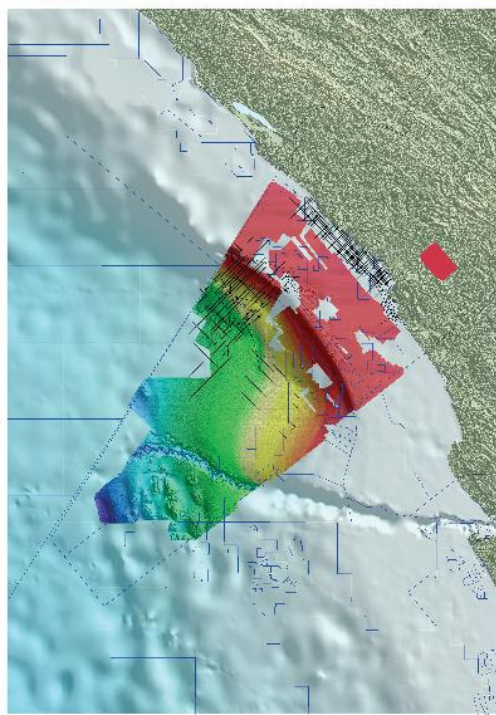


- **Phase I & II - 26,950 km**
  - Acquired - 2004-2007
  - CongoSPAN I - 13,000 km
  - CongoSPAN II - 13,950 km
- **Countries Covered**
  - Angola
  - Congo
  - Gabon
- 10 km cable, 18 s records
- Data Available for immediate delivery
- **Reimaging of Phase I - 13000km**
  - Complete

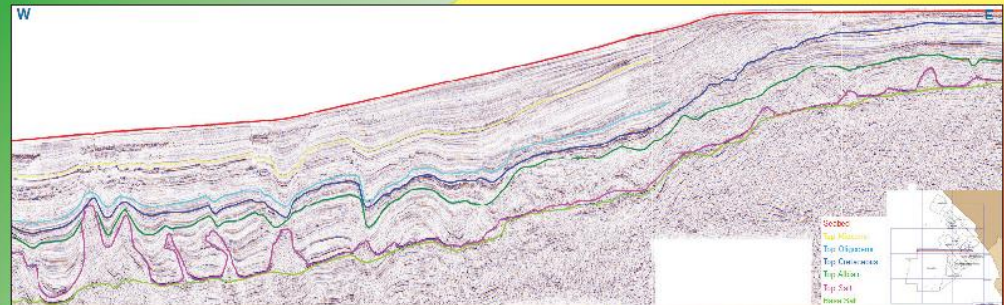
# Opportunities in Republic of Congo

## Congo MegaSurvey 3D Project

### Republic of Congo



### Republic of Congo



**PGS MegaSurvey  
Regional Section**



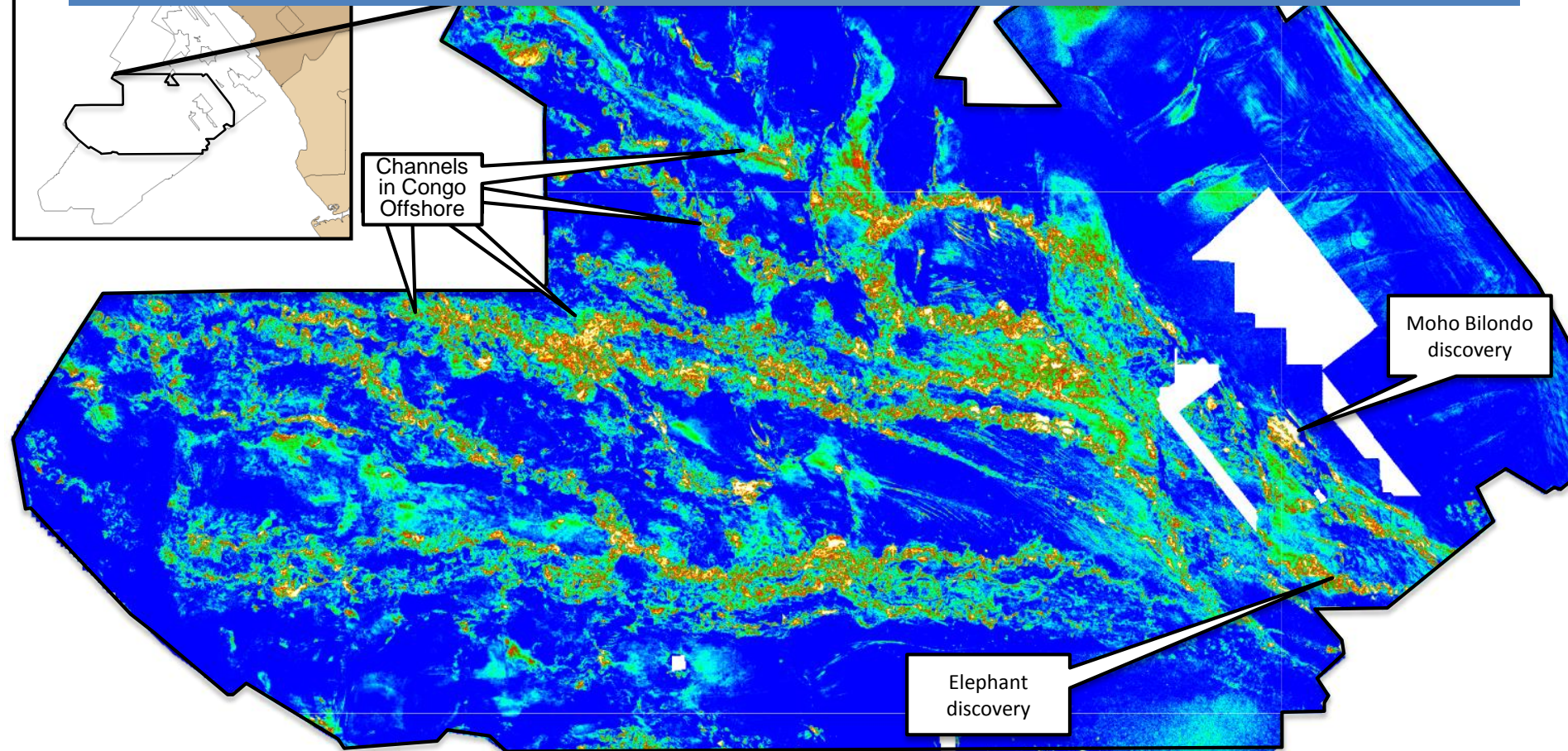


# Opportunities in Republic of Congo

## Congo MegaSurvey 3D Project

### RMS MAP UPPER MIOCENE (100ms WINDOW)

- Channel system imaged on RMS map provides several leads analogous to the Moho-Bilondo and Elephant discoveries
- Regional view permits leads to be linked with discoveries and provides a better understanding of the overall petroleum system, including source of sediments and transport direction





# Opportunities in Republic of Congo

## Summary

- **Perspectives**
  - Interior basin blocks available – drilling first wildcat well
  - Restart and development of former fields (MKB permit)
  - Development of marginal fields
  - Development of gas resources and reserves (Marine XII permit)
- **Attractive & Competitive Opportunities**
  - Finalising review of Hydrocarbon Code
  - PSCs, JOA, Farm In/Out opportunities
  - Numerous open blocks - International Licence Round planned for H1 2014
    - Known residual potential  $\geq 858$  MMbbls of possible reserves
      - Deep & Ultra Deep Tertiary prospectivity (MPN, MPS, MTPS, Haute Mer A , ...)
      - Valuable Onshore and Offshore Pre-salt prospectivity (**BRAZIL conjugate**)



## Opportunities in Republic of Congo



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# Thank You