



# Ministry of Mineral Resources



## Mozambique Fifth License Round

Hilton Hotel - London  
23<sup>rd</sup> October 2014

# Mozambique 5th License Round



This information is provided by INP as an introduction to the Mozambique 5<sup>th</sup> License Round.

Bid applications will close on Tuesday 20<sup>th</sup> of January at 12:00 noon.

For further details, information about data packages and data rooms please contact:

## **INP - Institute National Petroleum**

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Maputo  
Mozambique  
**Tel:** +258 21 320 935



### **Carlos Zacarias**

*Exploration Manager* [carlos.zacarias@inp.gov.mz](mailto:carlos.zacarias@inp.gov.mz)

### **Jose Branquinho**

*Project Manager* [jose.branquinho@inp.gov.mz](mailto:jose.branquinho@inp.gov.mz)

## **ERCL – Exploration Reservoir Consultants**

Dragon Court  
15 Station Road  
Henley-on-Thames  
Oxon RG9 6HY – UK  
**Tel:** +44 1491 578117



### **Huw Edwards**

*Director ERCL* [huw.edwards@ercl.com](mailto:huw.edwards@ercl.com)

### **Richard Heath**

*Director ERCL* [richard.heath@ercl.com](mailto:richard.heath@ercl.com)



# Welcome



His Excellency

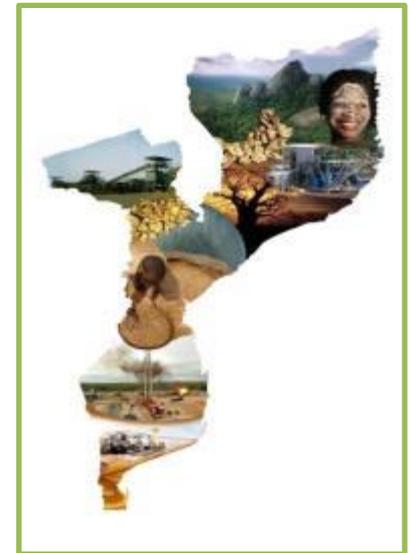
UK High Commissioner  
Republic of Mozambique

**HE Carlos dos Santos**



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# Introduction to the Panel

1. HE Carlos dos Santos                      UK High Commissioner
2. HE Esperança Bias                            Minister of Mineral Resources
3. Mr Arsenio Mabote                            INP            Chairman
4. Carlos Zacarias                                INP            Exploration Manager

# Agenda

**10:00 – 12:00**

<b>Welcome:</b>	<b>HE Carlos dos Santos</b>	UK High Commissioner, Republic of Mozambique
<b>Opening Statement:</b>	<b>HE Esperança Bias</b>	Minister of Mineral Resources
<b>Introduction:</b>	<b>Arsenio Mabote</b>	Chairman of INP

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**Legal & Fiscal:**

- Overview
- Petroleum Law
- Petroleum Regulations
- EPCC

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**Contract Areas on Offer:**

- Overview
- Technical Data
- INP - Master License Agreement
- Data Rooms

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**Application Procedure:**

- How to make an application
- Document Summary

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**Questions**

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**12:00 – 13:00**

**Networking – Tea / Coffee**



# Opening Statement



Her Excellency

Minister of Mineral Resources

Republic of Mozambique

**HE Esperança Laurinda Francisco Nhiuane Bias**





# Introduction



Chairman of INP

**Mr Arsenio Mabote**



# MOZAMBICAN INSTITUTIONS



## Instituto Nacional de Petróleo

(Institute of National Petroleum)

Chairman Arsenio Mabote

- INP is the regulatory authority for the petroleum operations (exploration, production and transport of hydrocarbons).



## Empresa Nacional de Hidrocarbonetos de Mocambique

(Mozambique National oil Company)

Chairman Nelson Ocuane

- Is the Mozambican State oil company established by Law 3/81.
- The Government shall ensure that ENH assume a leadership role in the marketing and commercialization of oil and gas as the sole representative of the State in the business
- Participates, as a stakeholder, in Petroleum Operations and Production and Transportation projects.
- Participates in the Exploration, with carried interest, in association with oil companies [in exploration].

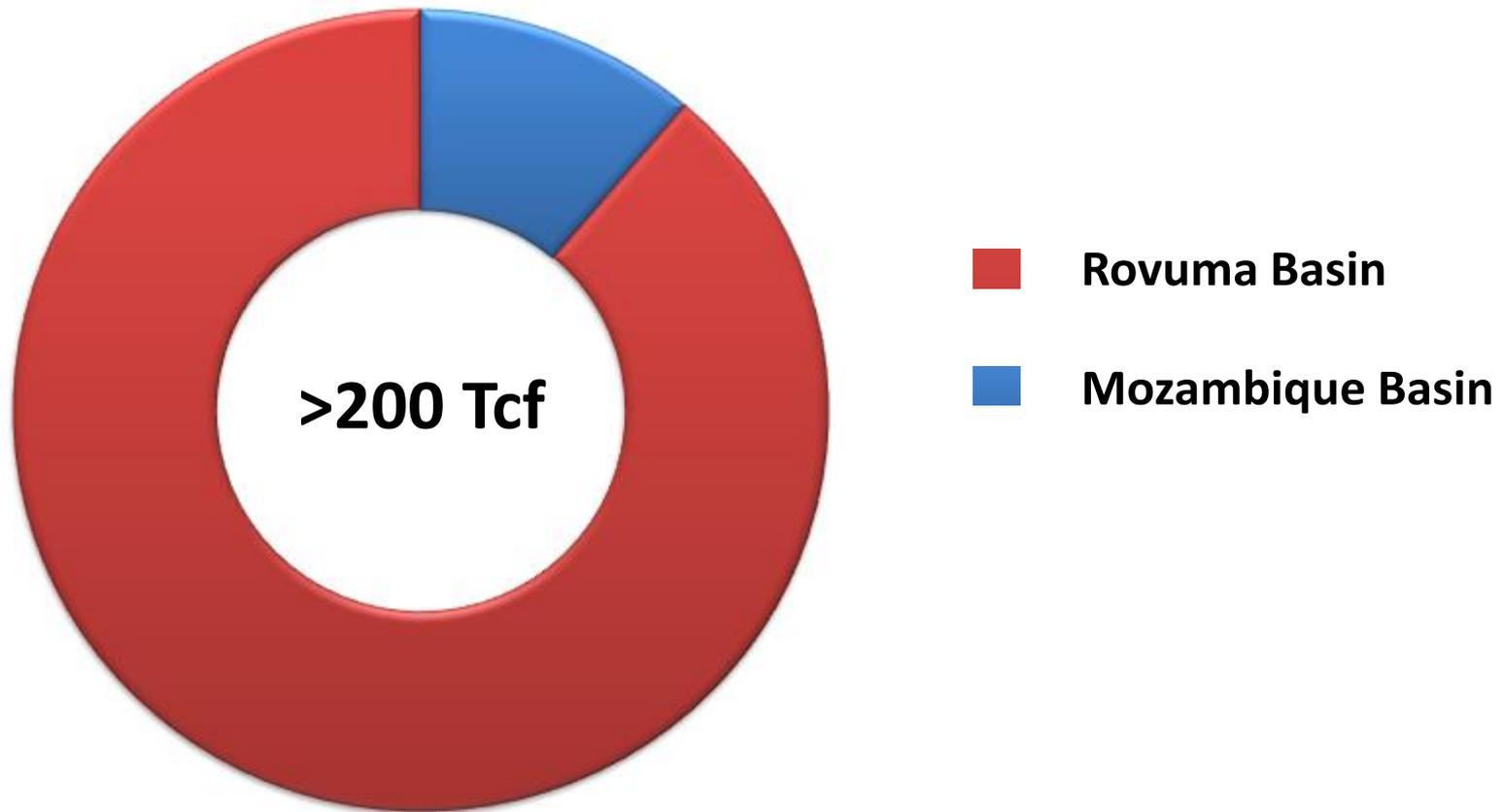
## INP MISSION

*“To manage the petroleum resources of Mozambique and administer the related operations for the benefit of the Society, and in compliance with the existing laws, government polices and contractual commitments”*

# PETROLEUM POLICY FUNDAMENTAL

- Optimal resource recovery of all petroleum resources
- Securing resource rent
- Allowing Industrial development
- Retain an efficient Petroleum regulatory and administrative regime
- Ensure production projects development and revenue collection

# MOZAMBIQUE GAS RESERVES



**Mozambique the success story continues**

# INP Licensing Strategy

## INP Exploration Strategy

- To maximise value creation from the petroleum resources in the country.

## INP Future Licensing Policy

- Licensing through open competitive bidding rounds
- Access to data / prepared data packages
- Sufficient time/resources for promotion

## INP expects companies applying for a Licenses to include;

- Regional overview
- Prospectivity analysis
- Technical work program
  - Seismic acquisition
  - Seismic reprocessing
  - G&G studies
  - Wells and TD of wells
- Duration of exploration phases
- Relinquishment Plans

# Mozambique 5<sup>th</sup> License Round Time Table

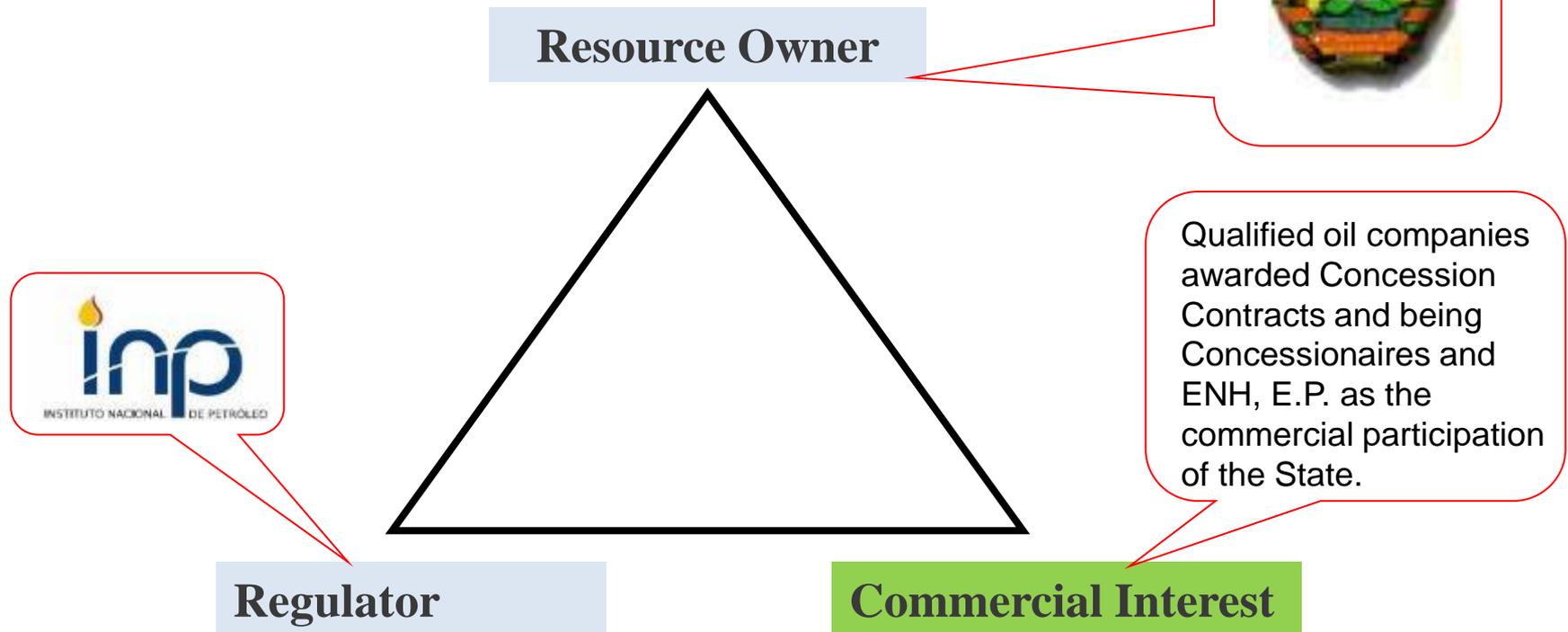
## Schedule

- Round Launched 23<sup>rd</sup> October 2014
- INP Data rooms open in Mozambique and UK (ERCL offices)
- Applications to be Submitted by 12:00 noon Tuesday 20<sup>th</sup> January 2015
- Applicant Bid Clarification Presentations expected from February 2015
- Bid Evaluation February / March 2015
- March 2015 short listed companies invited for EPCC discussions followed by EPCC awards

# Legal & Fiscal

# Organisational structure

The Petroleum Law of 2001 followed by the Petroleum Law of 2014 form the legal and regulatory foundation for granting rights to commercial entities allowing Petroleum Operations and establishing the governance structure clarifying roles and interests:



# MOZAMBIQUE Framework conditions

## Legend

Administrative law



Contract law



Petroleum  
Law  
2014

Petroleum  
Operations  
Regulations  
2004(2014)

Model Exploration and Production  
Concession Contract

Appurtenant Standard Documents

## Updated legal & regulatory structure:

- Petroleum Law 21/2014, from 18 August
- Petroleum Operation Regulations
- Updated Model Exploration and Production Concession Contract for 5th Licencing Round
- Concession Contracts only awarded to or assigned to (applicants) Concessionaires from Transparent Jurisdictions
- **Retaining requirement for EPCC standards:**
  - JOA,
  - AFP,
  - Bank Guarantee for Obligatory Work Commitments,
  - Ultimate Parent Company Guarantee for Development, Production & Decommissioning
- **Possibility to award additional Concession Contracts separately for:**
  - Reconnaissance (non-exclusive)
  - Oil Pipeline and Gas Pipeline System
  - Facilities other than those encompassed by EPCC
- **New PL 2014 rules regarding:**
  - Disclosure of extraterritorial collaboration arrangements
  - Publication of EPCC's
  - Natural Gas offtake
  - Domestic market requirement : 25% of the oil and gas produced in the national territory must be allocated to the national market
  - Role and content of ENH participation and activities
  - Local content & local communities requirements
  - Registration of companies

# Mozambican Regulatory System - EPCC

## Legend

Administrative law   
Contract law 

Model EPCC 2015

Petroleum Operations  
Regulations 2014

Petroleum Law 2014

Core Elements of the Petroleum legal and regulatory structure:

- New Petroleum Law No. 21/2014 of 18 August
- Petroleum Operations Regulations established through Decree of 20 August 2004 to be amended consistent with Petroleum Law 21/2014 requirements
- Updated Model Exploration and Production Concession Contract to be updated consistent with amended Petroleum Operations Regulations
- Fiscal Law No. 27/2014, from 23 of September on Petroleum Operations

# Petroleum Legal & Regulatory Framework

## Legend

Administrative law   
Contract law 

Model EPCC 2015

Petroleum Operations  
Regulations 2014

Petroleum Law 2014

- The updated Petroleum regulatory framework evolving from previous framework system and creating the basis for regulatory consistency, transparency and predictability in Mozambican Petroleum policy implementation
- New framework forms the basis for clarification of resource management responsibilities and State interests in the upstream Petroleum sector
- The Petroleum Law, Petroleum Operations Regulation and model documents:
  - Implement a more consistent legal hierarchical structure
  - Remove superfluous regulation in Model EPCC's as certain legal aspects have been incorporated in PL 2014 and will be detailed in updated POR 2014
  - Retain structure of EPCC and its appurtenant standard and required agreements and declarations

# Petroleum Legal & Regulatory Framework

## Legend

Administrative law



Contract law



**Petroleum  
Law  
2014**

**Petroleum  
Operations  
Regulations  
2004 (2014)**

**Model Exploration and Production  
Concession Contract**

Appurtenant Standard Documents

- The updated EPCC will be subject to non-biddable or negotiable requirements such as:
  - Corporate Income and Capital Gains Tax regime that is stabilized on a time limited basis
  - Petroleum Production Tax (Royalty)
  - Production Sharing based on standard R-Factor calculation formulae
  - Standard Decommissioning Fund establishment and calculation
- EPCC bid items:
  - Duration of Exploration Period and subdivision into phases (max 8 years)
  - Obligatory work commitment and Bank Guarantee thresholds
  - Participating Interest
  - Operator
  - Production bonus
  - Training and Institutional Support
  - Decommissioning Fund minimum deposit at establishment of Fund Escrow Account

# Petroleum Operations Fiscal Regime

## New fiscal Law for Petroleum Operations, Law N°. 27/2014, of 23<sup>rd</sup> September:

### Legend

Administrative law



Contract law



**Petroleum  
Law  
2014**

**Petroleum  
Operations  
Regulations  
2004 (2014)**

**Model Exploration and Production  
Concession Contract**

Appurtenant Standard Documents

- Applies to all Mozambican and foreign entities performing Petroleum Operations under a Concession Contract
- Corporate Income Tax at 32% to be paid in local currency
- Petroleum Production Tax (or royalty)
  - taken in kind or in cash
  - with a gross rate for Crude Oil of 10% and for Natural Gas 6%
  - Rate will be reduced if Production is for national industry use.
- Withholding tax at 10% on gross contract value
- Cost recovery ceiling 60% of the Disposable Petroleum
- Fiscal benefits

# Concession Contract Areas on Offer

Presented by:

Carlos Zacarias

INP

Exploration Manager

# Concession Contract Areas

## 1. Overview of the Areas

- Naming Convention

## 2. Technical Data

- INP Technical Data
  - Data License Agreement
  - Data Rooms
- Multi Client Data Projects Available
  - ERCL
  - Schlumberger
  - Corelab

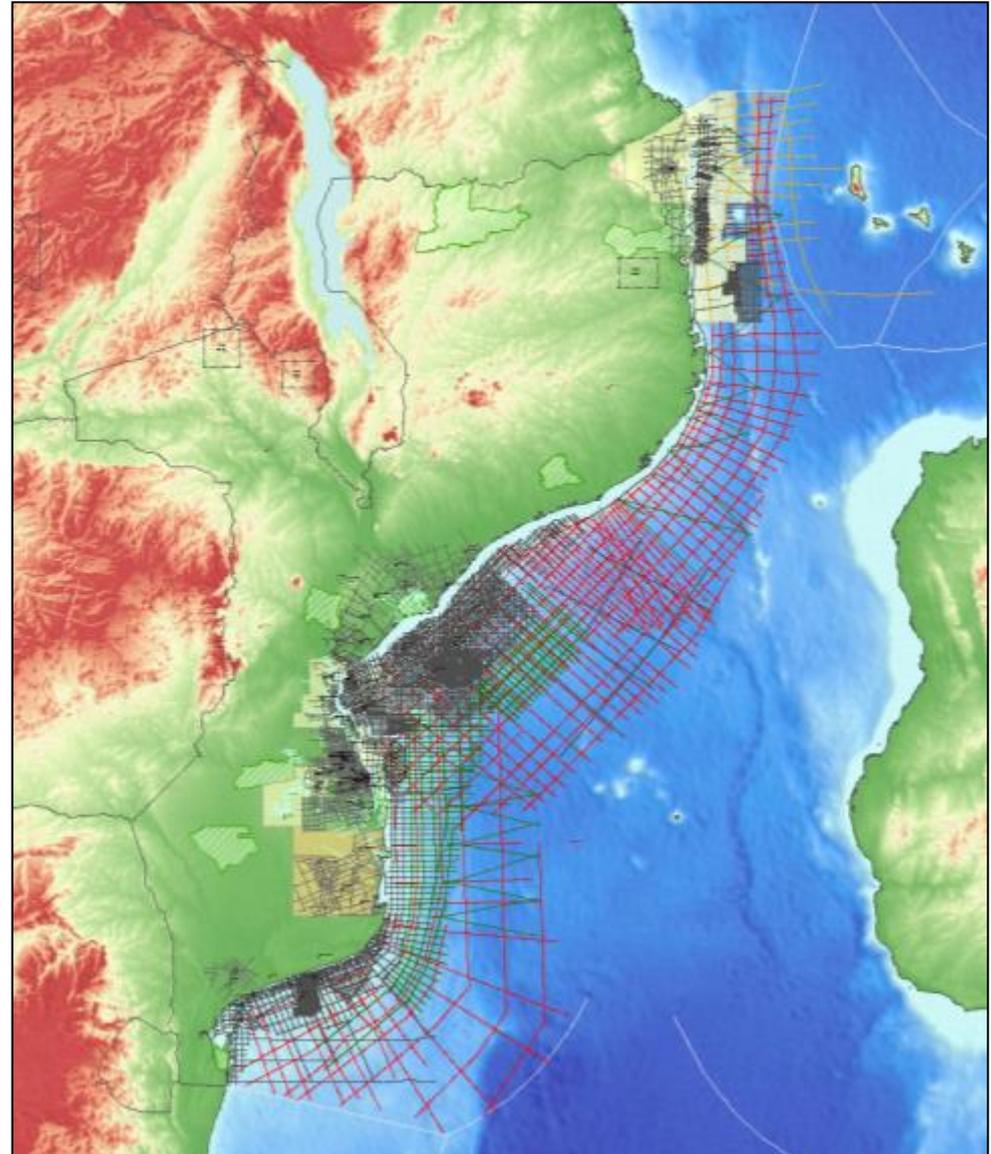
## 3. Contract Areas

- Rovuma
- Angoche
- Zambezi
- Pande / Temane Region
- Palmeria



# Areas

- **Overview of the Areas**
  - Naming Convention
- **Technical Data**
  - INP Technical Data
    - Data License Agreement
    - Data Rooms
  - Multi Client Data Projects
    - ERCL
    - Schlumberger
    - Corelab
- **Contract Areas**
  - Rovuma
  - Angoche
  - Zambezi
  - Pande / Temane Region
  - Palmeria



# Technical Reports & GIS Projects

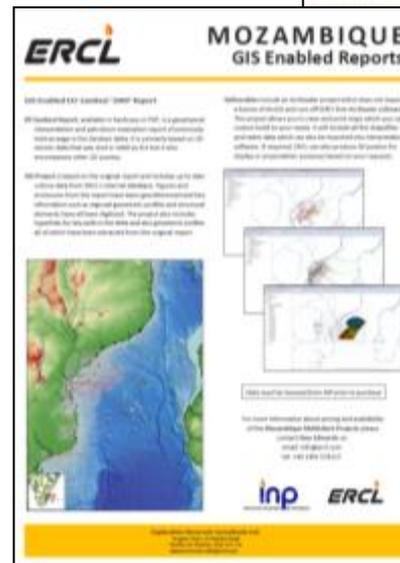
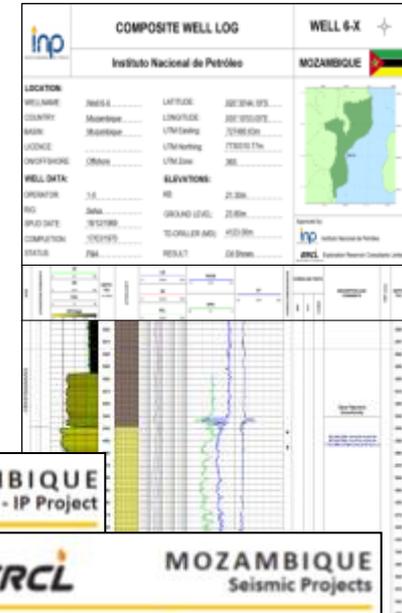
Data room in INP offices Maputo

Data room in ERCL offices (Henley-on-Thames, UK)

Under new INP Standard Master License Agreement

## Prepared in conjunction with ERCL

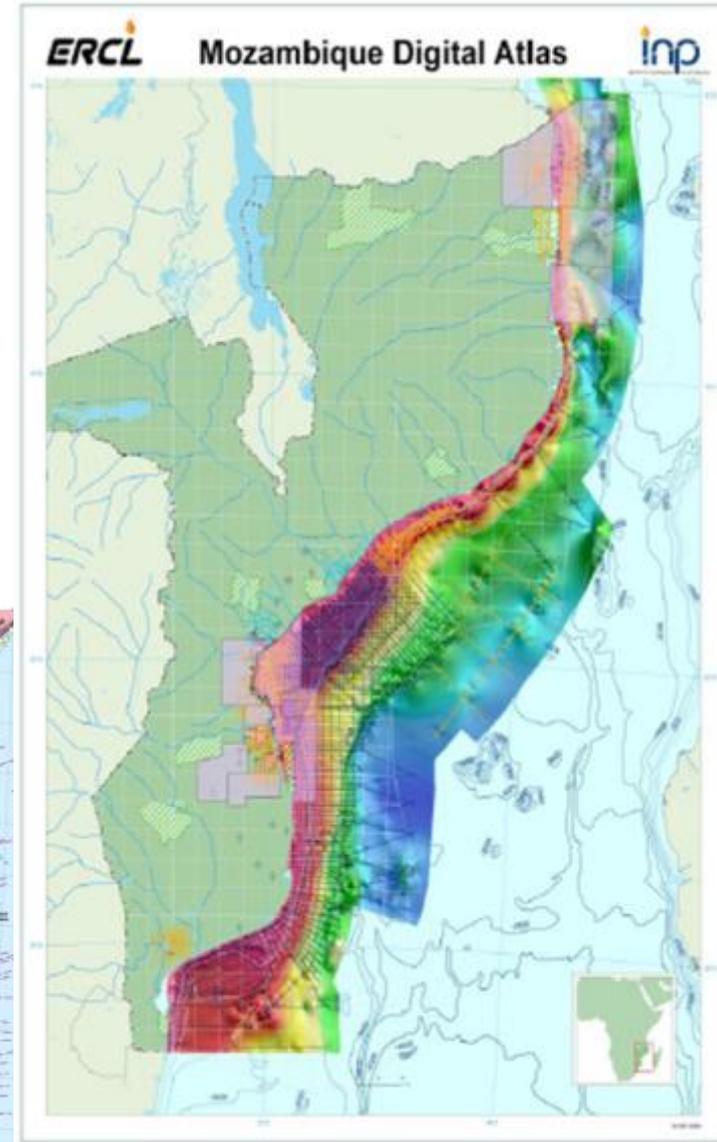
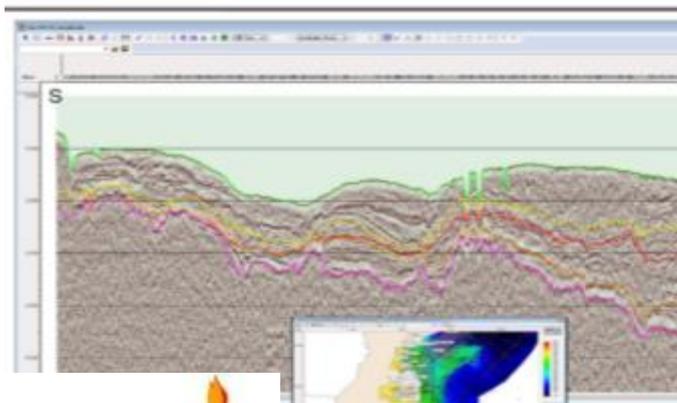
- Technical Reports
- Well Data
- Seismic Data
- GIS Projects
- Workstation Projects
- Comprehensive data listings





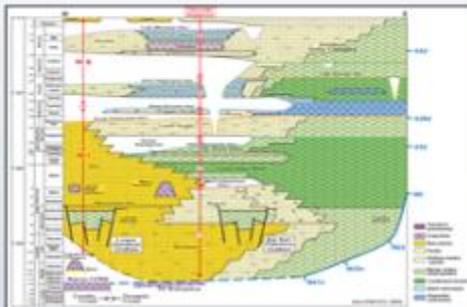
# MOZDA - Mozambique Digital Atlas

- **A regional framework of Mozambique**
  - Wells, Headers, Formation Tops,
  - Seismic Stratigraphic Framework
  - Key Horizons
  - Potential Field Data
- **Industry standard formats**
  - GIS
  - Kingdom
  - WEB / e-portal



# MOZDA - Well Summaries

## Well: INHAMINGA HIGH-1

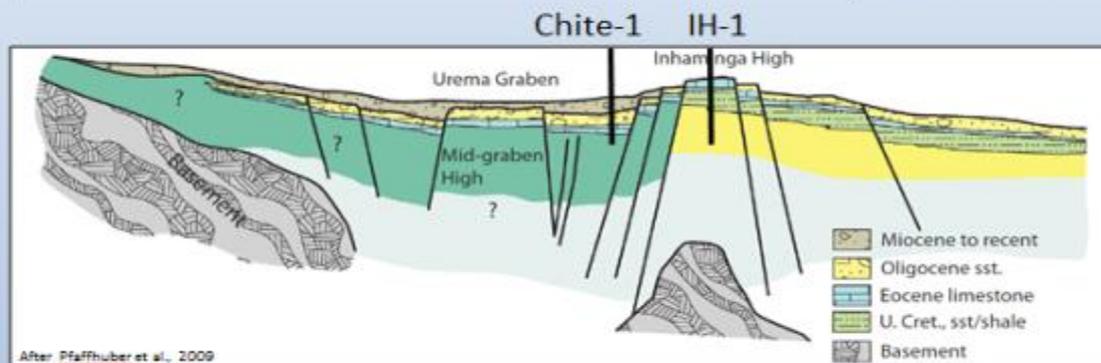


This well was spudded on 13<sup>th</sup> February 2011 by DNO Mozambique. It was the second well located on the Inhaminga Block and was located on the rift shoulder of the Urema Graben 5.3 km ESE of Chite-1.

The primary objective was the Jurassic sandstone beneath the Lupata Gorge volcanics. There is little information about these sandstones.

The secondary objective was the Cretaceous Sena Formation, which is represented by continental deposits time equivalent to the marine Domo Formation. While the Domo Formation has been encountered in earlier DNO wells, the Sena Formation was identified only in Well Corone-1, lying between the overlying Upper Grudja and the Domo Shale. Elsewhere, the Sena Formation has been penetrated in the Pande - Temane region, where porosities in the range 14 to 23% have been measured. The adjacent Domo Shale is regarded as a potential source rock for this reservoir.

Age		Stratigraphy	Thickness (m)	Depth (m)	Wellbore	Source Rock	Notes
CRETACEOUS	UPPER	GRUDJA FM	127	462	12		
	UPPER	DOMO FM	102	28	124		
	UPPER	DOMO FM	18	28	232		
	UPPER	DOMO FM	221	286	402		DST at 451-467m. See Note 1 to surface.
CRETACEOUS	UPPER	SENA FM	981	2169	2174		
	UPPER	JURASSIC SANDS	100	2269	2364		
	UPPER	JURASSIC VOLCANICS	418	2269	2687		
	UPPER	LETABA BASALT	100	2671	2771		
	UPPER	JURASSIC SANDS	80	2685	2765		



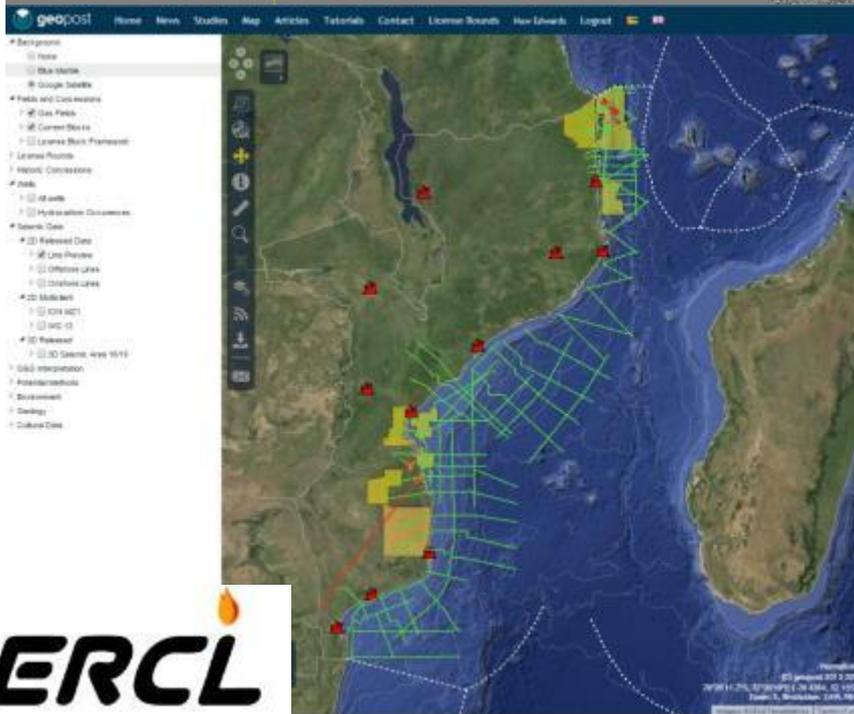
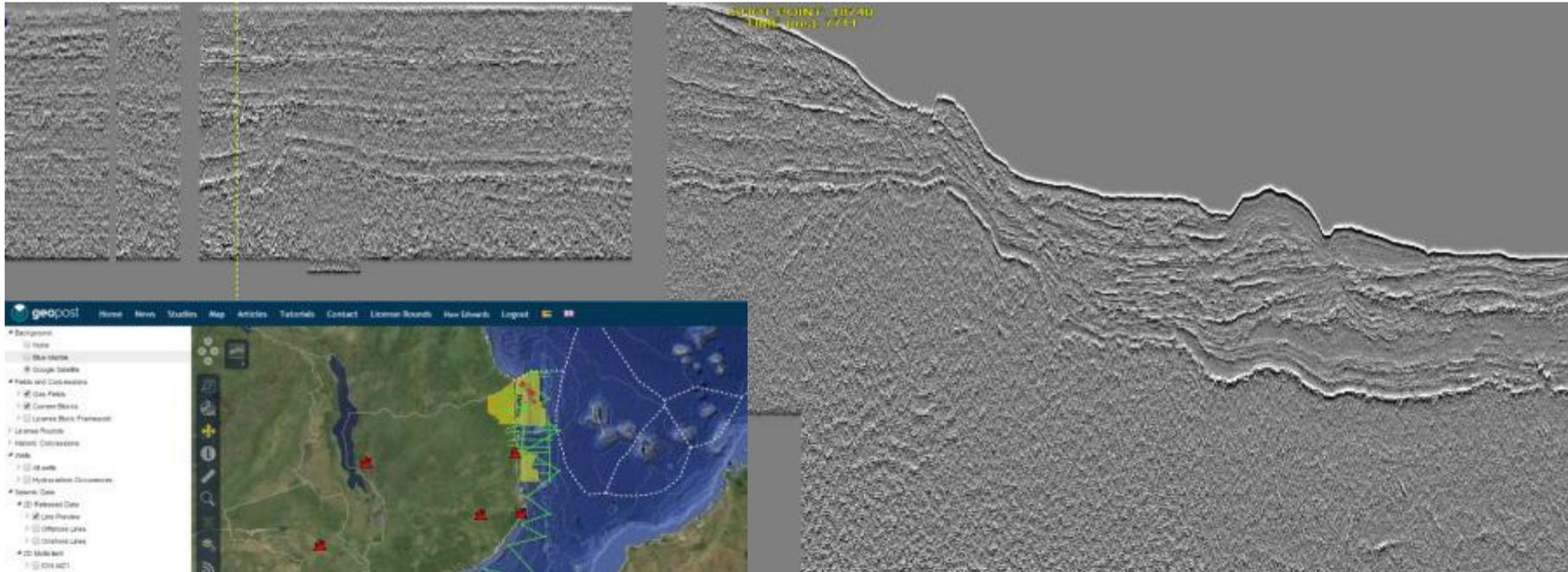
After Pfaffhuber et al., 2009

**Results:** Background gas remained very low throughout the well. The mud logger's chromatograph and FID were regularly calibrated and were regarded as being reliable. No hydrocarbon shows were observed at any point in the well. One DST was run from 451-467m in the Sena Formation but no flow to surface was achieved, consequently the well was plugged and abandoned.

The Upper Jurassic target sands were largely composed of quartz with some lithic clasts, and an argillaceous matrix. The occasional presence of calcium carbonate nodules (Caliche) suggests a semi-arid environment. It is likely these sands represent outwash fans. The porosity and permeability were generally poor because of the argillaceous matrix.



# MOZDA - Composite Regional Seismic Lines



## Regional Onshore / Offshore Seismic Grid

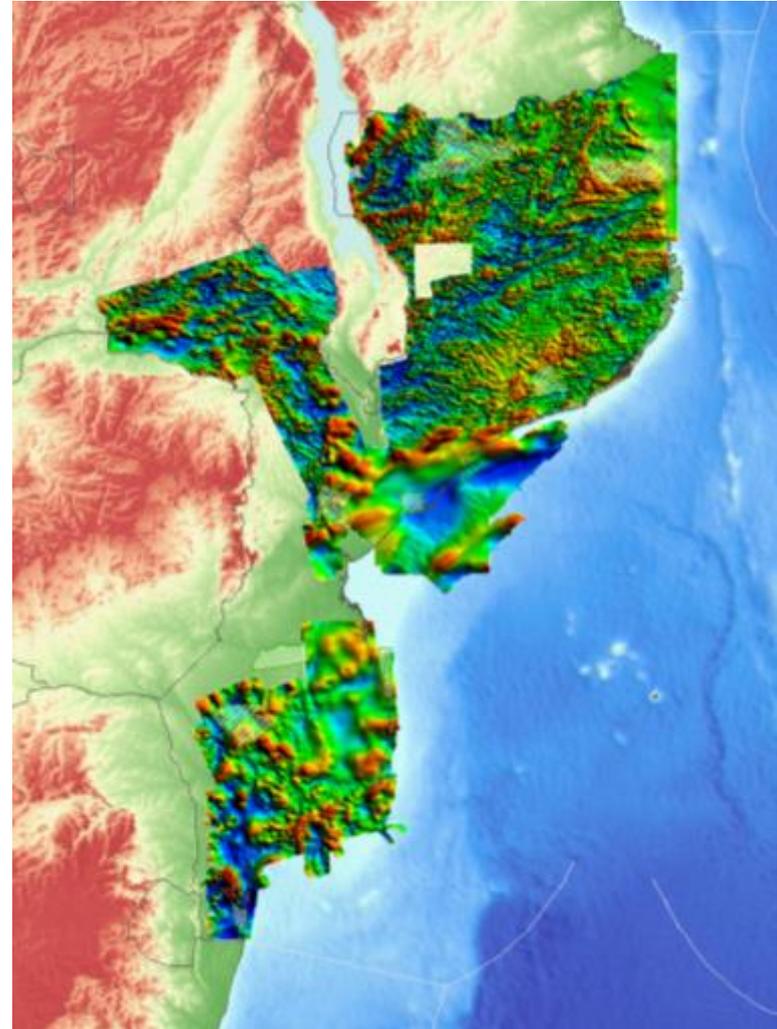
- SEG Y
- Link Wells

## Deliverable – MOZDA

(Mozambique Digital Atlas)

# MOZDA – Regional Potential Field Data

- Regional potential field data
  - Published satellite data
  - Published gravity data (Sandwell & Smith)
  - Compiled airborne, land and marine gravity
  - Compiled airborne, land and marine magnetics
  - G&M profiles for selected regional seismic composite lines
- Delivered within GIS as image and grid files



Well Data is available to license from INP:

## 1. INP / ERCL

- 79 Released Wells
- New Well Summary Sheets
- New Well Composites
- New HQ LAS Files
- New IP Petrophysics

## 2. Core Lab

- Regional Reservoir and Seal Study of the Basins of Mozambique

# Well Data Packages

Released wells can be licensed as a well package on a well-by-well basis through INP/ERCL. A well package will typically include;

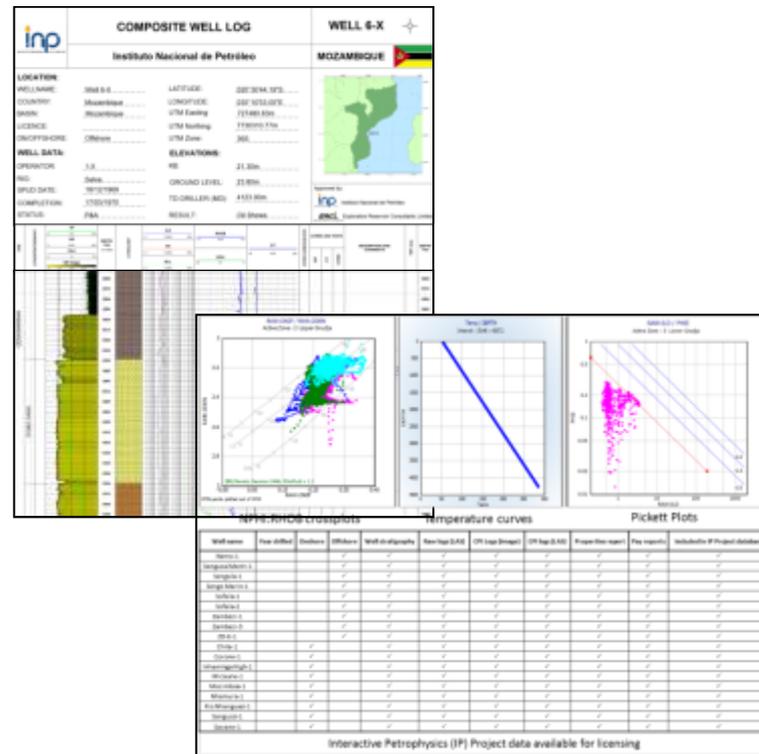
## BASIC PACKAGE

- Well Summary Sheet
- Composite Log
- Digital LAS data
- Time depth data
- Synthetic well ties

## ENHANCED PACKAGE

(where data is available)

- Reports/documents pertinent to the Well; including Final Well Reports (FWR), Engineering Reports, Contractor Reports
- Petrophysics
- Special Well Analysis
- Core



# Key Wells

Well name	Year drilled	Operator
Chite-1	2010	DNO
Corone-1	2004	DNO ASA
Inhaminga High-1	2011	DNO ASA
Micaune-1	1966	Gulf
Mocimboa-1	1986	Esso/Shell
Nhamura-1	1971	Aquitaine
Rio Nhanguazi-1	1971	Aquitaine
Sangussi-1	2008	DNO ASA
Savane-1	2004	DNO ASA

## 9 Onshore key wells

Well name	Year drilled	Operator
Nemo-1X	1969	Gulf Oil
Njika-1	2008	Sasol Petroleum
Njika-2	2009	Sasol Petroleum
Sangussi Marin-1	1971	Aquitaine
Sengala-1	2000	Sasol Petroleum
Sengo Marin-1	1971	Aquitaine
Sofala-1	1970	Gulf Oil
Sofala-2	2000	Sasol Petroleum
Zambezi-1	1970	Hunt Petroleum
Zambezi-3	1971	Hunt Petroleum
Z-DE-1	2007	Petronas Carigali

## 11 Offshore key wells

Regional rock-based study – unique data package covering:

## 1. Reservoir Geology

- Reservoir description
- Reservoir quality and properties (core analysis, petrography ts/xrd/sem, rock-typing)
- Petrophysical log analysis

## 2. Seals

- Evaluation of lithological properties and sealing capacity

## 3. Stratigraphy

- Lithostratigraphy
- Biostratigraphy
- Cyclostratigraphy

A JOINT STUDY BY INP AND CORE LABORATORIES



## Deliverables:

- Integrated Regional Report
- GIS Enabled Database
- Digital Data Set
- HTML Browser Version
- RAPID Database
- ODM Database
- Final Presentation/Workshop



Core Laboratories Integrated Reservoir Solutions



Seismic Data is available to license from 3 parties:

## 1. INP / ERCL

- Oil Company released seismic data original processing
- Oil Company reprocessed released seismic data
- INP Regional composite seismic lines Onshore / Offshore

## 2. ION

- MC Seismic 2011 (Regional SPAN seismic - Rovuma Area)

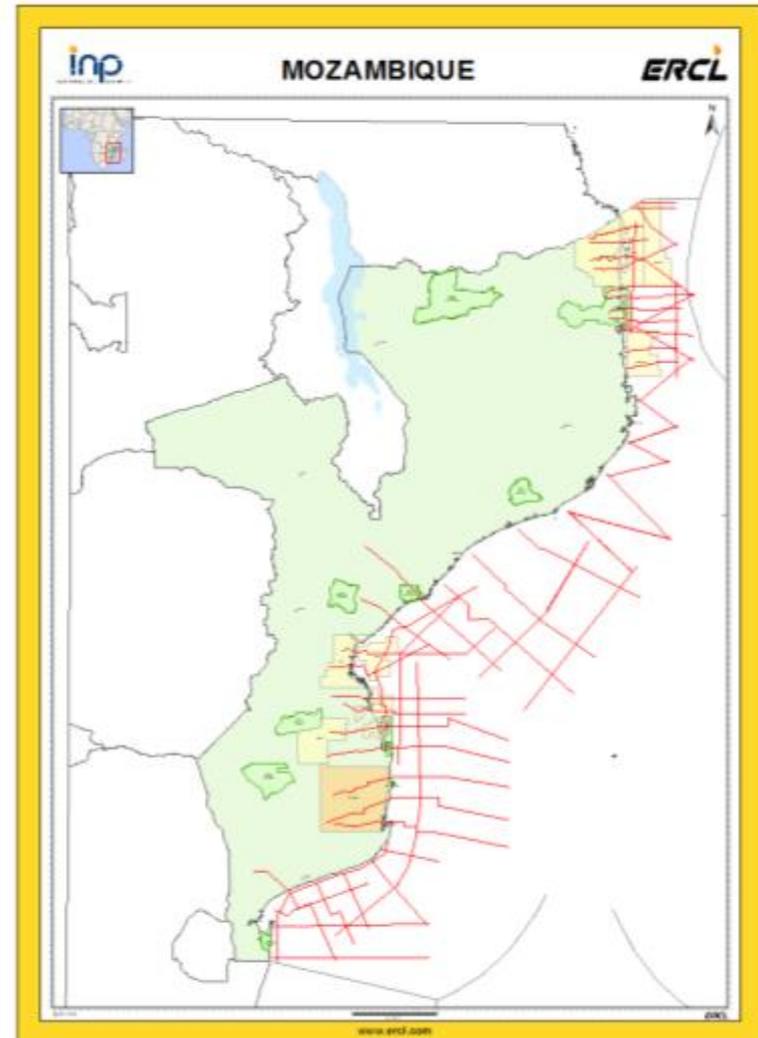
## 3. SCHLUMBERGER

- MC Seismic 2013 Regional Survey
- Brokered Seismic Reprocessed Seismic

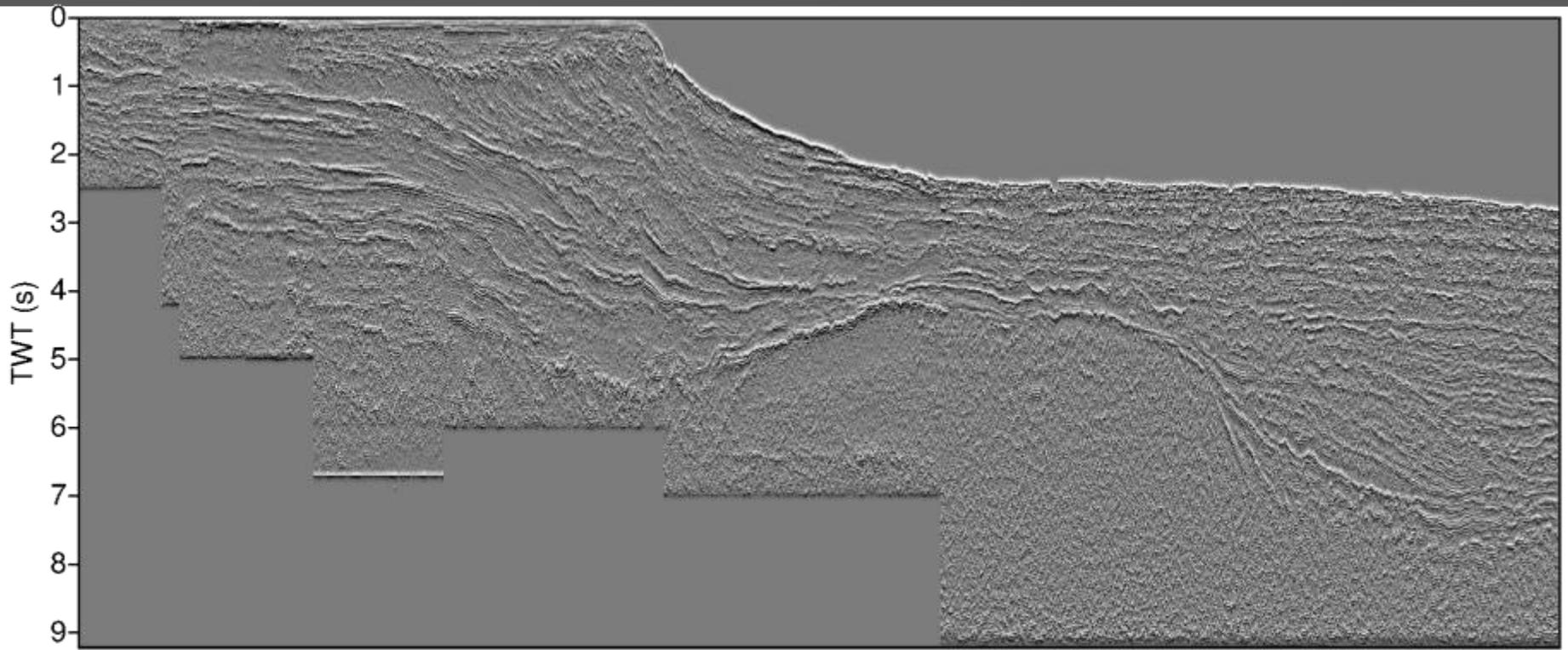


# MOZDA – Regional Composite Lines

- Regional composite profiles
  - Onshore-offshore lines, over 50 profiles and over 16,500 kms 2D seismic
  - Provide regional Seismic Stratigraphic Framework
  - Five regional horizons
  - Composite lines vary from 90 to 735 kms in length
- Industry standard formats
  - SEGY for composite lines
  - Interpreted horizons available as grid files
  - Geoseismic sections
- Selected in collaboration with INP
- Discounted fees for volume purchases



# MOZDA – INP Composite Line INP-32



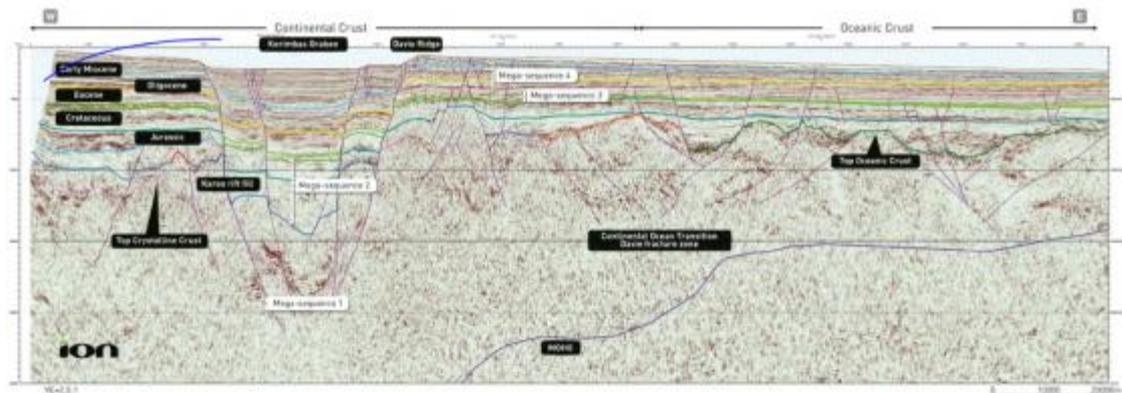
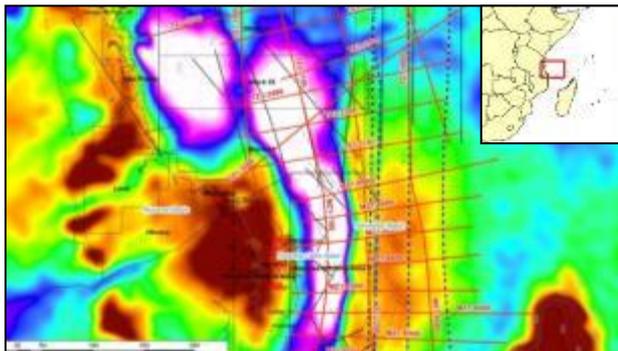
75 km

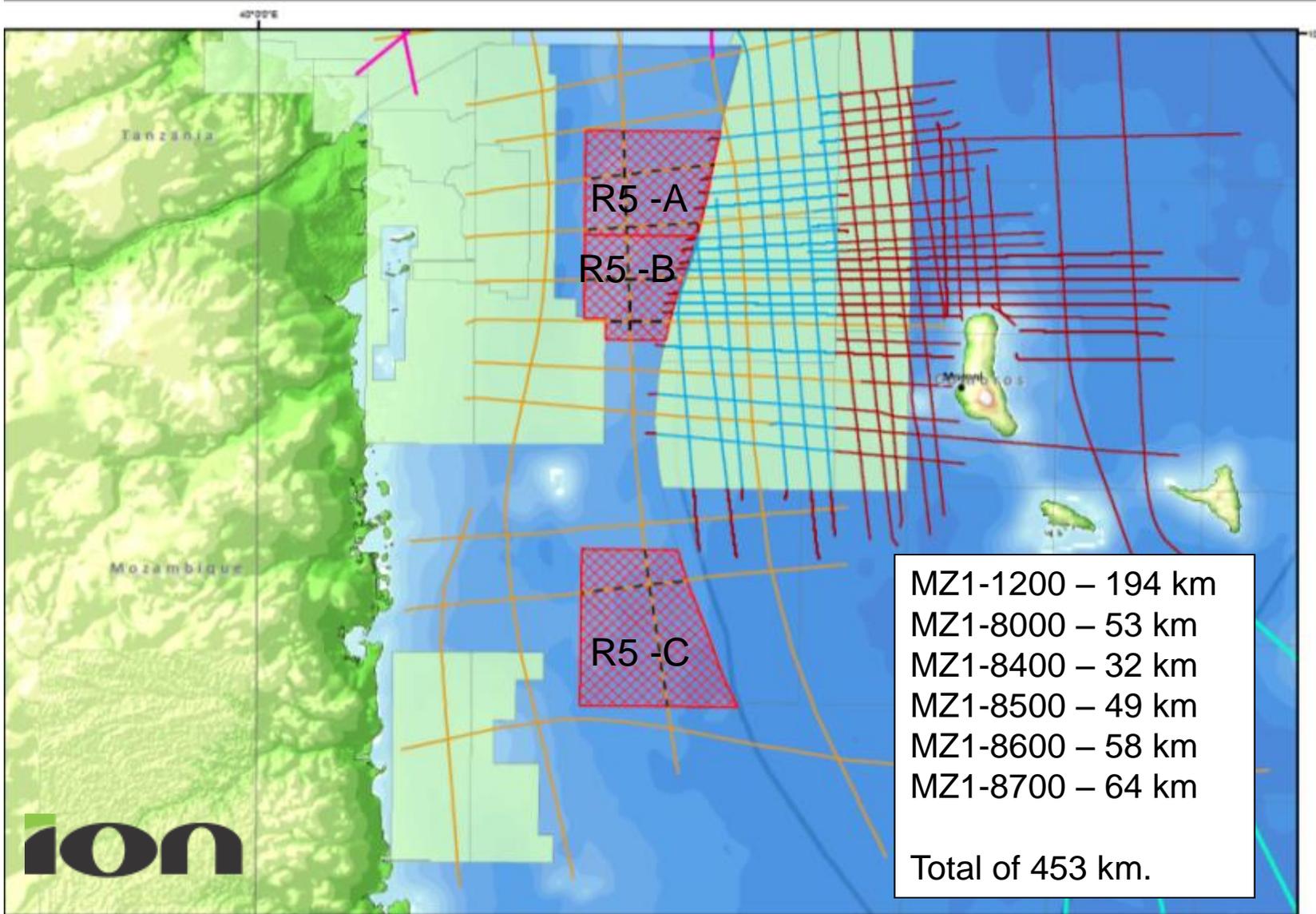
1:1,600,000



On behalf of The Government of Mozambique , ION Geoventures is offering 2477 kms of 2D SPAN seismic data acquired in 2011 as part of the EAST AFRICA Geological Study of Mozambique, Kenya, Tanzania, Madagascar, Comoros and the Seychelles

- SPAN Data is characterized by regional lines of long offset (10 kms ) and long record (18 seconds) data.
- Pre stack time and pre stack depth Migration
- Gravity and magnetic data





## Data License Fee includes following data deliverables:

- Seismic data: Pre Stack Time Migration , Pre Stack Depth Migration
- PSDM Depth Interval Velocity Model
- PSTM Velocity Model
- PSTM Angle Stacks
- PSTM, PSDM Gathers
- RMO PSTM, PSDM Gathers
- Acquisition and Data Processing Report
- Raw and final Navigation data
- Final Interpretation Report
- Gravity and Magnetics Data



## Key Acquisition Parameters

<b>Total Km</b>	36,179.6 Km
<b>Streamer Length</b>	10,300 m
<b>Streamer Depth</b>	ObliQ* (8-35 m)
<b>Source</b>	Delta Source 6-9-6 m
<b>Shot Point Interval</b>	25 m
<b>Record length</b>	12 Sec (Continuous)
<b>Gravity and Magnetics</b>	Acquired during Acquisition

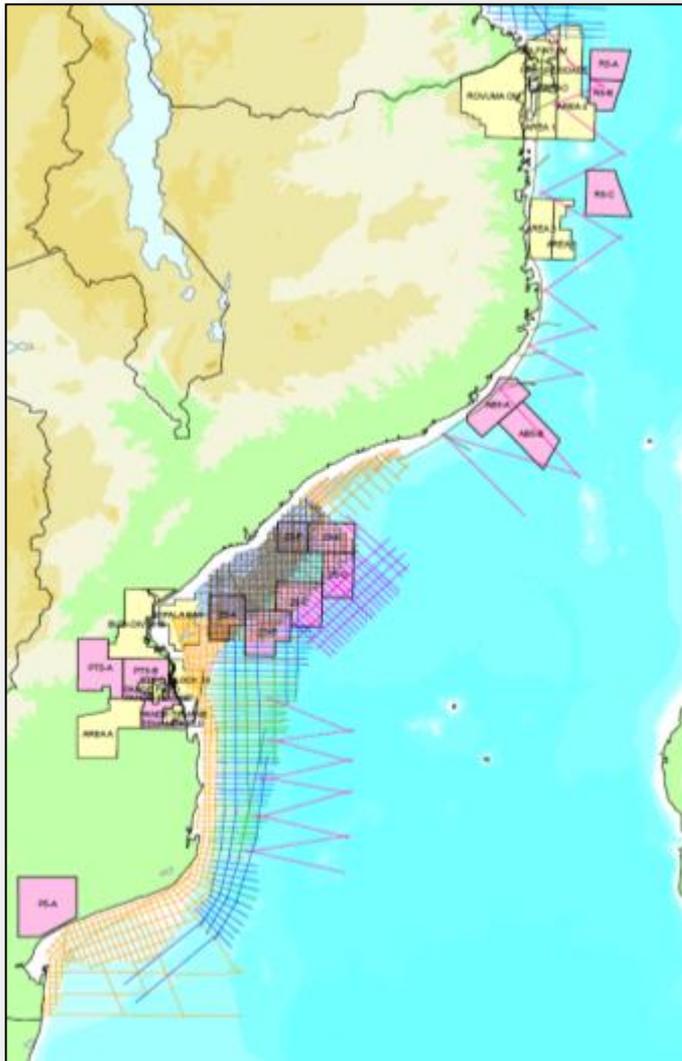
## Processing Sequence Highlights

- Single Streamer Deghosting
- 2D Surface Multiple Prediction
- Weighted Least Square (WLS) Radon
- 2D anisotropic TTI Kirchhoff pre-stack time migration
- Dense Spatially Continuous Velocity Analysis
- Angle stacks and Inversion ready gathers

## Deliverables available

- 2D Anisotropic Kirchhoff pre-stack time migration
- Migration and stacking velocities
- Navigation
- Four Angle stacks (Near, Mid, Far and Ultra Far)
- Acquisition and processing reports
- Gravity and Magnetic data
- Pre and post migration gathers

# Schlumberger Multiclient Broker Data



**Schlumberger**

Survey Name	SM81	BP98	GMR	GMC81
Year of Acquisition	1981	1998	1981/82	1981
Number of line Km	12,788	10,278	610	11,189
Record Length (s)	7	8	6	6
Sample Rate (ms)	4	2	2	2
Cable Length (m)	3000	5000	2400	2400
Fold	30	100	48	48
Group Interval (m)	50	12.5	25	25

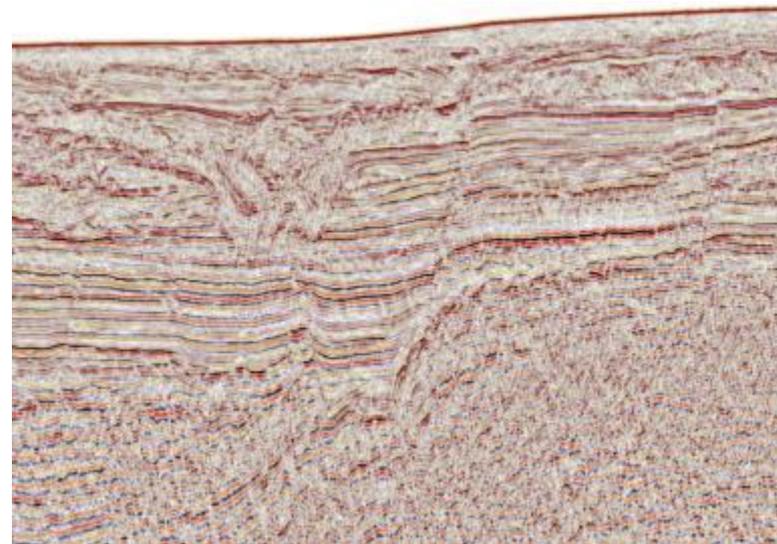
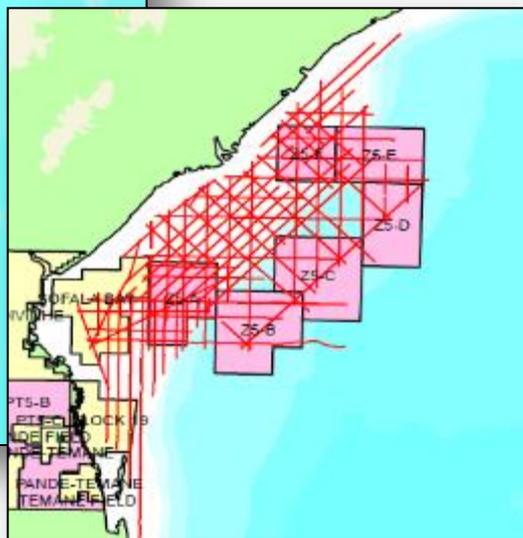
Survey Name	MBWG98	MBWG99	MBWG00
Year of Acquisition	1998	1999	2000
Number of line Km	4985Km	7222Km	3637Km
Record Length (s)	9216	9216	10
Sample Rate (ms)	2ms	2ms	2ms
Cable Length (m)	5100	5100	6000
Fold			120
Group Interval (m)	12.5	12.5	12.5

# Schlumberger Multiclient Reprocessed Data

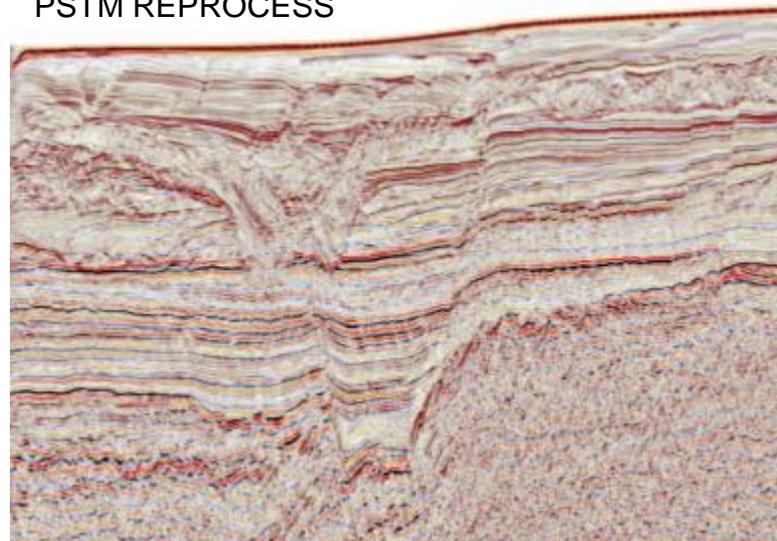


Phase I Completed 2012  
Total 15,846 Km  
Surveys MBW 98/99/00

Phase II Completed 2014  
Total 9,200 Km  
Sub-Set of Surveys  
BP98/GMC81/SM81



PSTM REPROCESS



# Contract Areas

## 1. Overview of the Contract Areas

- Naming Convention

## 2. Technical Data

- INP Technical Data
  - Data License Agreement
  - Data Rooms
- Multi Client Data Projects Available
  - ERCL
  - Schlumberger
  - Corelab

## 3. Contract Areas

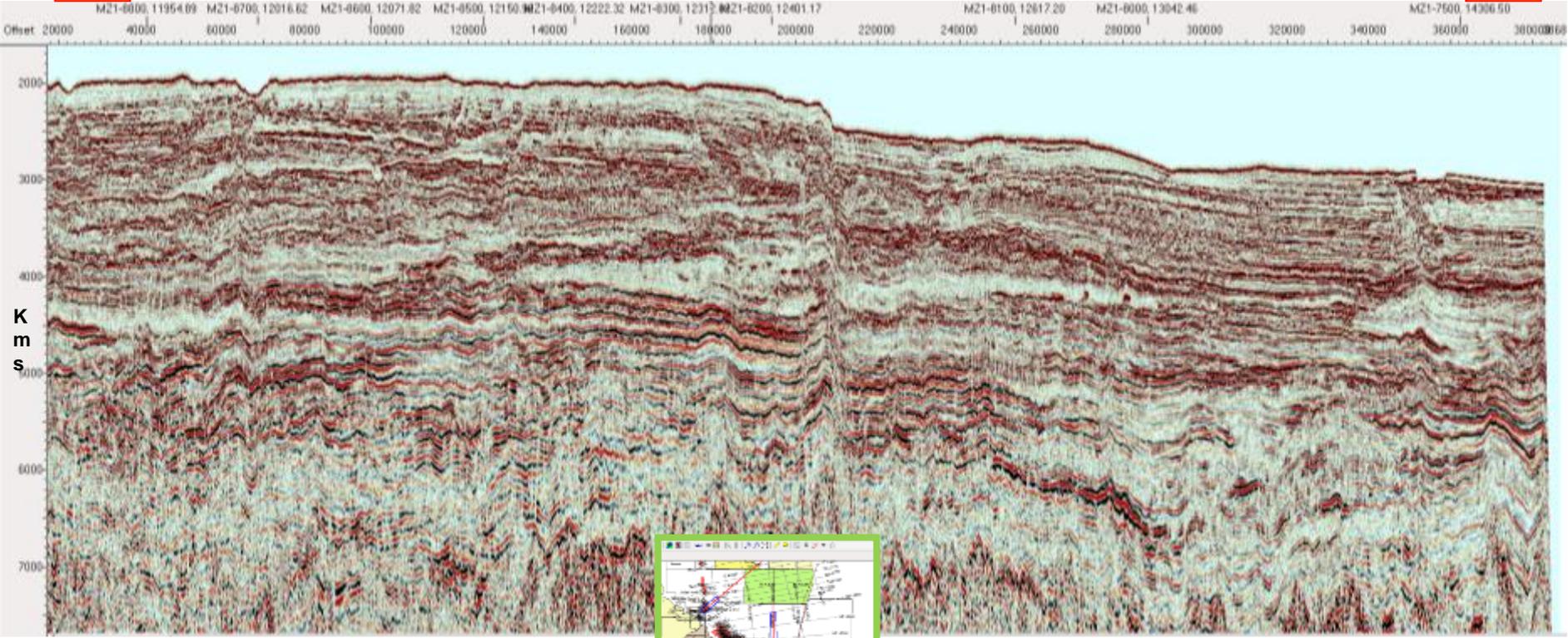
- Rovuma
- Angoche
- Zambezi
- Pande / Temane Region
- Palmeria



# R5-A-B-C Strike Line (Depth Section)

N

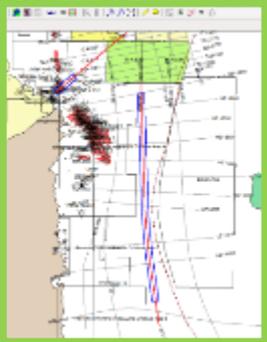
S



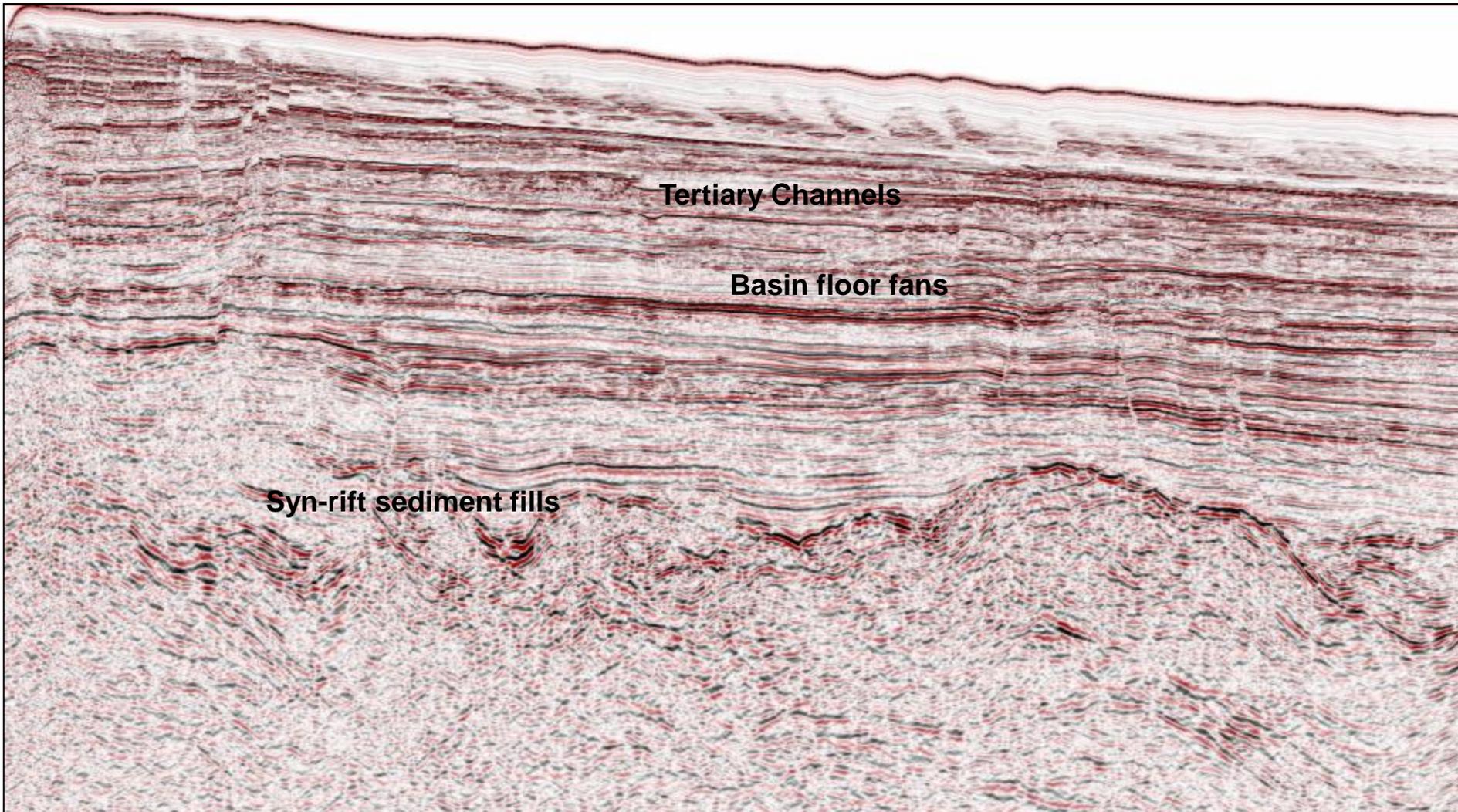
R5-A

R5-B

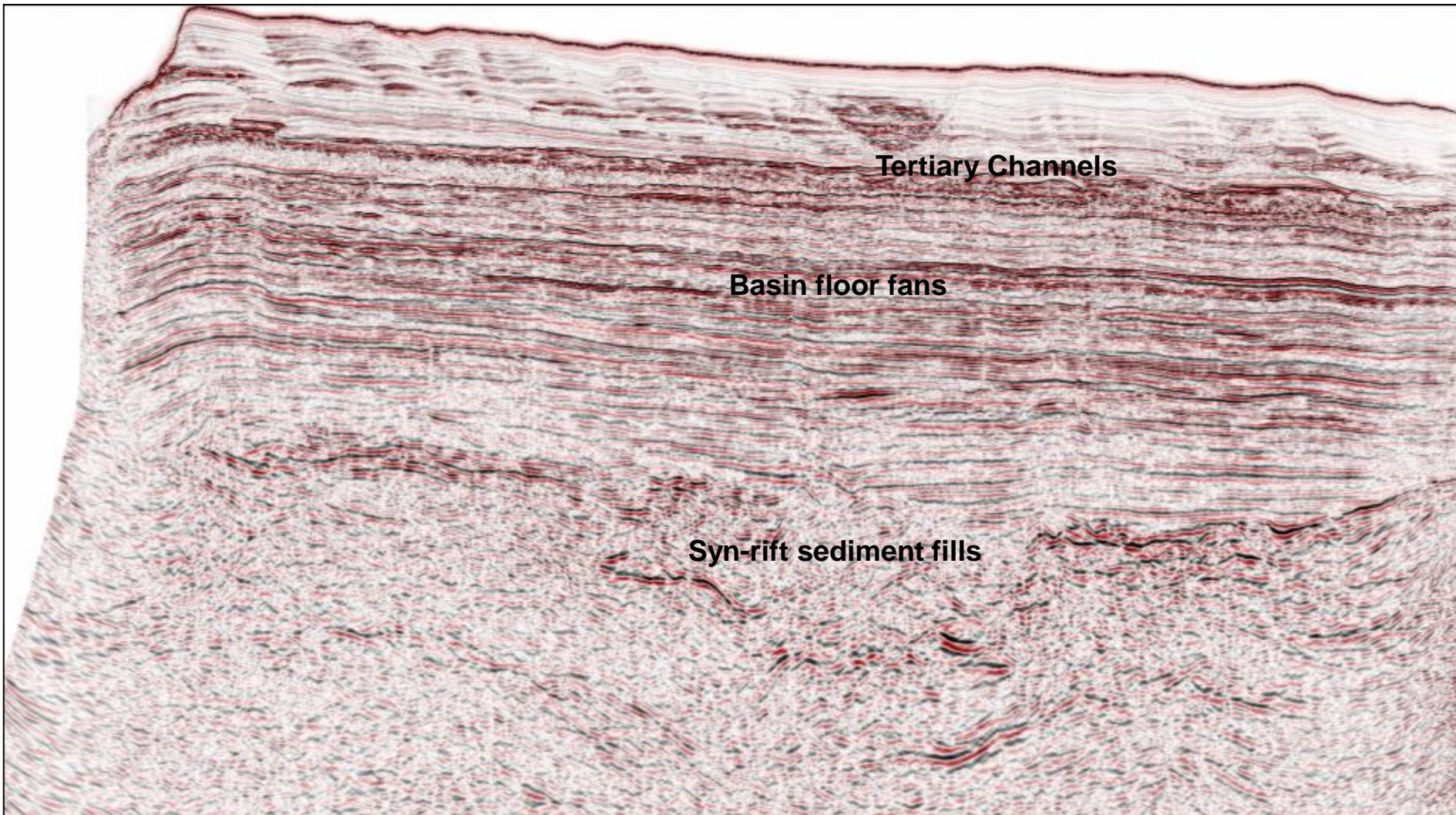
R5-C



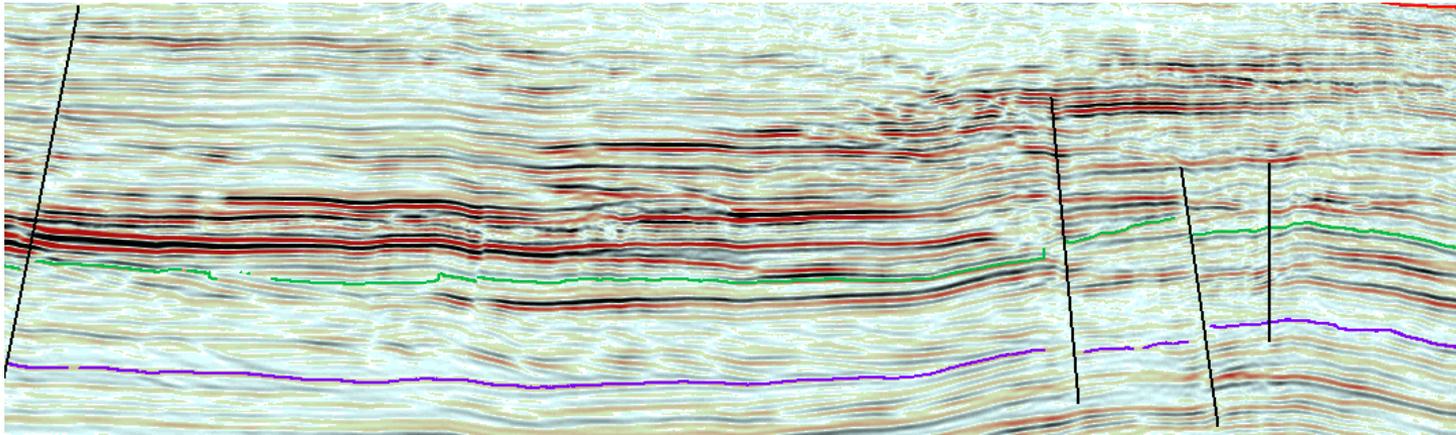
# R5-A Dip Line (MBW13)



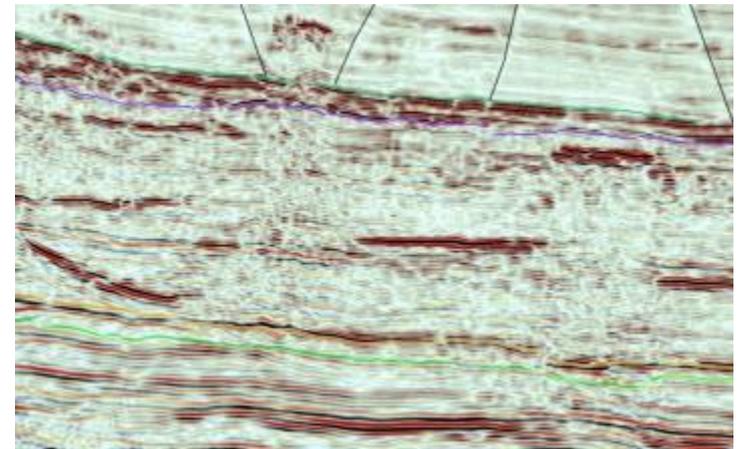
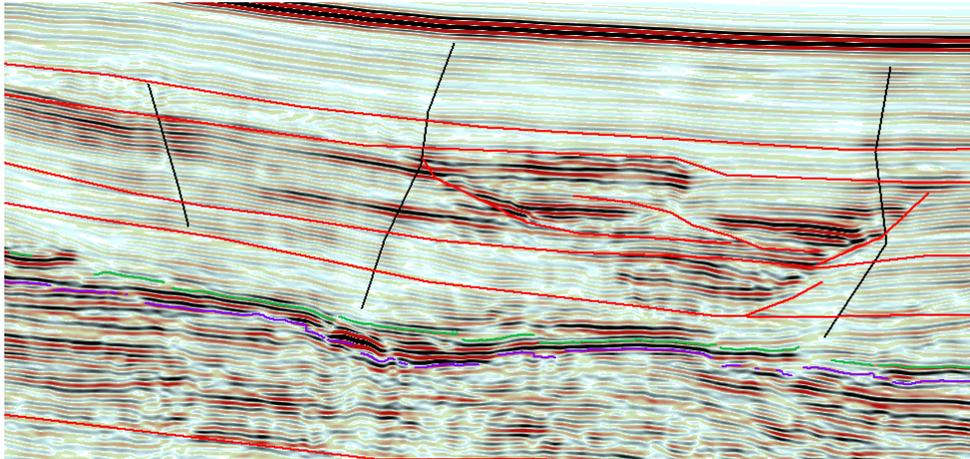
# R5-B Dip Line (MBW13)



# R5-C Oil Company released seismic data



- Early Miocene Unc
- Oligocene Unc
- Early Eocene Unc
- Base Tertiary Unc
- Early Cretaceous Unc.
- Top Jurassic
- Top Karoo
- Top Basement



# Rovuma

# R5-A

# 3,456 Km<sup>2</sup>



MINIMUM WORK PROGRAM			
Period 1	2D Seismic	2,500 Km	
Period 1	3D Seismic	1,000 Sq. Km	
Period 1	Well	0	
Period 1	Other Studies	5 M\$	
Period 2	Well	1	
Period 2	Other Studies	5 M\$	
Period 3	Well	1	
Period 3	Other Studies	5 M\$	

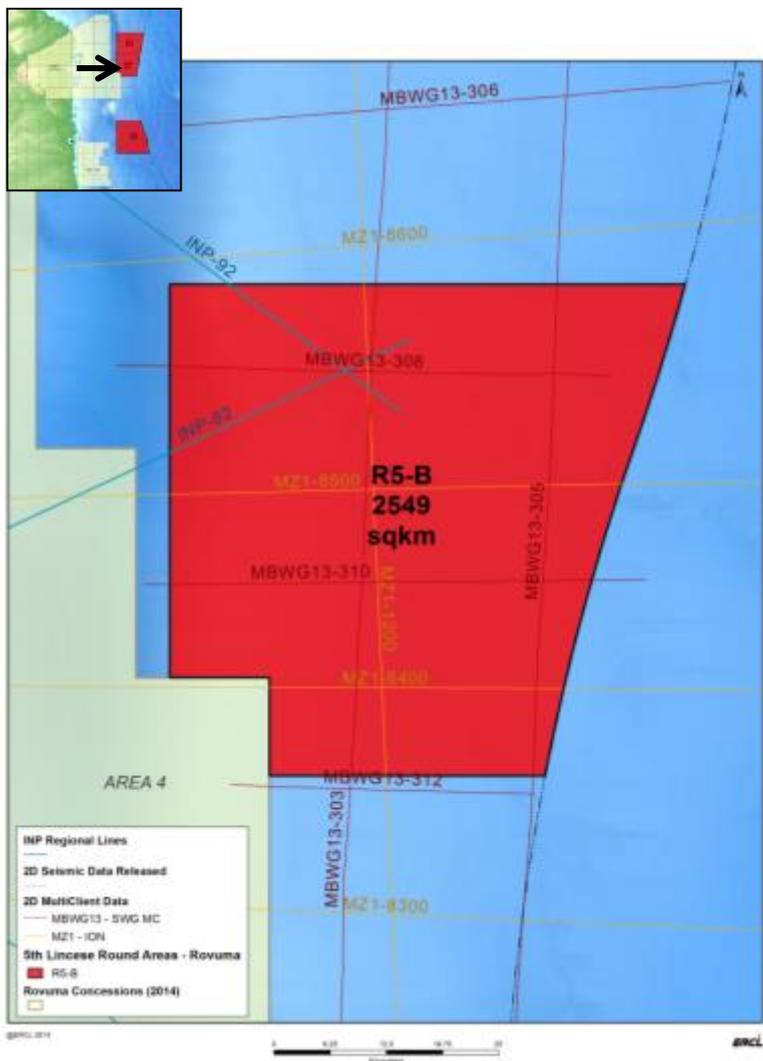
NOTE: The 2D seismic minimum program could be offset against an increased 3D seismic commitment.

CURRENT SEISMIC DATA IN R5-A			km
Schlumberger	MBWG13		225
ION	MZ1		155
INP Regional	INP		144
Brokered	Other		33
		TOTAL	557

# Rovuma

# R5-B

# 2,549 Km<sup>2</sup>



MINIMUM WORK PROGRAM		
Period 1	2D Seismic	2,000 Km
Period 1	3D Seismic	500 Sq. Km
Period 1	Well	0
Period 1	Other Studies	5 M\$
Period 2	Well	1
Period 2	Other Studies	5 M\$
Period 3	Well	1
Period 3	Other Studies	5 M\$

NOTE: The 2D seismic minimum program could be offset against an increased 3D seismic commitment.

CURRENT SEISMIC DATA R5-B		km
Schlumberger	MBWG13	206
ION	MZ1	185
INP Regional	INP	60
Brokered	Other	342
TOTAL		793

# Rovuma

# R5-C

# 5,207 Km<sup>2</sup>



## MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	7,500	Km
Period 1	3D Seismic	1,000	Sq. Km
Period 1	Well	0	
Period 1	Other Studies	5	M\$
Period 2	Well	1	
Period 2	Other Studies	5	M\$
Period 3	Well	1	
Period 3	Other Studies	5	M\$

NOTE: The 2D seismic minimum program could be offset against an increased 3D seismic commitment.

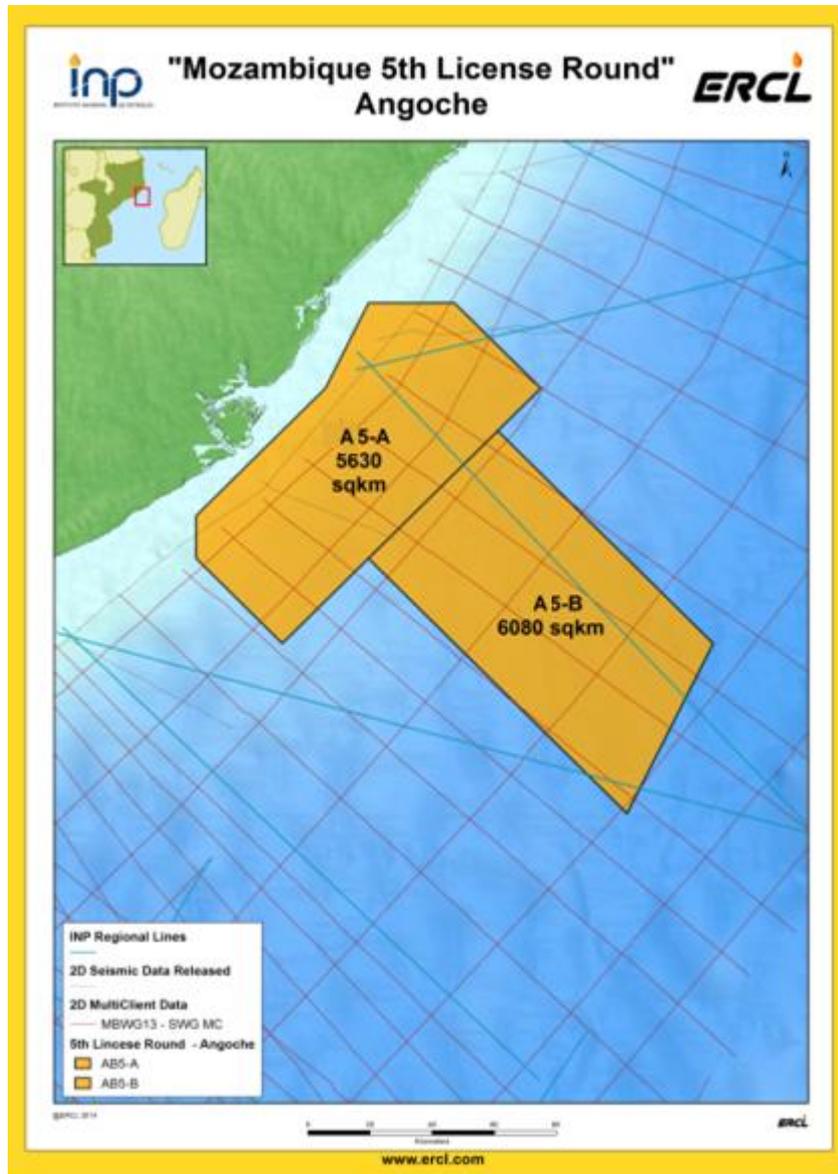
## CURRENT SEISMIC DATA R5-C

Source	Area	km
Schlumberger	MBWG13	405
ION	MZ1	141
INP Regional	INP	523
Brokered	Other	651
TOTAL		1,720

# Angoche Basin

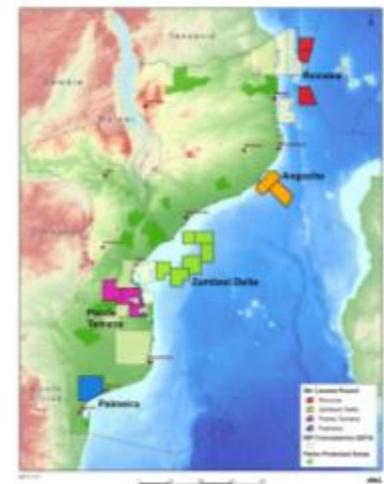
2 Areas

11,710 Km<sup>2</sup>



A5-A = 5,630 Km<sup>2</sup>

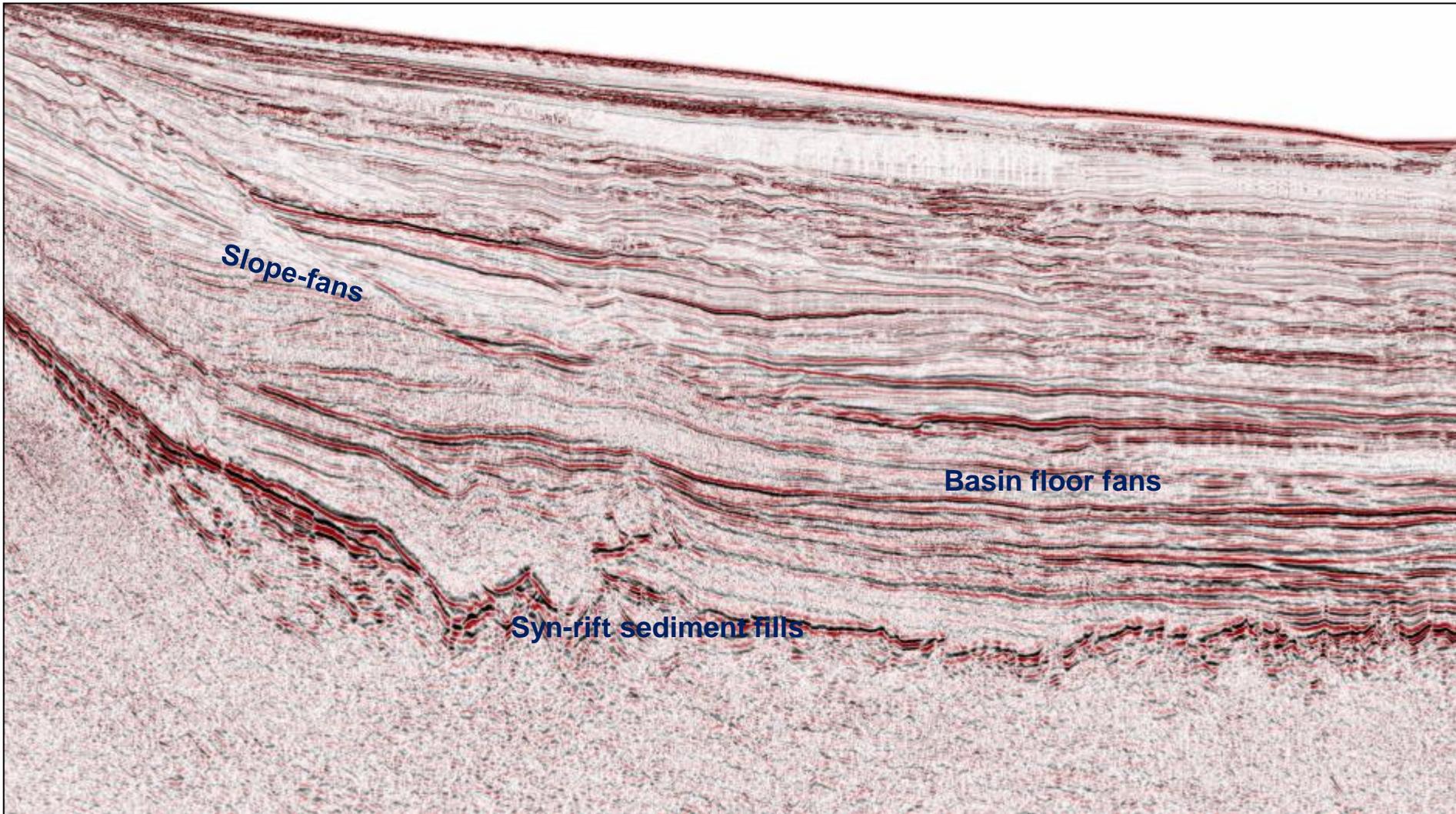
A5-B = 6,080 Km<sup>2</sup>



A5 - A,B

Dip Line

(MBW13)



# Angoche

# A5-A

# 5,630 Km<sup>2</sup>



### MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	7,500	Km
Period 1	3D Seismic	1,000	Sq. Km
Period 1	Well	1	
Period 1	Other Studies	3	M\$
Period 2	Well	1	
Period 2	Other Studies	10	M\$
Period 3	Well	1	
Period 3	Other Studies	5	M\$

NOTE: The 2D seismic minimum program could be offset against an increased 3D seismic commitment.

### CURRENT SEISMIC DATA A5-A

Source	Block	km
Schlumberger	MBWG13	468
INP Regional	INP	370
Brokered	Other	226
<b>TOTAL</b>		<b>1,064</b>

# Angoche

# A5-B

# 6,080 Km<sup>2</sup>



### MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	7,500	Km
Period 1	3D Seismic	1,000	Sq. Km
Period 1	Well	1	
Period 1	Other Studies	3	M\$
Period 2	Well	1	
Period 2	Other Studies	10	M\$
Period 3	Well	1	
Period 3	Other Studies	5	M\$

NOTE: The 2D seismic minimum program could be offset against an increased 3D seismic commitment.

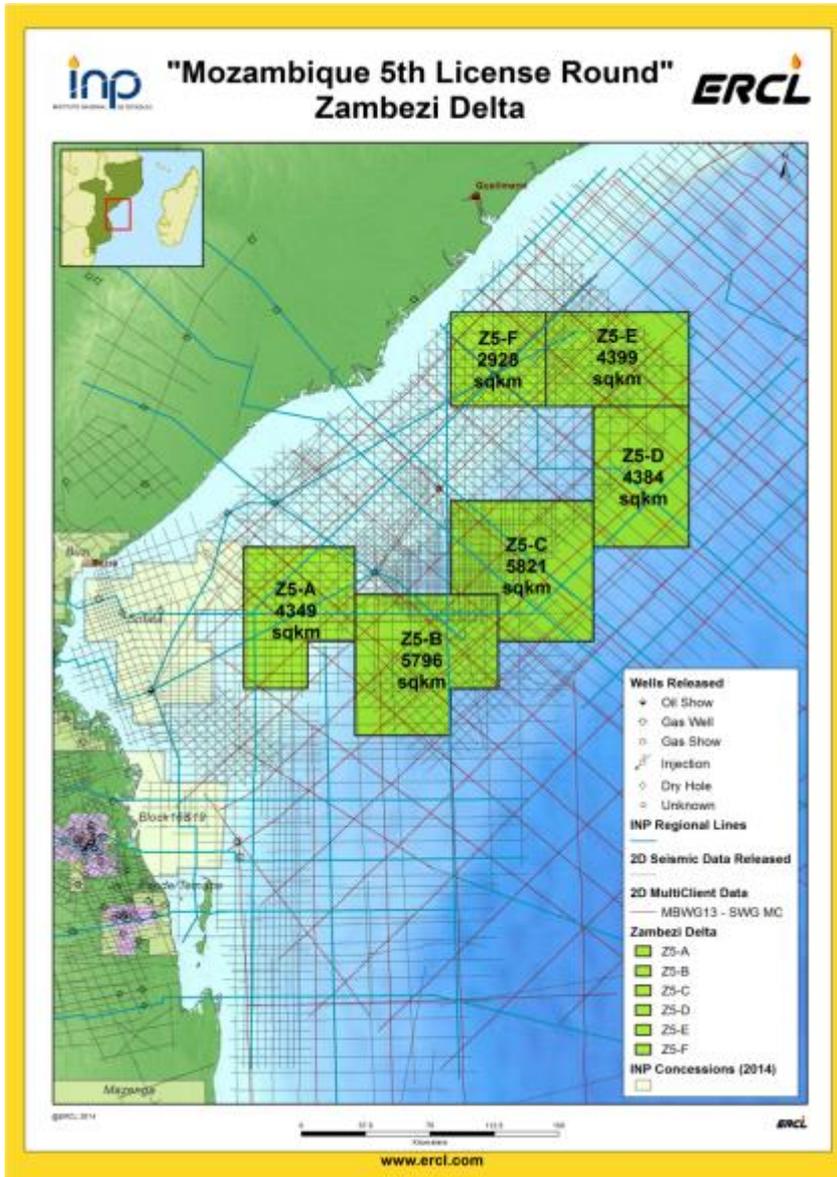
### CURRENT SEISMIC DATA A5-B

Source	Block	km
Schlumberger	MBWG13	470
INP Regional	INP	470
Brokered	Other	119
<b>TOTAL</b>		<b>1,059</b>

# Zambezi

# 6 Areas

# 27,677 Km<sup>2</sup>



Z5-A 4,349 Km<sup>2</sup>

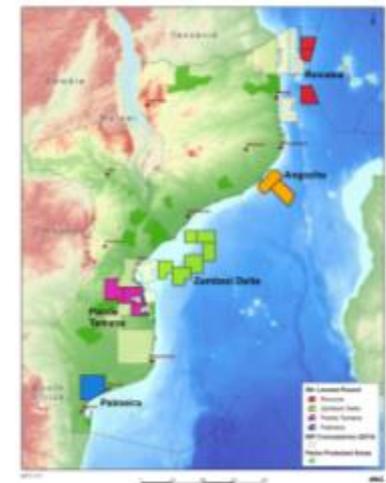
Z5-B 5,796 Km<sup>2</sup>

Z5-C 5,821 Km<sup>2</sup>

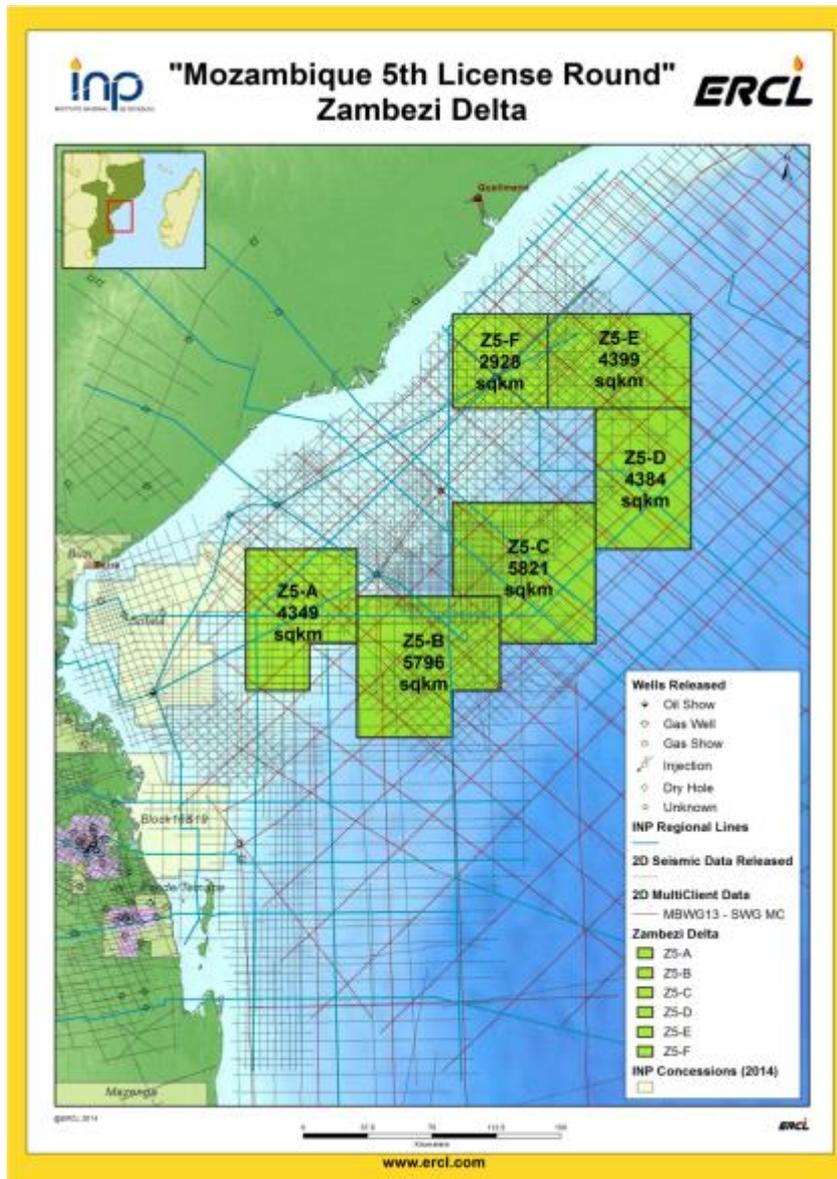
Z5-D 4,384 Km<sup>2</sup>

Z5-E 4,399 Km<sup>2</sup>

Z5-F 2,928 Km<sup>2</sup>



# Open Area – Offshore Zambezi / Beira High



**Offshore Zambezi Area**  
**6 Areas 27,677 Km2**

## INP/ERCL

- Released Wells
- Released Seismic
- Released Reports
- MOZDA
- Zambezi Report

## Schlumberger

- New MC Data
- MC Broker Data

## Corelab

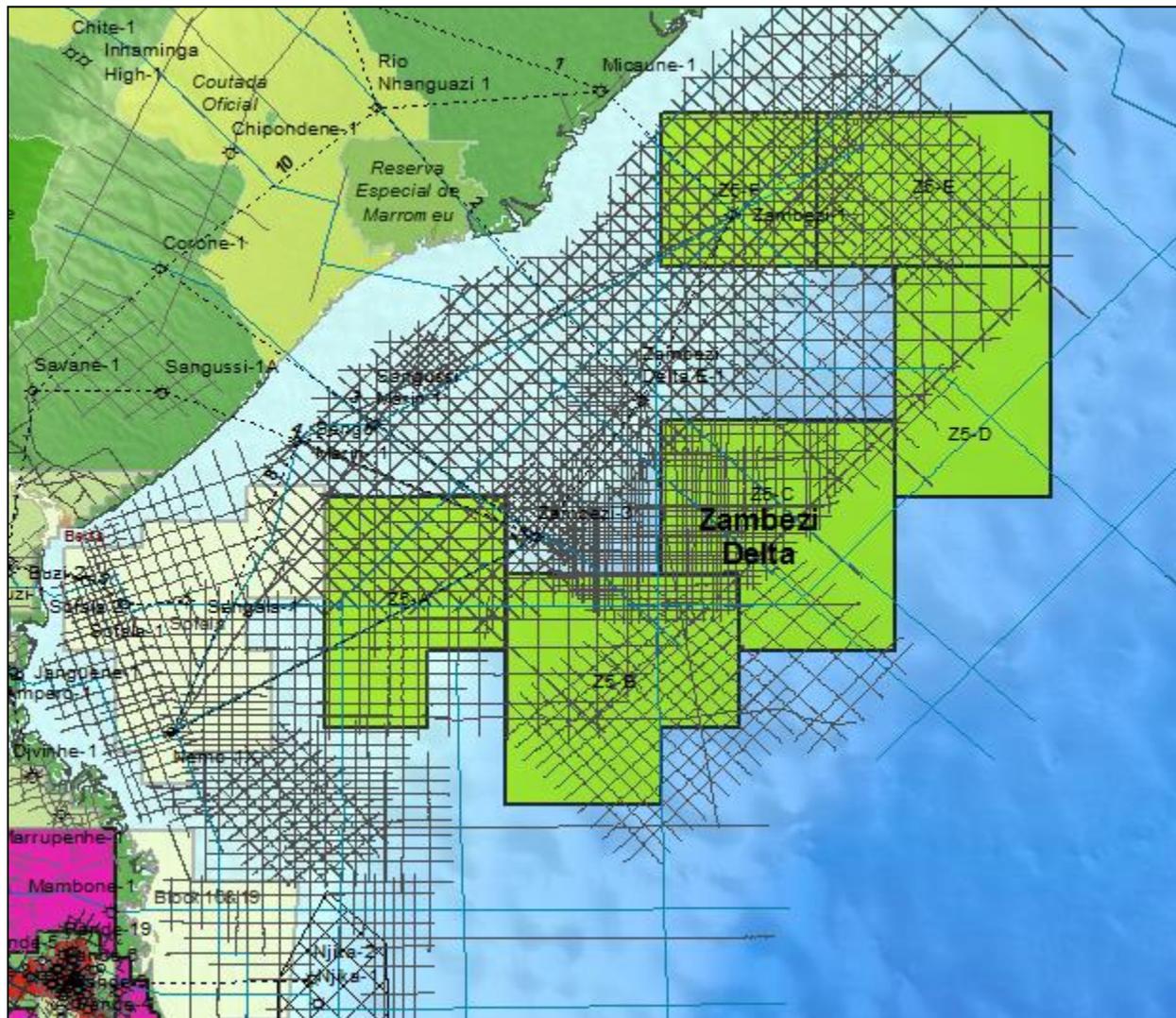
- Reservoir & Seals Study

# Offshore Key Wells

Well name	Year drilled	Operator	Final Well Report	Bio Strat	Stratigraphy	Raw logs (LAS)	CPI Logs (Image)	CPI logs (LAS)	Reservoir & Pay Report	Included in IPTM Project database	ERCL Petrophysical Report
Nemo-1X	1969	Gulf Oil			✓	✓	✓	✓	✓	✓	✓
Njika-1	2008	Sasol Petroleum	✓	✓	✓	✓					
Njika-2	2009	Sasol Petroleum	✓	✓	✓	✓					
Sangussi Marin-1	1971	Aquitaine	✓	✓	✓	✓	✓	✓	✓	✓	✓
Sengala-1	2000	Sasol Petroleum	✓		✓	✓	✓	✓	✓	✓	✓
Sengo Marin-1	1971	Aquitaine	✓		✓	✓	✓	✓	✓	✓	✓
Sofala-1	1970	Gulf Oil	✓		✓	✓	✓	✓	✓	✓	✓
Sofala-2	2000	Sasol Petroleum	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zambezi-1	1970	Hunt Petroleum	✓	✓	✓	✓	✓	✓	✓	✓	✓
Zambezi-3	1971	Hunt Petroleum	✓	✓	✓	✓	✓	✓	✓	✓	✓
Z-DE-1	2007	Petronas Carigali	✓	✓	✓	✓	✓	✓	✓	✓	✓

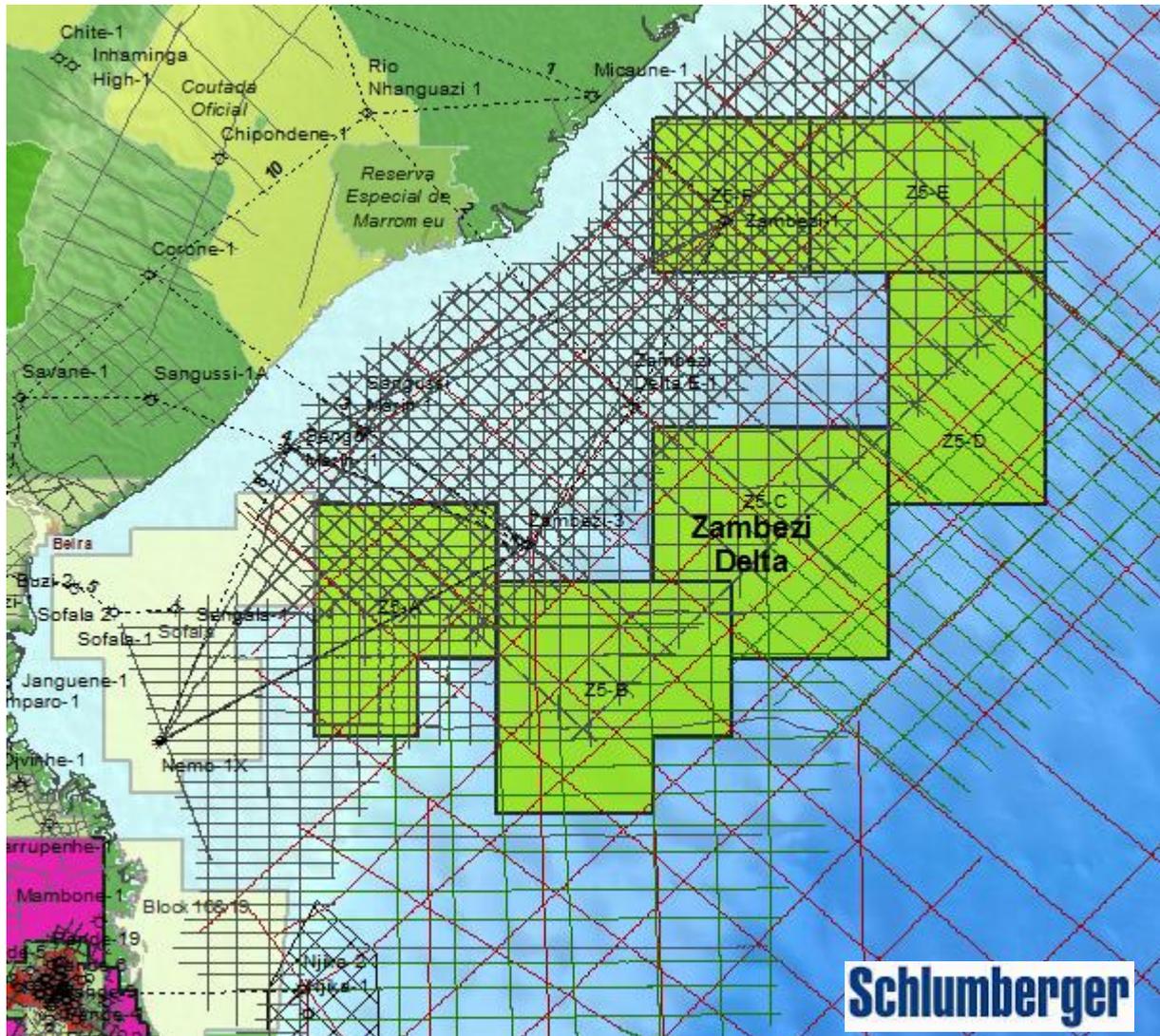
**11 Offshore key wells available to license through INP/ERCL**

# Released INP/ERCL Brokered Seismic



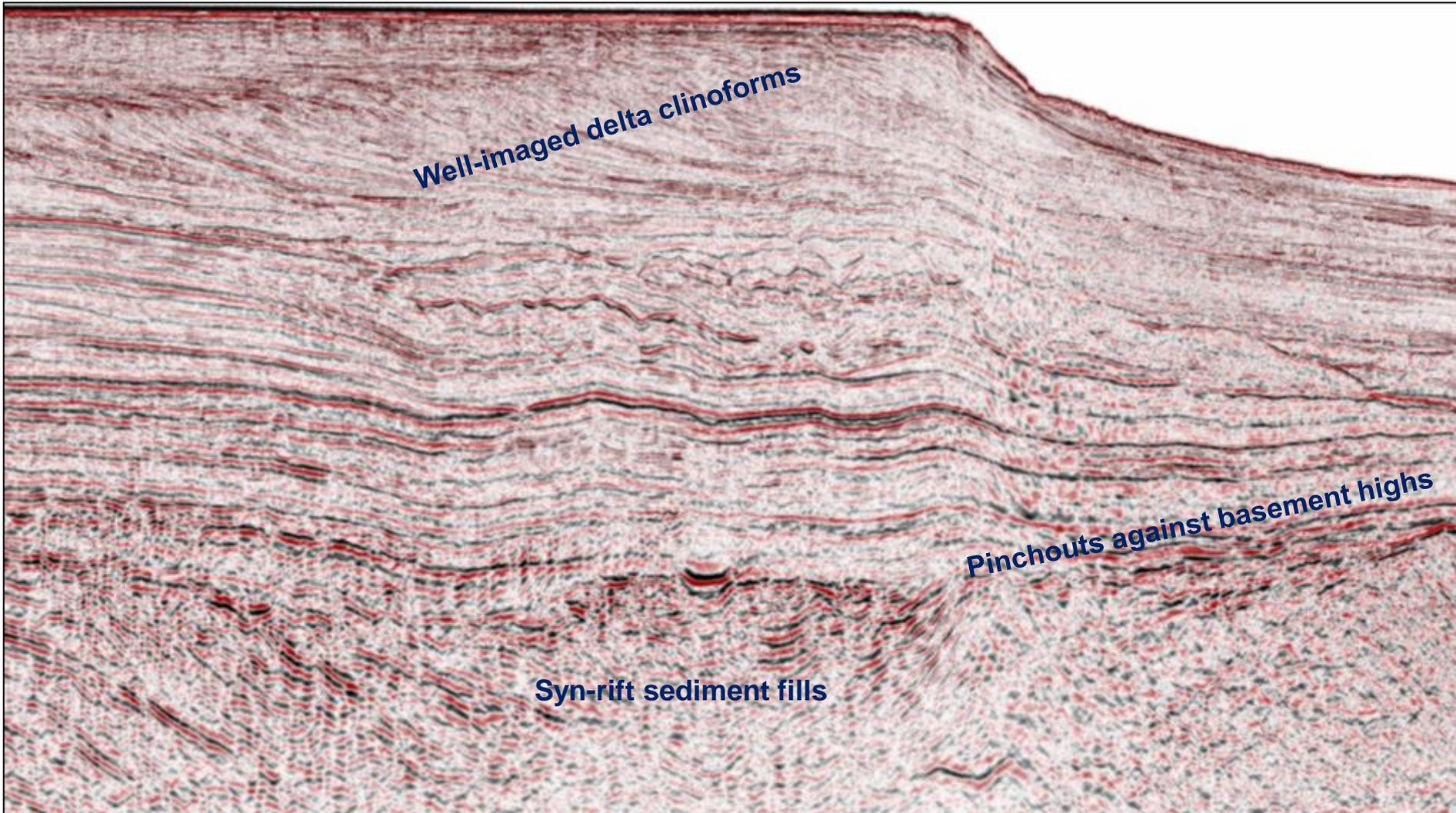
Survey Name	Year
GMR-81	1981
SM81	1981
GMC-81	1982
ENH-84	1984
ION-GTX	1984
JNOC	1984
BP-85	1985
ENH-85	1985
NTMOZ	1987
AMM10_98	1998
AMS-98	1998
LRP-98	1998
BP-98	1999
MOZ-00	2000
SZD-03	2003
Block 16/19-3D (in part)	2007
SPS 2008 (in part)	2008
MOZ-08	2008
MP 2008 Sofala (in part)	2008
STE1D	2008
STK (in part)	2010
INP Regional	Various

# Schlumberger – MC and Brokered 2D Seismic

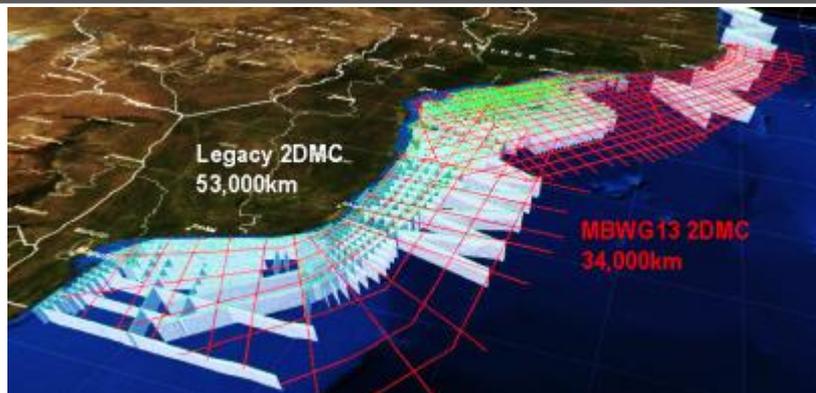


Survey Name	Year
GMR-81	1981
SM81	1981
GMC-81	1982
BP-98	1998
MBWG98	1998
MBWG99	1999
MBWG00	2000
MBWG13	2013

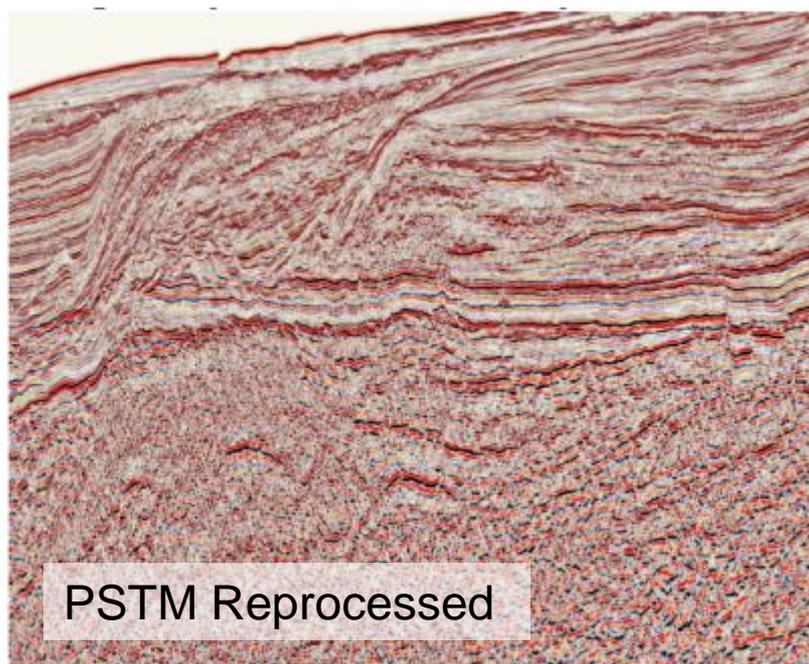
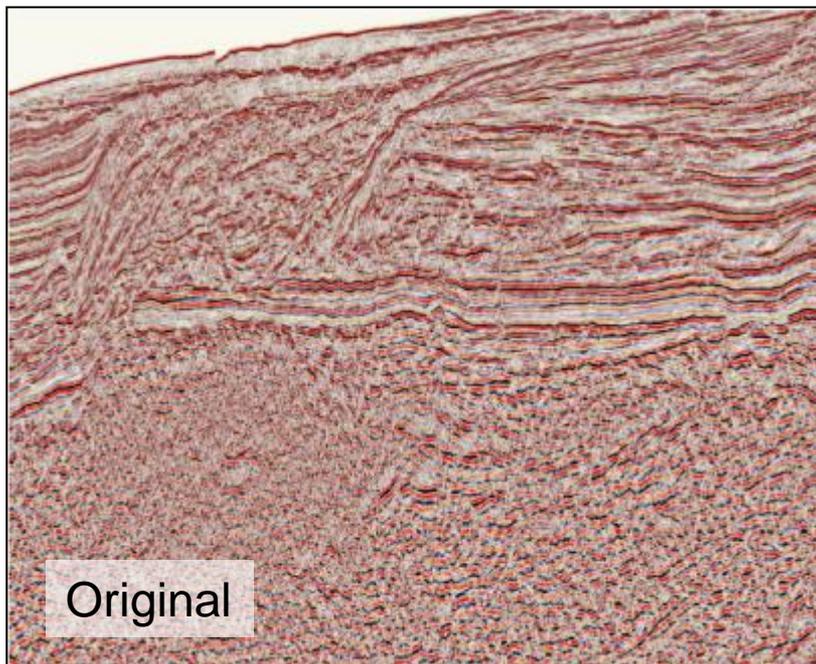
# Zambezi - Schlumberger Multiclient - MBWG13



# Reprocessing Legacy Data

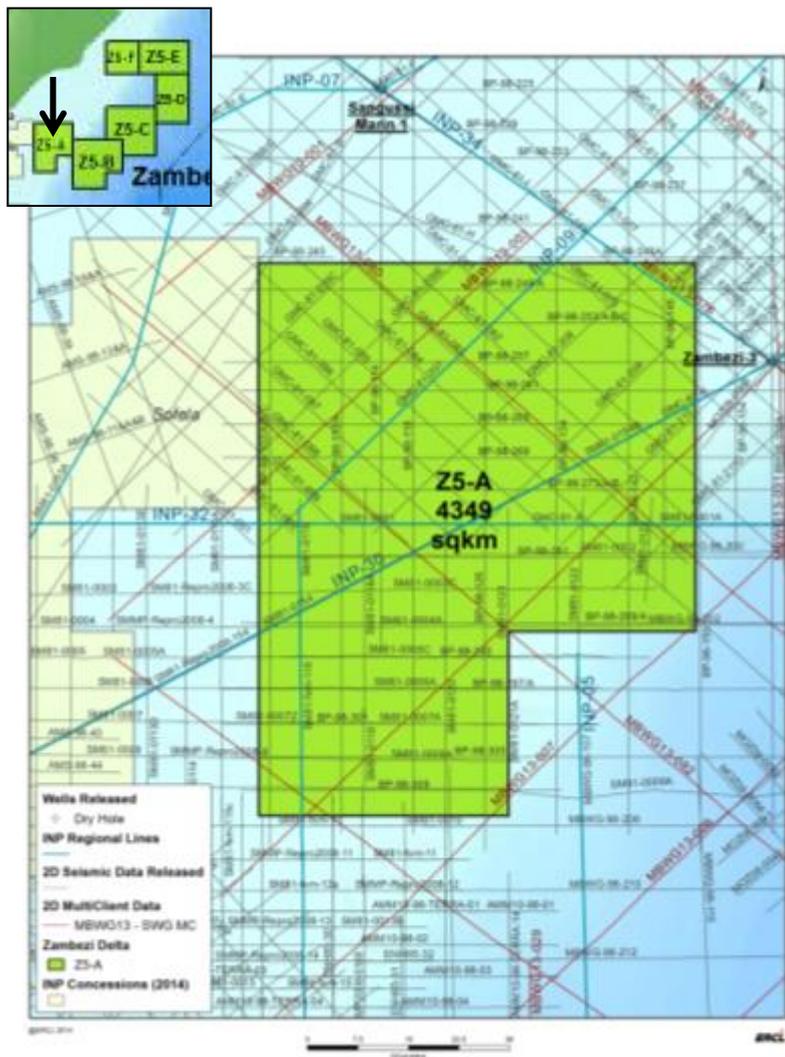


- Schlumberger reprocessing
- Legacy WG MC Data



# Zambezi Z5-A

# 4,349 Km<sup>2</sup>



## MINIMUM WORK PROGRAM

Period 1	2D Seismic	0 Km
Period 1	3D Seismic	1,000 Sq. Km
Period 1	Well	1
Period 1	Other Studies	5 M\$
Period 2	Well	1
Period 2	Other Studies	10 M\$
Period 3	Well	1
Period 3	Other Studies	10 M\$

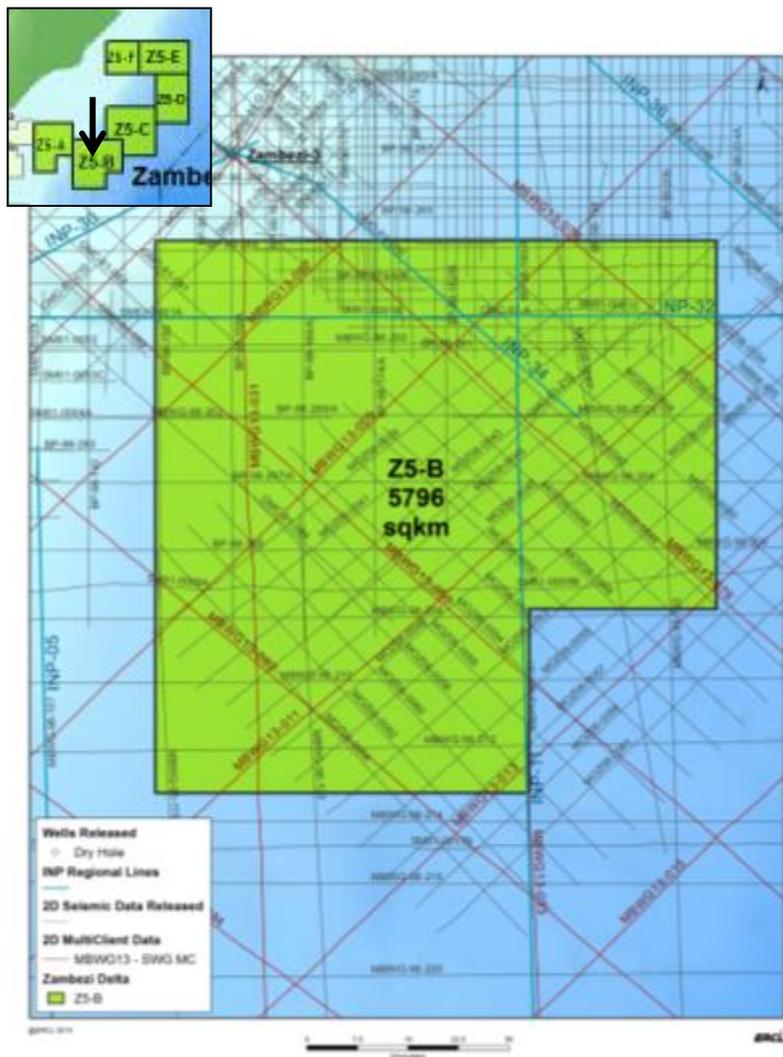
## CURRENT SEISMIC DATA Z5-A

		km
Schlumberger	MBWG13	268
INP Regional	INP	1,077
Brokered	Other	2,985
	<b>TOTAL</b>	<b>4,330</b>

# Zambezi

# Z5-B

# 5,796 Km<sup>2</sup>



## MINIMUM WORK PROGRAM

Period 1	2D Seismic	0 Km
Period 1	3D Seismic	2,000 Sq. Km
Period 1	Well	1
Period 1	Other Studies	5 M\$
Period 2	Well	1
Period 2	Other Studies	10 M\$
Period 3	Well	1
Period 3	Other Studies	10 M\$

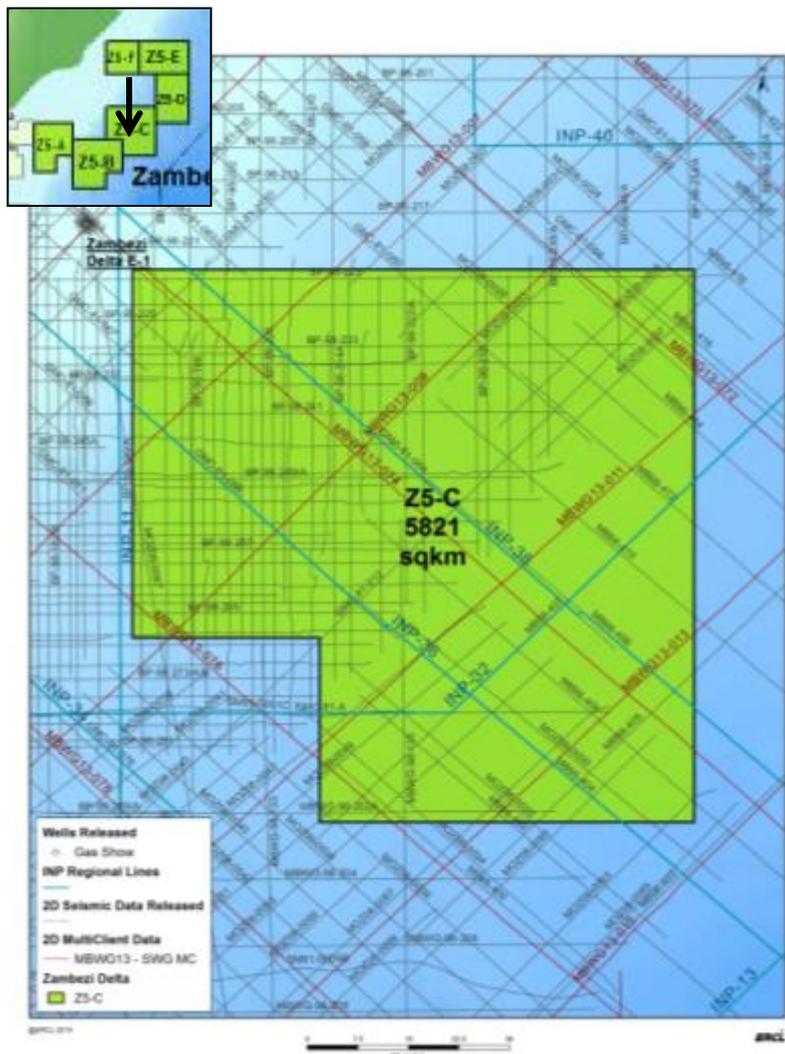
## CURRENT SEISMIC DATA Z5-B

		km
WesternGeco	MBWG13	559
INP Regional	INP	780
Brokered	Other	3,896
	<b>TOTAL</b>	<b>5,235</b>

# Zambezi

# Z5-C

# 5,821 Km<sup>2</sup>



### MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	0	Km
Period 1	3D Seismic	2,000	Sq. Km
Period 1	Well	1	
Period 1	Other Studies	5	M\$
Period 2	Well	1	
Period 2	Other Studies	10	M\$
Period 3	Well	1	
Period 3	Other Studies	10	M\$

### CURRENT SEISMIC DATA Z5-C

Source	Client	km
WesternGeco	MBWG13	379
INP Regional	INP	1,237
Brokered	Other	3,757
<b>TOTAL</b>		<b>5,373</b>

# Zambezi

# Z5-D

# 4,384 Km<sup>2</sup>



### MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	0	Km
Period 1	3D Seismic	1,500	Sq. Km
Period 1	Well	0	
Period 1	Other Studies	3	M\$
Period 2	Well	1	
Period 2	Other Studies	10	M\$
Period 3	Well	1	
Period 3	Other Studies	10	M\$

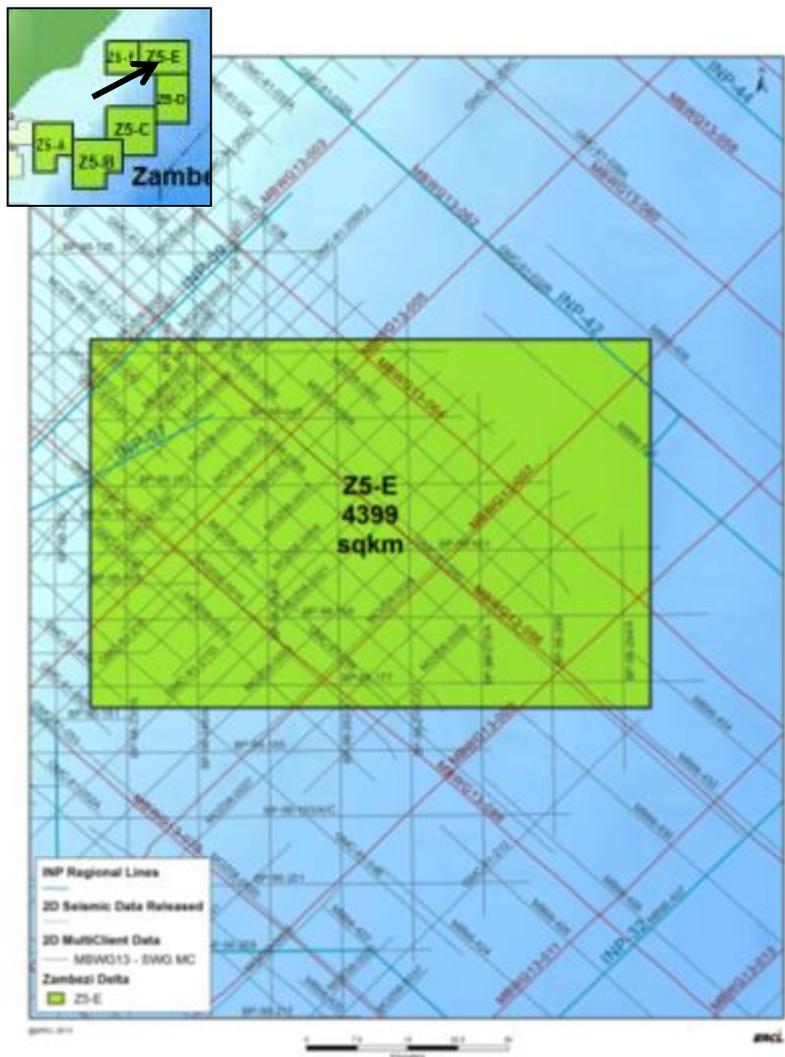
### CURRENT SEISMIC DATA Z5-D

Source	Client	Quantity	Unit
WesternGeco	MBWG13	319	km
INP Regional	INP	926	
Brokered	Other	1,108	
<b>TOTAL</b>		<b>2,353</b>	

# Zambezi

# Z5-E

# 4,399 Km<sup>2</sup>



## MINIMUM WORK PROGRAM

Period 1	2D Seismic	0 Km
Period 1	3D Seismic	1,500 Sq. Km
Period 1	Well	1
Period 1	Other Studies	5 M\$
Period 2	Well	1
Period 2	Other Studies	10 M\$
Period 3	Well	1
Period 3	Other Studies	10 M\$

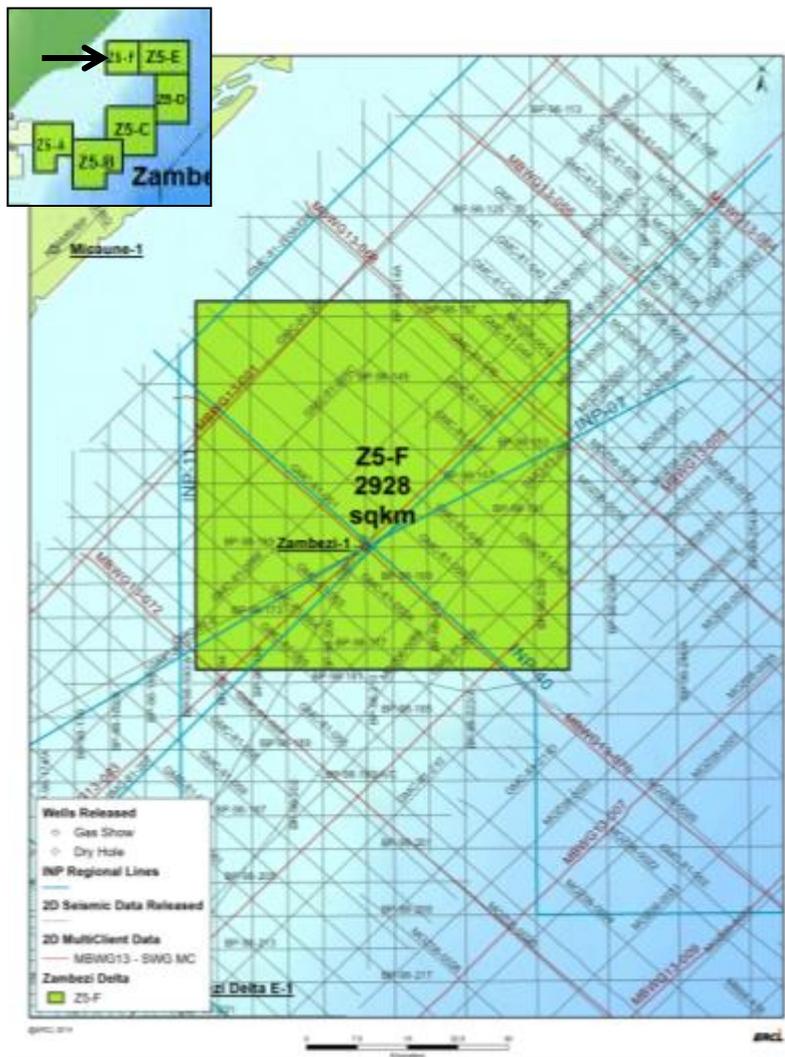
## CURRENT SEISMIC DATA Z5-E

		km
WesternGeco	MBWG13	371
INP Regional	INP	653
Brokered	Other	2,495
	<b>TOTAL</b>	<b>3,519</b>

# Zambezi

# Z5-F

# 2,928 Km<sup>2</sup>

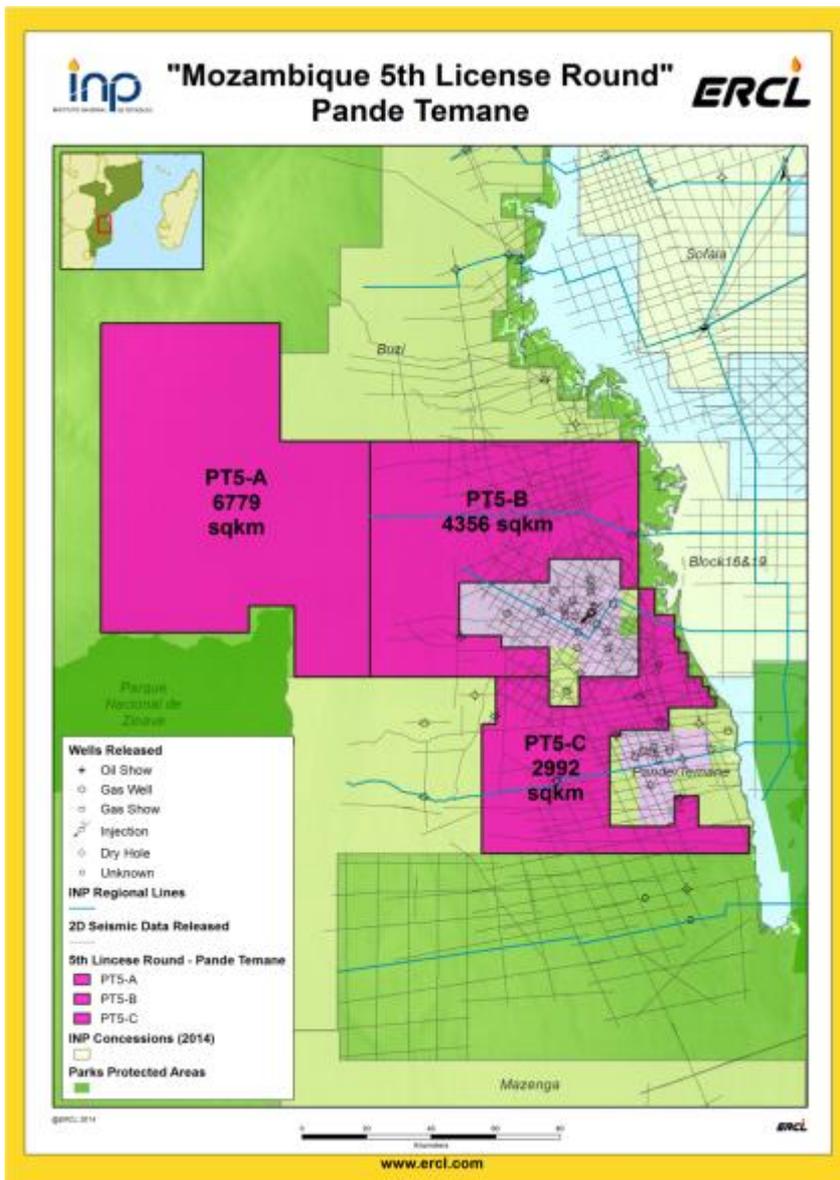


MINIMUM WORK PROGRAM		
Period 1	2D Seismic	0 Km
Period 1	3D Seismic	750 Sq. Km
Period 1	Well	1
Period 1	Other Studies	3 M\$
Period 2	Well	1
Period 2	Other Studies	5 M\$
Period 3	Well	1
Period 3	Other Studies	5 M\$

CURRENT SEISMIC DATA Z5-F		km
WesternGeco	MBWG13	202
INP Regional	INP	1,625
Brokered	Other	2,110
TOTAL		3,937

# Pande Temane Area

# 3 Areas 14,183 Km<sup>2</sup>



PT5-A 6,779 Km<sup>2</sup>

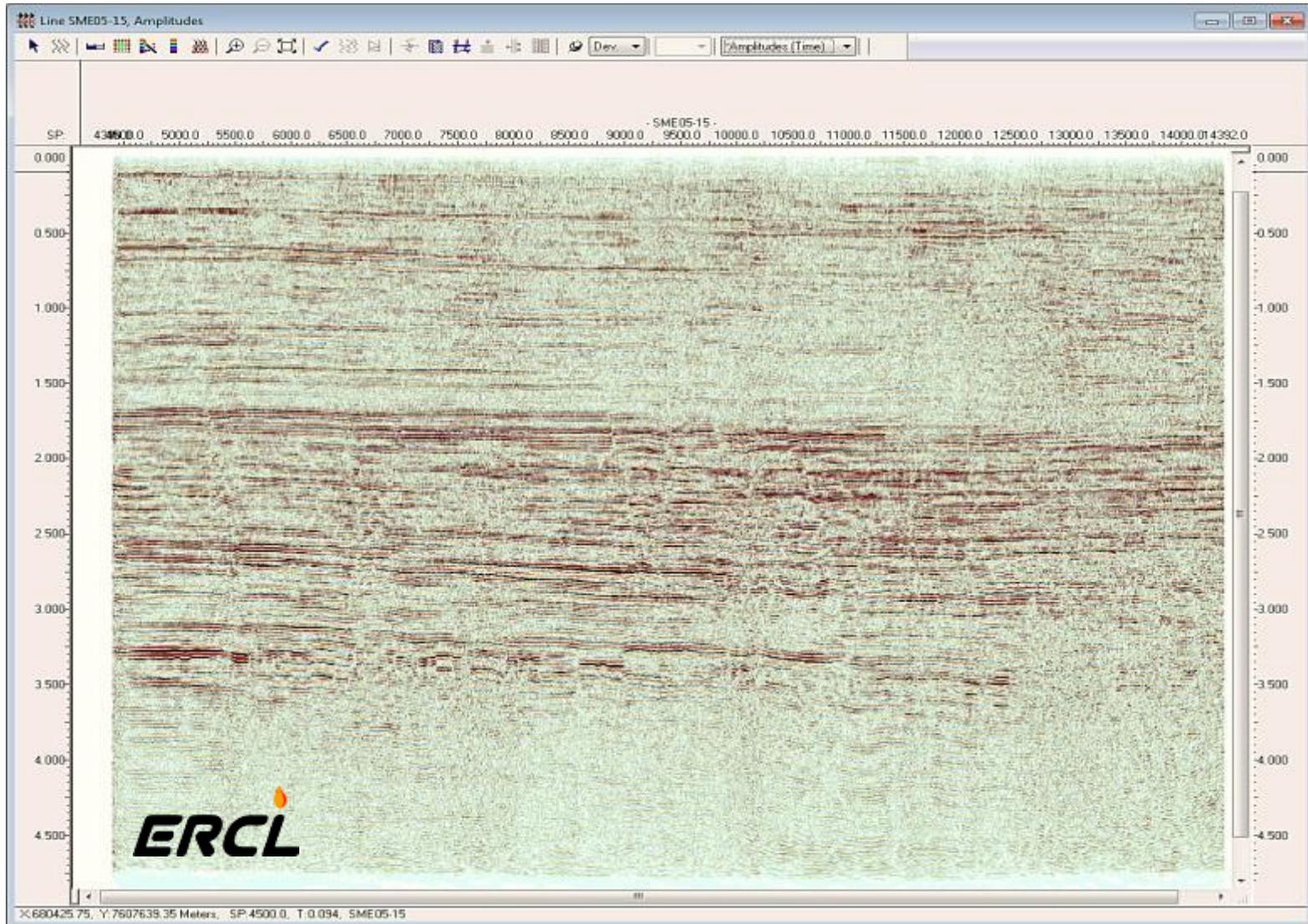
PT5-B 4,356 Km<sup>2</sup>

PT5-C 2,992 Km<sup>2</sup>



# Pande Temane Area

# Released Seismic



# Pande/Temane

# PT-A

# 6,779 Km<sup>2</sup>



## MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	1,600	Km
Period 1	3D Seismic	0	Sq. Km
Period 1	Well	0	
Period 1	Other Studies	5	M\$
Period 2	Well	1	
Period 2	Other Studies	5	M\$
Period 3	Well	1	
Period 3	Other Studies	5	M\$

NOTE: The 2D seismic minimum program could be offset against a Full Tensor Gravity (FTG) program or a 3D seismic commitment.

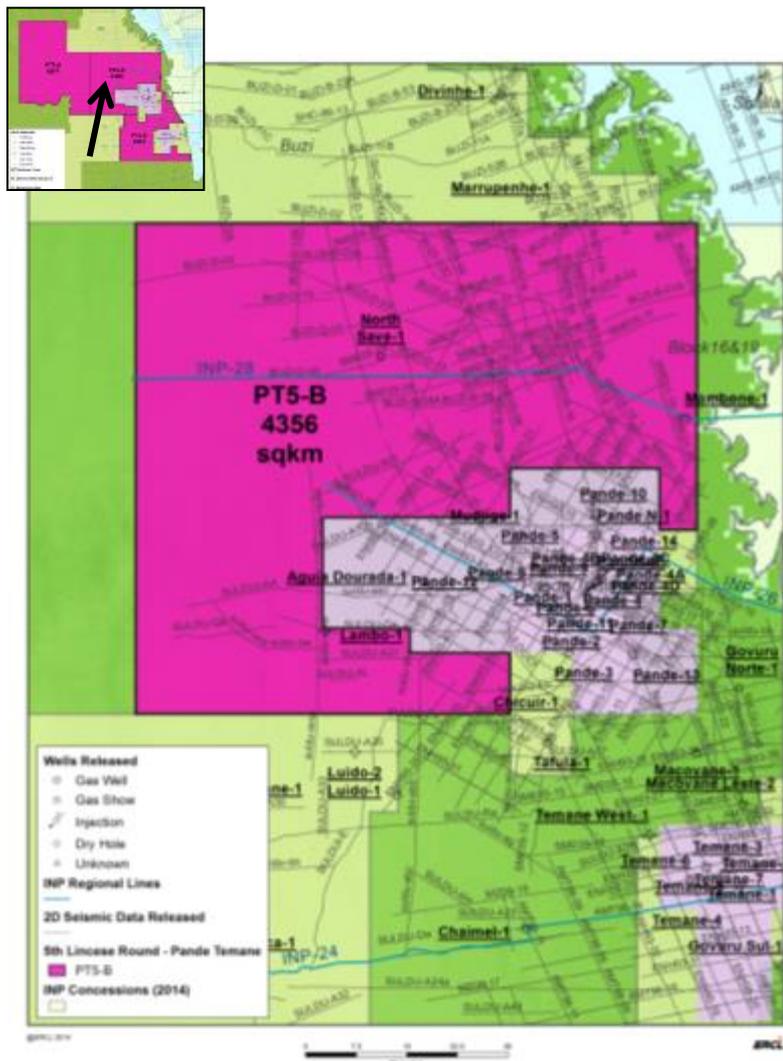
## CURRENT SEISMIC DATA PT- A

Category	Source	km
INP Regional	INP	0
Brokered	Other	0
<b>TOTAL</b>		<b>0</b>

# Pande/Temane

# PT-B

# 4,356 Km<sup>2</sup>



## MINIMUM WORK PROGRAM

Period	Activity	Quantity	Unit
Period 1	2D Seismic	1,600	Km
Period 1	3D Seismic	0	Sq. Km
Period 1	Well	0	
Period 1	Other Studies	5	M\$
Period 2	Well	1	
Period 2	Other Studies	5	M\$
Period 3	Well	1	
Period 3	Other Studies	5	M\$

NOTE: The 2D seismic minimum program could be offset against a 3D seismic commitment.

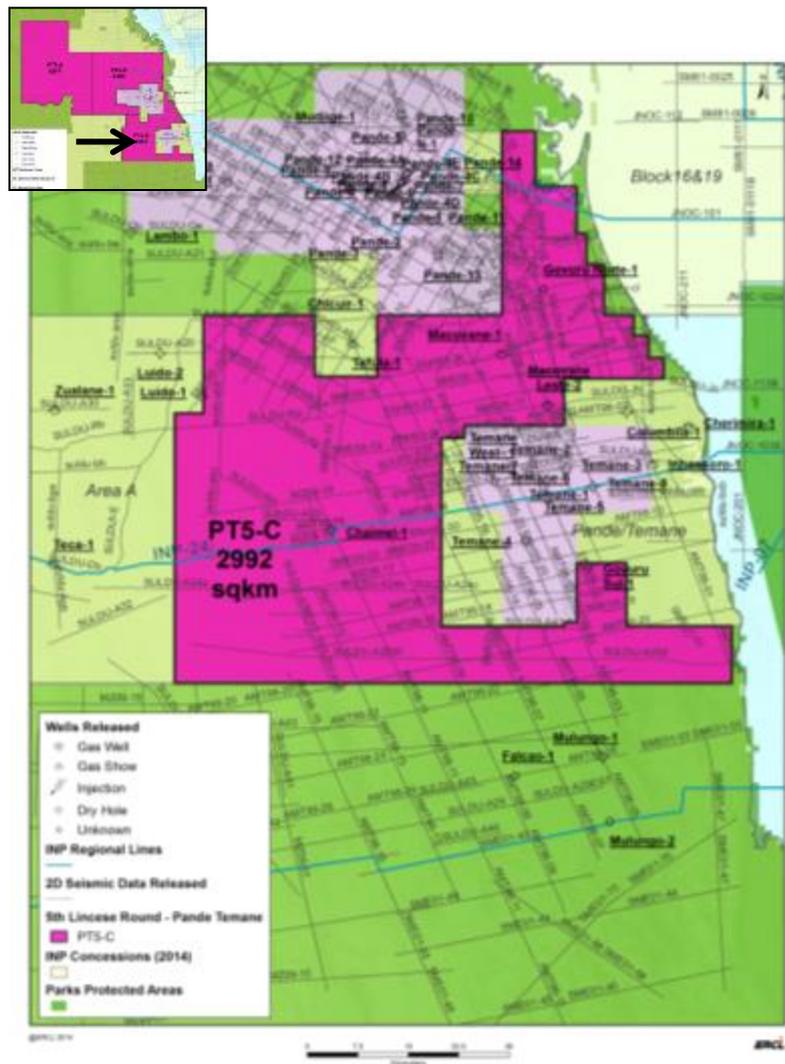
## CURRENT SEISMIC DATA PT- B

Category	Type	Quantity	Unit
INP Regional	INP	200	km
Brokered	Other	1,441	km
<b>TOTAL</b>		<b>1,641</b>	<b>km</b>

# Pande/Temane

# PT-C

# 2,992 Km<sup>2</sup>



MINIMUM WORK PROGRAM		
Period 1	2D Seismic	1,600 Km
Period 1	3D Seismic	0 Sq. Km
Period 1	Well	1
Period 1	Other Studies	5 M\$
Period 2	Well	1
Period 2	Other Studies	5 M\$
Period 3	Well	1
Period 3	Other Studies	5 M\$

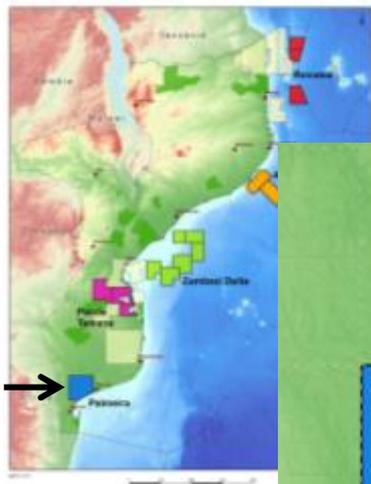
NOTE: The 2D seismic minimum program could be offset against a 3D seismic commitment.

CURRENT SEISMIC DATA PT-C		km
INP Regional	INP	200
Brokered	Other	1,853
	<b>TOTAL</b>	<b>2,053</b>

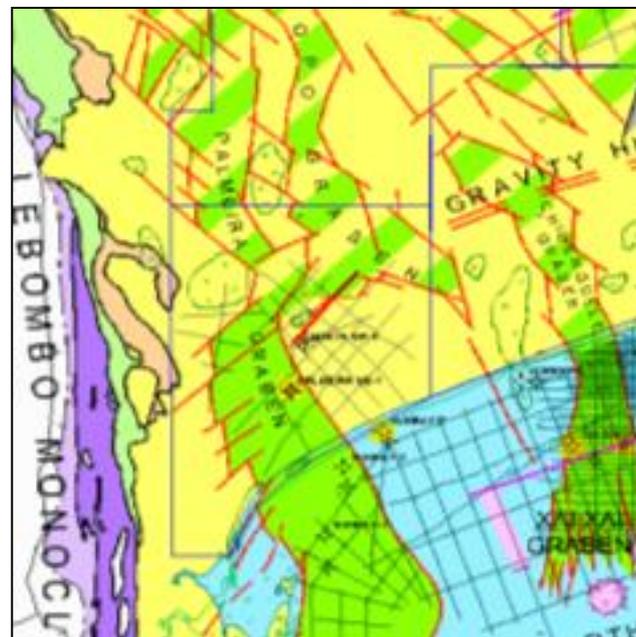
# Palmeira

# 1 Block

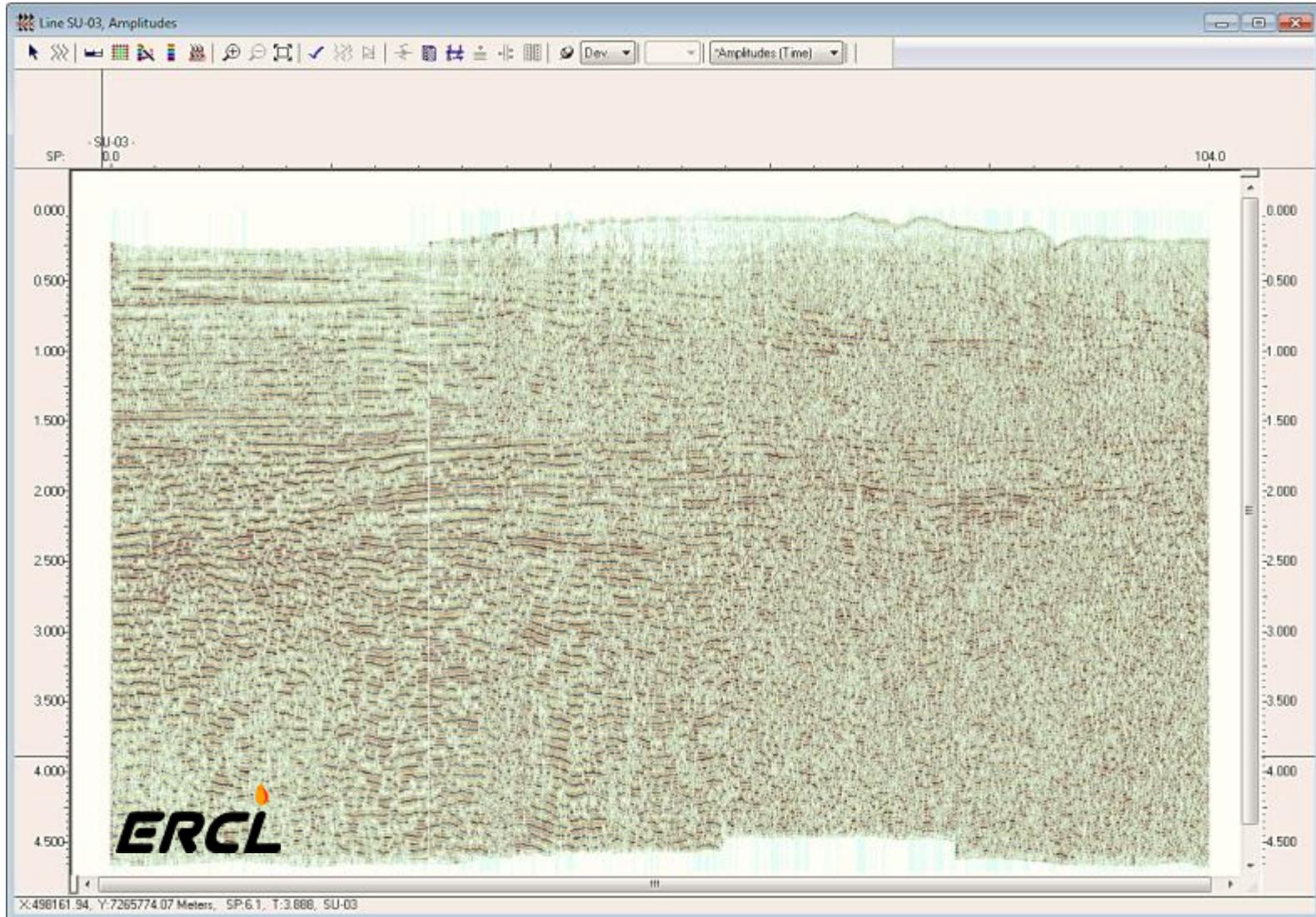
# 9,988 Km<sup>2</sup>



P5-A = 9,982 Km<sup>2</sup>



# Palmera Example Seismic



# Palmeira

# P5A 9,998 Km<sup>2</sup>



MINIMUM WORK PROGRAM			
Period 1	2D Seismic	1,600 Km	
Period 1	3D Seismic	0 Sq. Km	
Period 1	Well	0	
Period 1	Other Studies	8 M\$	
Period 2	Well	1	
Period 2	Other Studies	5 M\$	
Period 3	Well	1	
Period 3	Other Studies	5 M\$	

NOTE: The 2D seismic minimum program could be offset against a Full Tensor Gravity (FTG) program or a 3D seismic commitment.

CURRENT SEISMIC DATA P5-A		km
INP Regional	INP	100
Brokered	Other	852
	<b>TOTAL</b>	<b>952</b>

# Application Guidelines

# Application Guidelines



REPUBLIC OF MOZAMBIQUE  
MINISTRY OF MINERAL RESOURCES

## MOZAMBIQUE 5<sup>TH</sup> LICENSING ROUND

### APPLICATION GUIDELINES & MINIMUM WORK PROGRAMS

Round closes Tuesday, 20<sup>th</sup> January 2015

|



**INSTITUTO NACIONAL DE PETRÓLEO**  
Av. Fernão de Magalhães n° 34 1° Andar  
CP n° 4724  
Maputo – Mozambique

1. INTRODUCTION
2. LEGAL & FISCAL DOCUMENTS
3. APPLICATION DOCUMENTS
4. SUBMITTING AN APPLICATION
5. MINIMUM WORK PROGRAMS
6. BID EVALUATION CRITERIA
7. GEOTECHNICAL DATA SUMMARY
8. CONTACT DETAILS

## 2. Legal & Fiscal Documents

2.1 Schedule 1 - Petroleum Law

2.2 Schedule 2 - Petroleum Operation Regulations

2.3 Schedule 3 - Model EPC

2.4 Schedule 4 - Areas in Mozambique 5<sup>th</sup> Licensing Round

## 2.1 Petroleum Law

The Mozambique Petroleum sector is currently regulated by the Petroleum Law No 21/2104 of 18<sup>th</sup> August. The law establishes the regime for the granting of rights for the conduct of Petroleum Operations in the Republic of Mozambique. The scope of the law excludes the refining of Petroleum and its industrial utilization.

### **Ownership of Petroleum Resources**

Petroleum resources in situ as natural resources in the soil and the subsoil of the land territory of Mozambique, in the seabed of its the interior waters, territorial sea and of the Exclusive Economic Zone or its continental shelf are the property of the State.

### **Participation of the State**

The State reserves itself the right to participate in Petroleum Operations. The participation of the State may occur during any phase of Petroleum Operations or during the construction and operation of a Oil Pipelines and Gas Pipelines or other Facilities in accordance with the terms and conditions to be established in a Concession Contract and approved Development Plans.

## 2.2 Petroleum Operation Regulations

The Petroleum Operations Regulations are currently being updated to further outline the conditions for the conduct of Petroleum Operations in Mozambique. Petroleum Operations may only be conducted in accordance with:

### **Reconnaissance Concession Contract**

Allows the holder the right to conduct preliminary work and assessment operations in the area subject to the Concession Contract. Is executed on a basis of exclusivity for a maximum two-year period and permits the drilling of wells to a depth of 100 meters below the surface or the bottom of the sea.

### **Exploration and Production Concession Contract**

An Exploration and Production Concession Contract gives an exclusive right to conduct Petroleum Exploration and Production activities as well as the non-exclusive right to operate petroleum pipelines.

### **Facilities Concession Contract**

A Facility Concession Contract grants Concessionaires a right to conduct Petroleum Operations related to the construction and operation of facilities not encompassed by a Development Plan pursuant to an Exploration and Production Concession Contract, such as multi use central processing Facility serving several EPCC Areas or a multi-user LNG plant serving several EPCC Areas.

### **Petroleum Pipeline Concession Contract**

A Petroleum Pipeline Concession Contract grants the right to construct and operate an Oil Pipeline or a Gas Pipeline for the purpose of transporting Crude Oil or Natural Gas in cases that such are not covered by an Exploration and Production Concession Contract.

## 2.3 Model EPCC

### EXPLORATION AND PRODUCTION CONCESSION CONTRACT”.

The revised Model EPCC will be available to download from the website ([www.inp-mz.com](http://www.inp-mz.com))

The EPCC granted to the successful applicants will be based on this model. The awarded EPCCs will be made public consistent with Petroleum Law 2014 requirements.

Applicants should take due notice that the EPCC is based on an administrative law based governmental decision in which a specific number of fiscal elements have been agreed based on negotiation prior to the final award.

It is provided in Microsoft Word format for companies to complete.



# 3. APPLICATION DOCUMENTS

- 3.1 Appendix A - Applicant Details and Financial Information
- 3.2 Appendix B - Technical Application Summary
- 3.3 Appendix C - Financial Proposal
- 3.4 Appendix D - Health Safety Environment

## 3.1 Applicant Details and Financial Information

### APPENDIX A

Appendix A contains financial information about the applicant and is required to support applications for a Reconnaissance Concession Contract, an Exploration and Production Concession Contract or a Pipeline Concession Contract.

Where there are two or more companies submitting a combined or joint application, the Government require the Appendix A completed by each applicant separately.

Companies are required to confirm that they are not in default of any obligations to the State.

## 3.2 Technical Application Summary

### APPENDIX B

The technical submission shall contain the information requested on the following pages for each of the areas applied for.

Attached to the technical submission the applicant is requested to present brief and relevant documentation for each area of G&G studies and analyses focusing on aspects that are considered critical for an evaluation of the prospectivity of the area, such as:

- a brief and focused petroleum geological analysis, describing the prospectivity in the area applied for, critical factors, etc.
- a brief description of the seismic interpretation, well ties, etc., including attached interpreted seismic sections
- time and depth structure maps for prospective horizons, showing all identified prospects and leads
- brief description of the prospect evaluation
- description of the proposed obligatory work programme and exploration strategy

The technical submission should also be provided on a separate USB or CDROM which should have adequate resolution of all the figures in order to show relevant details.

# Technical Application Summary Sheets

**INP** Instituto Nacional de Petróleo 

**B2. INDIVIDUAL PROSPECT / LEAD EVALUATION SHEETS**  
 As much information as possible should be filled in (leads are not expected to have a complete volume and parameter data set). The map with prospect/lead outline must have coordinates.

Prospect /Lead name		Reference to seismic line(s)/seismic coverage:		
Prospect / Lead	Structural element	Reported by (company & report reference / date)	Water depth (m)	
Play	Area & Block(s)		Ground level elev (m)	
CALCULATED HYDROCARBON VOLUMES				
Gas / Oil case	ORIGINALLY IN PLACE		RECOVERABLE	
	Low	Base	High	Low
				Base
				High
Gas Bcf				
Condensate / Oil MMBbl				
Comments				
Calculate Volumes				
PROSPECT RISK ASSESSMENT				
Trap		Reservoir		Source
Probability of structure	Probability of seal	Presence of Target fm	Probability of Reservoir Quality	Probability of Source
				Probability of maturity /charge
				Geol. probability of success:
Comments, Prospect Risk Assessment				
TRAP TYPE, RESERVOIR ROCK, SOURCE ROCK, CAP ROCK (SEAL)				
Type of trap (structural, stratigraphic, etc)		Reservoir level (Chronostrat./age)	Reservoir level (Lithostrat./fm)	
Source Rock (Chronostrat. /	Source Rock (Lithostrat./fm)	Seal (Chronostratigraphy /age)	Seal (Lithostratigraphy / formation)	
Comments:				
PARAMETRES USED IN VOLUME CALCULATIONS				
	Low	Base case (most likely value)	High	
Depth to top of prospect (m) (below Ground level / sea level)				
Depth to base of prospect (m) (closing contour)				
Milliseconds to top of prospect (ms)				
Milliseconds to base of prospect (ms)				
Area of closure (km <sup>2</sup> )				
Geos rock volume (10 <sup>9</sup> m <sup>3</sup> )				
Hydrocarbon column in prospect (m)				
Reservoir thickness (m)				
Net / Gross (N/G)				
Porosity (φ)				
Water Saturation (Sw)				
Formation Volume Factor (FVF)	Bg			
	Bo			
Recovery factor				
Gas Oil Ratio (GOR), free gas (Sm <sup>3</sup> /Sm <sup>3</sup> )				
GOR, oil (Sm <sup>3</sup> /Sm <sup>3</sup> )				

APPENDIX B – Technical Submission Page 4 of 10

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**Summary of proposed of work program:**  
 (Please complete the appropriate boxes and provide expected cost)

First Exploration Period:	Other:	2D Seismic Acquisition:	3D Seismic Acquisition:	Drill Expl. Well:
	Size: _____	Size: _____	Size: _____	Depth: _____
Years	USD: _____	USD: _____	USD: _____	Target _____
				USD: _____
Second Extension Period:	Other:	2D Seismic Acquisition:	3D Seismic Acquisition:	Drill Expl. Well:
	Size: _____	Size: _____	Size: _____	Depth: _____
Years	USD: _____	USD: _____	USD: _____	Target _____
				USD: _____
Third Extension Period:	Other:	2D Seismic Acquisition:	3D Seismic Acquisition:	Drill Expl. Well:
	Size: _____	Size: _____	Size: _____	Depth: _____
Years	USD: _____	USD: _____	USD: _____	Target _____
				USD: _____

**Re-processing and re-interpretation of existing geotechnical data (seismic / well)**

	Line km Within the area applied for	Line Km Within Region
Reprocessing		
New Interpretation		
Other (special studies)		

APPENDIX B – Technical Submission Page 9 of 10

## 3.3 Financial Proposal

### APPENDIX C

The proposal of the applicant for the obligatory work commitment and minimum expenditure amounts to be incorporated in the standard Bank Guarantee in respect of the Exploration Area (s) specified in the application must be stated.

Definite proposal with respect to all negotiable items as contained in the Model Exploration and Production Concession Contract must be stated, including bonus payments, training, institutional support that may be applicable.

# Financial Proposal – Appendix C

## Key Points

- Training
- Institutional Support
- Social Support
- ENH carried Interest
- Cost Petroleum
- R Factor Table  
(now fixed by Law)
- Production Bonus
- Expenditure Commitments  
(by Period)

Items		US \$	%
Training			
Institutional Support			
Social Support			
ENH carried Interest (minimum 10%)			
Cost Petroleum			60%
Production Share R-Factor: Concessionaires Share	R < 1	Minimum 85%	
	1 ≤ R < 1.5	Minimum 75%	
	1.5 ≤ R < 2.0	Minimum 65%	
	2.0 ≤ R < 2.5	Minimum 50%	
	R ≤ 2.5	Minimum 40%	
Production Bonus payable in US Dollar	At the commence of initial commercial production:		
	When Production from EPCC Area first reach _____ BOE/day average for a month:		
	When Production from EPCC Area first reaches each further tranche of _____ BOE/day average for a month:		
Total Expenditure Commitment (US \$ million)	First Exploration Period		
	Second Exploration Period		
	Third Exploration Period		
	<b>Total EPCC Expenditure</b>		

## 3.4 Health Safety Environment

### APPENDIX D

An applicant should submit details of the Health, Safety and Environment protection company policy and record of the same for the last 3 years.

Note:

*Legal requirement and INP objectives are to ensure the success of the systematic effort needed to prevent faults and dangerous situations, incidents and accident or undesired conditions arising or developing, and to limit pollution and injury to persons and damage to equipment, Facilities or property, that will support and maintain a favourable health, environment and safety culture that [must] pervade all levels of the company and its contractors organization as well as every individual activity or establishment.*

*INP also recognizes that a favourable health, environment and safety culture is [also] needed to ensure consistent and continuous[al] development and improvement of health, environment and safety.*

## 4. SUBMITTING AN APPLICATION

- Applications must be consistent with the provisions of the Petroleum Law No 21/2014 of 18 August and the Petroleum Operations Regulations.
- Applications on behalf of more than one company are to be accompanied by a fully executed agreement between those companies. Terms and conditions of such agreements may not deviate from the requirements stipulated by applicable Mozambican law including the Petroleum regulatory regime consisting of the petroleum Law, Petroleum Operations Regulations, the model EPCC and its appurtenant documents.
- A non-refundable fee of MT 500,000 per applicant must accompany the application.
- Applications should be made in triplicate, in sealed envelopes clearly marked on the top “APPLICATION FOR HYDROCARBON EXPLORATION IN MOZAMBIQUE 5th LICENSE ROUND ” must be sent by registered mail or hand delivered.
- A receipt will be issued on receipt of each application.
- INP will post on the website ([www.inp-mz.com](http://www.inp-mz.com)) the list of applicants and the blocks applied for one week after the license round application deadline.
- All bids shall remain valid for at least 6 months from the date of the licensing round application deadline.

# MOZAMBIQUE 5<sup>th</sup> LICENSE ROUND – CLOSING DATE



Applications must be received in INP Office Maputo

by 12:00 Midday

Tuesday 20<sup>th</sup> January 2015

## 5. BID EVALUATION CRITERIA

The Ministry of Minerals Resources and the National Petroleum Institute will take the following aspects into consideration:

- The technical competence and financial strength of the applicant to be able to carry out exploration and production of hydrocarbons within legal requirements and industry standards.
- The technical database used in making the application.
- The technical evaluation and obligatory work program. Preference will be given to bids which demonstrate an active and cost-effective exploration approach, with satisfying progress.
- Economic terms offered by the Applicant
- Strength of the proposed systems, standards and management for health, safety and environmental protection.
- Level of institutional support and training.

**Important Note:**

*INP encourages companies to present a technical proposal that will maximize the knowledge of the petroleum potential of the Area(s) applied for. The Score Card will be included in the Application Guidelines document to made available shortly.*

# Applicant Guidelines

## Single Company Applications

License to be awarded in the 5<sup>th</sup> Round will contain a minimum of 2 companies in addition to State Participation. This may involve INP combining applicants to achieve this requirement.

## Group Applications

- Recommend 2 to 4 companies per group
  - Operator
  - Concessionaires 2 - 3

Note:

*In addition the State through ENH will have a carried interest (minimum of 10% biddable) in each EPCC.*

# Experience – Onshore

## Operator

- Operatorship of at least one onshore exploration / development program including seismic and drilling
- Total assets & capital greater than USD 100 Million

## Non-Operator / Partner

- Should have sufficient assets to support the proposed work program and contingencies

## All Participants

- *Companies must have proven expertise, technical capacity and financial means to conduct the required petroleum operations in an efficient manner (Reference the Petroleum Law – Article 26)*

# Experience – Offshore less than 500m

## Operator

- Operatorship of at least one offshore petroleum license and the drilling of exploration and development wells
- Total assets & capital greater than USD 2 Billion

## Non-Operator / Partner

- Should have sufficient assets to support the proposed work program and contingencies

## All Participants

- *Companies must have proven expertise, technical capacity and financial means to conduct the required petroleum operations in an efficient manner (Reference the Petroleum Law – Article 26)*

# Experience – Deep Water Offshore > 500m

## Operator

- Operatorship of at least one petroleum license in water depths in excess of 500m including drilling of exploration or development wells.
- Total assets & capital greater than USD 5 Billion

## Non-Operator / Partner

- Total assets & capital greater than USD 250 Million

## All Participants

- *Companies must have proven expertise, technical capacity and financial means to conduct the required petroleum operations in an efficient manner (Reference the Petroleum Law – Article 26)*



# Concluding Remarks

Chairman of INP  
**Mr Arsenio Mabote**

## **Mozambique offers good exploration opportunities:**

- Good prospective acreage available
- Favourable legal, regulatory and fiscal framework
- Adequate infrastructure for natural gas transmission;
- Political stability

## **Mozambique offers good investment opportunities:**

- The socio-economic indicators are steadily growing
- GDP is growing on average of 7 to 8% per year
- The inflation rate is under control and the local currency the new metical is stable
- The fiscal incentives for foreign investment are attractive
- The infrastructures such as roads, telecommunications are improving substantially

The presentation material shown today and bid documentation will be available shortly to download from:

[www.inp-mz.com](http://www.inp-mz.com)

# INP Advisors / Partners

INP would like acknowledge it Advisors and Multi-Client data partners

## INP Advisors:



## INP Multi-Client Projects / Technical Data:

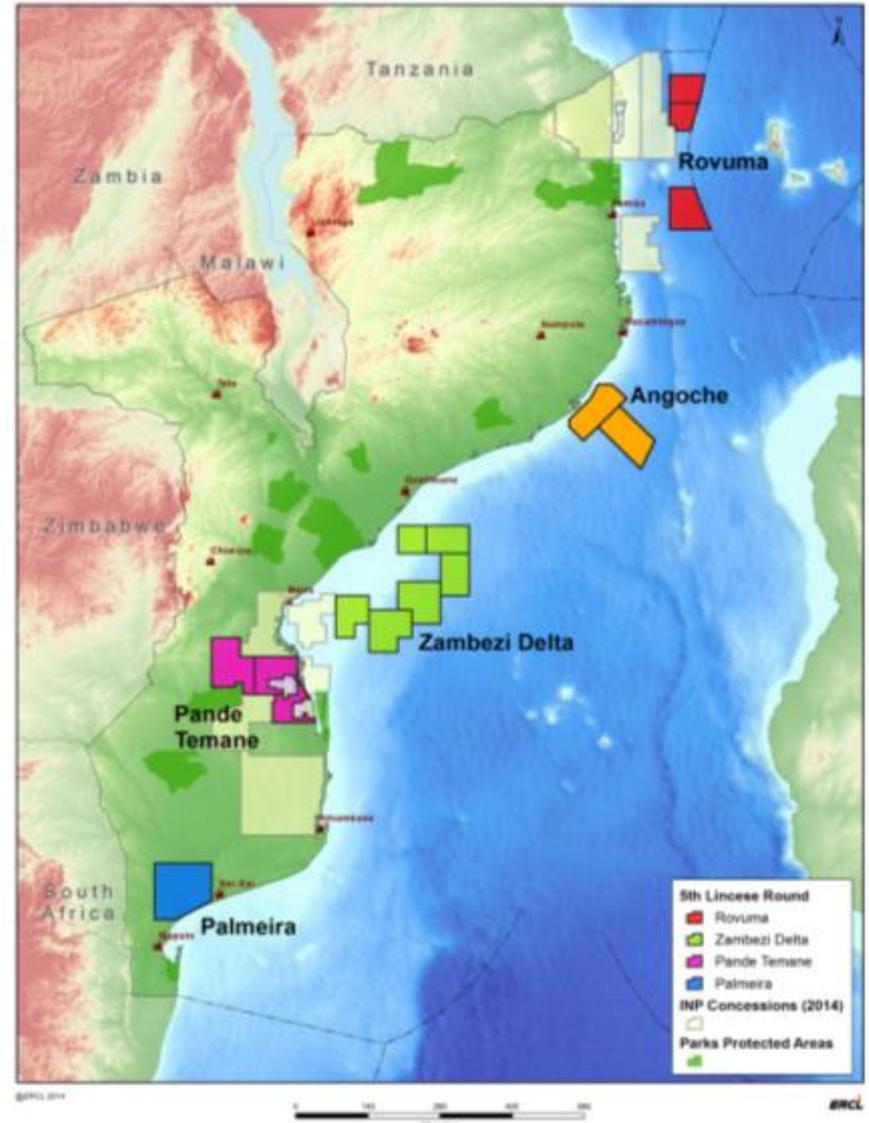


# INP

welcome your application  
in the  
Mozambique  
5<sup>th</sup> Licensing Round

## Questions ?

For further information please visit  
[www.inp-mz.com](http://www.inp-mz.com)



# Documents available 31<sup>st</sup> October 2014



REPUBLIC OF MOZAMBIQUE  
MINISTRY OF MINERAL RESOURCES

## MOZAMBIQUE 5<sup>TH</sup> LICENSING ROUND

### APPLICATION GUIDELINES & MINIMUM WORK PROGRAMS

Round closes Tuesday, 20<sup>th</sup> January 2015



**INSTITUTO NACIONAL DE PETRÓLEO**  
Av. Fernão de Magalhães nº 34 1º Andar  
CP nº 4724  
Maputo – Mozambique

INP Instituto Nacional de Petróleo



REPUBLIC OF MOZAMBIQUE  
MINISTRY OF MINERAL RESOURCES

## MOZAMBIQUE FIFTH LICENSING ROUND

### TECHNICAL DATA

Please send / deliver your  
application to:

(See Guidance Notes)



**INSTITUTO NACIONAL DE PETRÓLEO**  
Av. Fernão de Magalhães nº 34 1º Andar  
CP nº 4724  
Maputo – Mozambique

# Mozambique 5th License Round



This information is provided by INP as an introduction to the Mozambique 5<sup>th</sup> License Round.

Bid applications will close on Tuesday 20<sup>th</sup> of January at 12:00 noon.

For further details, information about data packages and data rooms please contact:

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