

Regional study

MSGBC Basin Petroleum Prospectivity

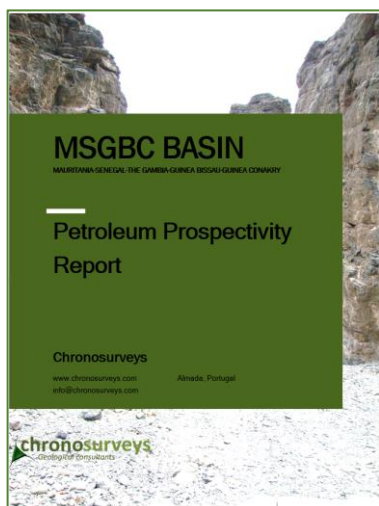
Mauritania-Senegal-The Gambia-Guinea Bissau- Guinea Conakry Basin Regional prospectivity report

The MSGBC basin ranges from southernmost Western Sahara to Guinea-Conakry, along the Atlantic margin, both onshore and offshore.

The basin has been in the spotlight in recent years due to the several World-Class discoveries – Greater Tortue, Marsouin, Teranga, SNE among others.

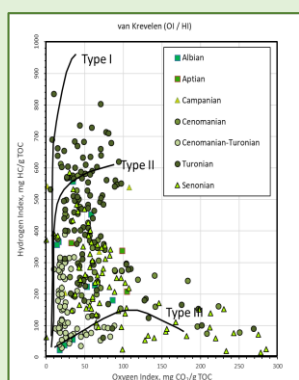
The discoveries opened new plays in the basin which have vast exploration potential.

This study compiles extensive public-domain information, coupled with our deep knowledge of the area and includes a comprehensive report, GIS and WebGIS projects.

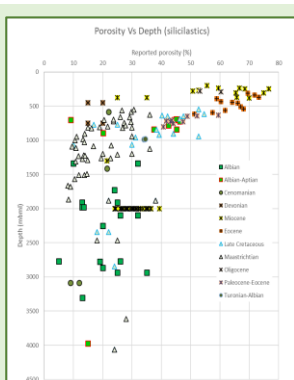


Comprehensive report profusely illustrated with charts, seismic sections, maps, etc. Petroleum system's elements and processes are described and discussed for the several areas of the basin.

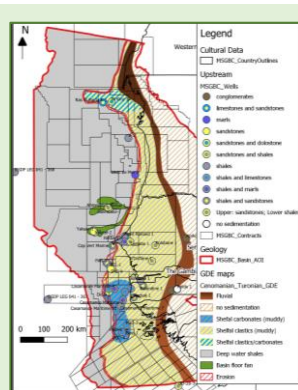
- 380+ references (articles, thesis, presentations, brochures, etc) used
- Political, historical and economic background of each country
- 96 georeferenced 2D seismic lines
- 18 geological cross-sections
- 900+ source rock parameter data points
- 250+ reservoir parameter data points
- Gross depositional environment maps of 7 key intervals of the basin
- 6 main plays identified, described and illustrated
- GIS project with Upstream, Geology, Geography and cultural data
- WebGIS project with key data for easy remote access.



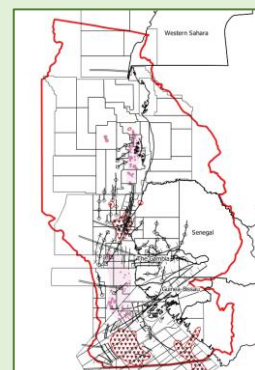
900+ Source rock parameters datapoints, plotted in multiple charts for easy interpretation. Raw data available in Excel sheet with original source of data



250+ Reservoir parameter datapoints, plotted in multiple charts for easy interpretation. Raw data available in Excel sheet with original source of data



Gross depositional environment maps of 7 key intervals of the basin



GIS project with Upstream, Geology, Geography and cultural data

MSGBC BASIN

MAURITANIA-SENEGAL-THE GAMBIA-GUINEA-BISSAU-GUINEA CONAKRY

115 pages report with 63 figures of maps, charts, seismic sections. Overview of the basin, description of the source rocks, reservoir, traps and plays.

Report contents

Brief historical background

- Political system
- Security
- Key actors
- Economy
- Main imports and exports

Exploration and Production history

- 1950's-1960's
- 1970's
- 1980's
- 1990's
- 2000's
- 2010's and beyond

Geology of the MSGBC Basin

- Introduction
- Materials and Methods

Source rocks

- Cenomanian-Turonian
- Albian-Aptian
- Berriasian to Barremian
- Jurassic
- Silurian Buba shales

Reservoirs

- Paleozoic
- Aptian
- Early Cenomanian to Albian
- Maastrichtian
- Paleogene
- Miocene

Traps and plays

- Pre and syn-rift fault block play
- Post-rift fault play
- Salt diapir play
- Unconformity play (SNE play)
- Distal 4-way closures
- Turbidite play

Gross Depositional Environments

- Late Jurassic
- Aptian
- Albian
- Cenomanian-Turonian
- Maastrichtian
- Paleogene
- Neogene

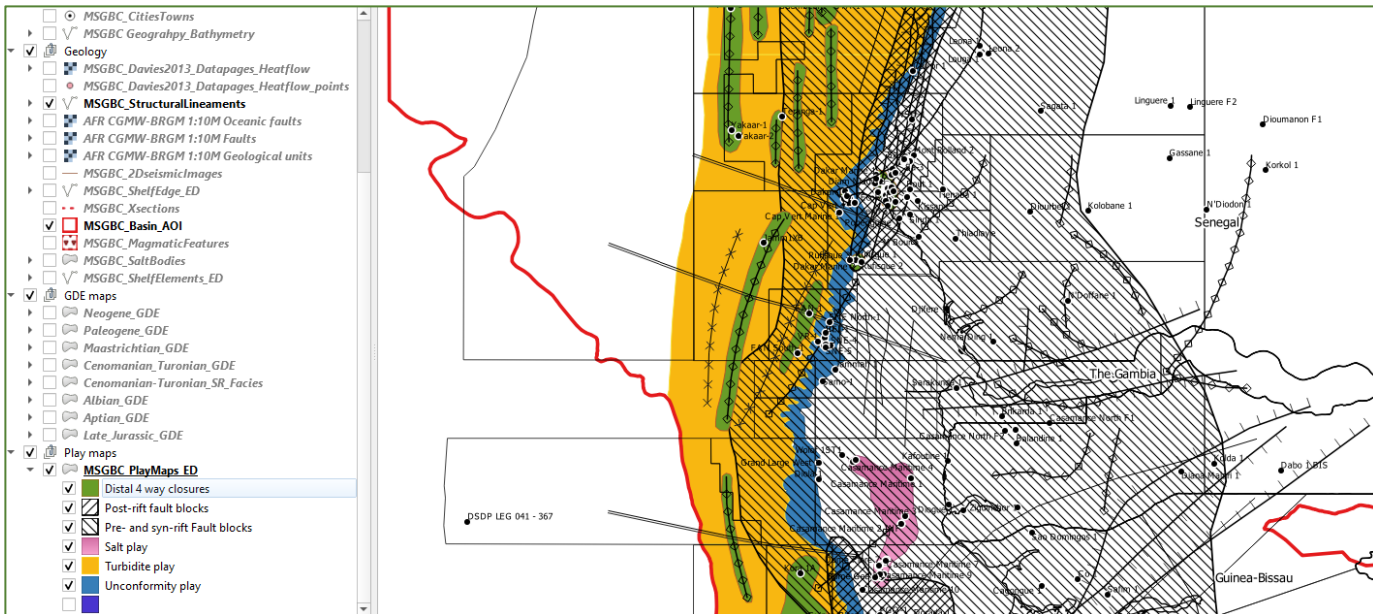
Seismic coverage

- 2D seismic surveys
- 3D seismic surveys

Mauritania-Senegal-The Gambia-Guinea Bissau- Guinea Conakry Basin GIS project

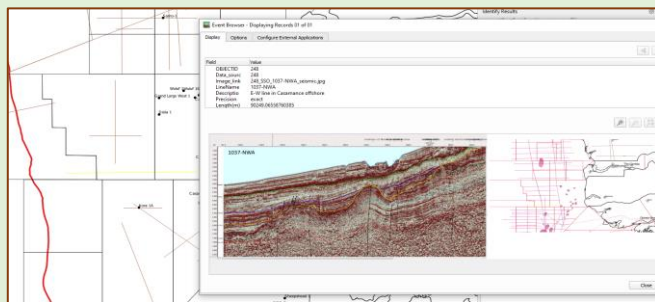


Ready-to-use GIS project, built using QGIS 3.6, convertible to ArcGIS format. Over 27 layers of geological, upstream, geographical and cultural data.

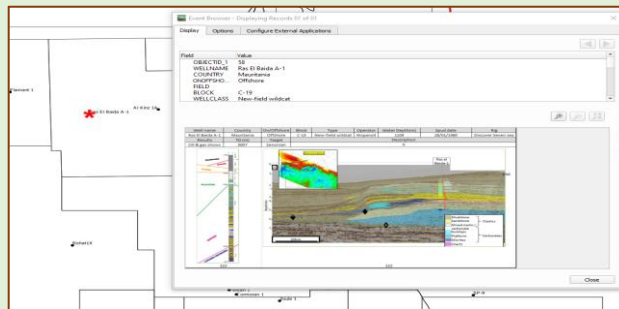
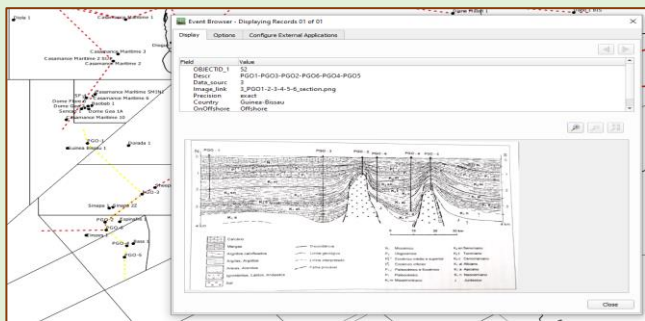


Georeferenced data

96 2D seismic lines linked to a raster image which pops-up when clicking on the well (using e-vis event tool in QGIS or html pop-up tool in ArcGIS).



18 cross-sections linked to a raster image which pops-up when clicking on the well (using e-vis event tool in QGIS or html pop-up tool in ArcGIS).



270+ wells linked to a raster image which pops-up when clicking on the well (using e-vis event tool in QGIS or html pop-up tool in ArcGIS).

MSGBC BASIN

MAURITANIA-SENEGAL-THE GAMBIA-GUINEA-BISSAU-GUINEA CONAKRY

GIS project contents

Cultural Data

- MSGBC Country outlines
- MSGBC Maritime boundaries
- MSGBC Ports
- MSGBC Airports

Upstream

- MSGBC Wells (270+ summary sheets)
- MSGBC 2D surveys
- MSGBC 3D surveys
- MSGBC Contracts
- MSGBC leads, prospects and fields

Geography

- MSGBC Cities Towns
- MSGBC Geography Bathymetry

Geology

- MSGBC Davies2013 Datapages Heatflow
- MSGBC structural lineaments
- Africa Land geology CGMW-BRGM 1:10M (external layers)
- MSGBC 2D seismic lines (94 raster images)
- MSGBC X-sections (18 raster images)
- MSGBC Basin AOI
- MSGBC Magmatic features
- MSGBC salt bodies

GDE maps

- Late Jurassic
- Aptian
- Albian
- Cenomanian-Turonian
- Maastrichtian
- Paleogene
- Neogene

Play map

- Pre and syn-rift fault block play
- Post-rift fault play
- Salt diapir play
- Unconformity play (SNE play)
- Distal 4-way closures
- Turbidite play

MSGBC BASIN

MAURITANIA-SENEGAL-THE GAMBIA-GUINEA-BISSAU-GUINEA CONAKRY

This study is aimed for New Ventures and early stages of exploration of any company interested in knowing more about the MSGBC Basin.

It allows integration with proprietary data and other sources of data.

The report and GIS project are marketed as a yearly license with updated versions every 6 months.

The authors have been working with this basin for several years and are available for advisory work, attend data room for asset evaluation and general geological consulting work.

Next versions updates

Cultural Data

- Summary sheets on ports and airports
- Political situation updates

Upstream

- MSGBC Wells (updated with recent drilling)
- MSGBC leads, prospects and fields (updated with recent data)

Geology

- 1D Petroleum Systems modelling of key wells and pseudo-wells

GDE Maps and play maps

- Updated maps whenever relevant data is released.

About Chronosurveys

Chronosurveys brings together the best of the Oil & Gas Industry and Academia. We are a group of consultants based in Portugal with experience in Oil & Gas and specialist researchers in Academia that provide integrated services in Stratigraphy, Source Rock evaluation and other Petroleum Geology disciplines. Our services include:

- Biostratigraphy
 - Palynology
 - Nannofossils
 - Micropaleontology (forams)
 - Other disciplines (conodonts, metamorphic terranes, evaporites)
 - Review of vintage reports
- Source rock evaluation
 - Organic geochemistry (TOC, RockEval)
 - Thermal maturity (vitrinite reflectance, spore colour, fluorescence)
 - Visual kerogen typing
- Seismic interpretation and prospect generation
 - Data room evaluations
 - Regional prospectivity
 - Volumetrics and risking
- Stratigraphy and reservoir geology
 - Well correlation
 - Petrographic descriptions
 - XRD
- Multiclient regional prospectivity reports
 - Dynamic GIS project (and webGIS version)
 - Petroleum system evaluation with plays, GDE and CRS maps, well data, seismic and cross-sections, outcrop data, source rock and reservoir parameters
- Training
 - In house and offsite training courses (biostratigraphy, petroleum geology)
 - Field trips in Portugal
 - Geo-Historical tours of Lisbon

We are available to provide further details in a Skype meeting or by email:
info@chronosurveys.com