



# **LGO Energy plc**

**Trinidad – An opportunity for Investors**

**Neil Ritson, Chief Executive Officer**

**21 October 2016, London**

**London (AIM): LGO**  
**[www.lgo-energy.com](http://www.lgo-energy.com)**



## Topics to Cover Today

- Who are LGO Energy plc ?
- Trinidad's fiscal and political landscape
- Brief history of oil in Trinidad and its regional setting
- The State Oil Company – Petrotrin
- Access and competitive landscape
- Production trends
- Goudron Field example
- SW Peninsula example
- Summary



## Company Profile

London Stock Exchange

- *Listed on AIM, 2007, Ticker = LGO*

Producing Oilfields  
and Exploration options

- *Onshore Trinidad and Spain*

London HQ – 8 employees

Spain – 17 employees

Trinidad – 13 employees

Production average (12-months to)

Total Active wells

Group 2P Reserves (mmbbls)

Group Oil in Place (mmbbls)

Market Capital (million)

November 2014

- 527 bopd

- 80

- 7.1

- 231

- £ 100

November 2015

- 1,132 bopd

- 86

- 11.4

- 909

- £ 15

October 2016

- 555 bopd

- 86

- 11.8

- 1080

- £ 7.25



# TRINIDAD

Goudron Field, Trinity Hills Wildlife Reserve

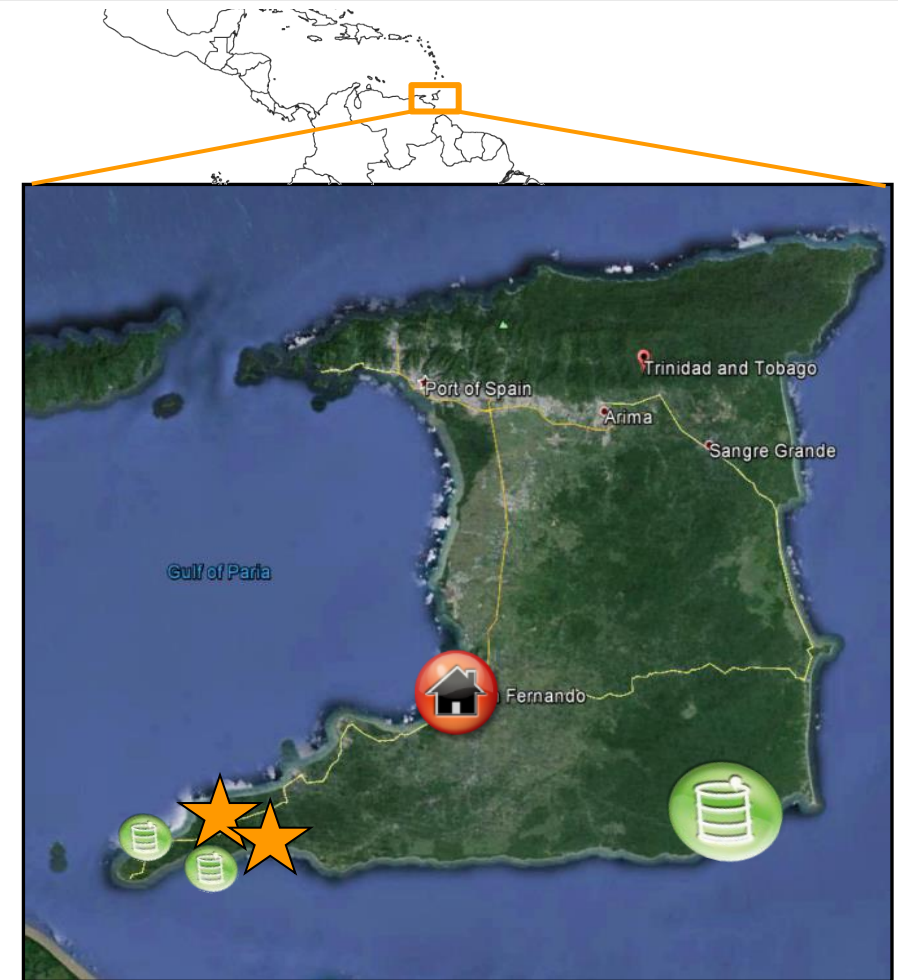






## LGO's Trinidad Footprint

- Trinidad Head Office: San Fernando
- Goudron IPSC (100%) with 2P reserves of 11.8 mmbbls and over 975 mmbbls of oil in place in two reservoirs: Mayaro Sandstone and deeper C-sands. LGO has drilled 15 new C-sand wells since April 2014. All wells also intersected significant Mayaro Sandstone oil pay
- Icacos Field in the South West Peninsula (SWP) (50%, non-operator), producing ~35 bopd from three active wells
- Over 10,500 acres of largely unexplored private oil leases in the SWP and adjacent rights including the Bonasse Field held in partnership with Beach Oilfield Limited (BOLT)



 Oil fields

 Exploration leases



# Why Invest in Trinidad?

## Trinidad and Tobago Economy 2015<sup>1</sup>

- GDP: \$27.5 billion
- GDP Growth: 1.6%
- Population: 1,354,000 [= Birmingham]
- Unemployment Rate: 6.6%
- Land area: 5,131 km<sup>2</sup> [= Northumberland]
- Major industries include energy, manufacturing, tourism

## Advantages

- Politically and economically stable Western democracy
- Trinidad is part of the East Venezuelan Basin with over 30 billion barrels of resources
- Long oil history resulting in over 3 billion barrels already produced, reliable legislation and mature service industries
- Last 30 years focus has been offshore, resulting in less attention to the significant remaining onshore oil potential
- Limited use of modern technology onshore
- Large number of under-exploited proven fields and unexplored areas suitable for independent oil companies

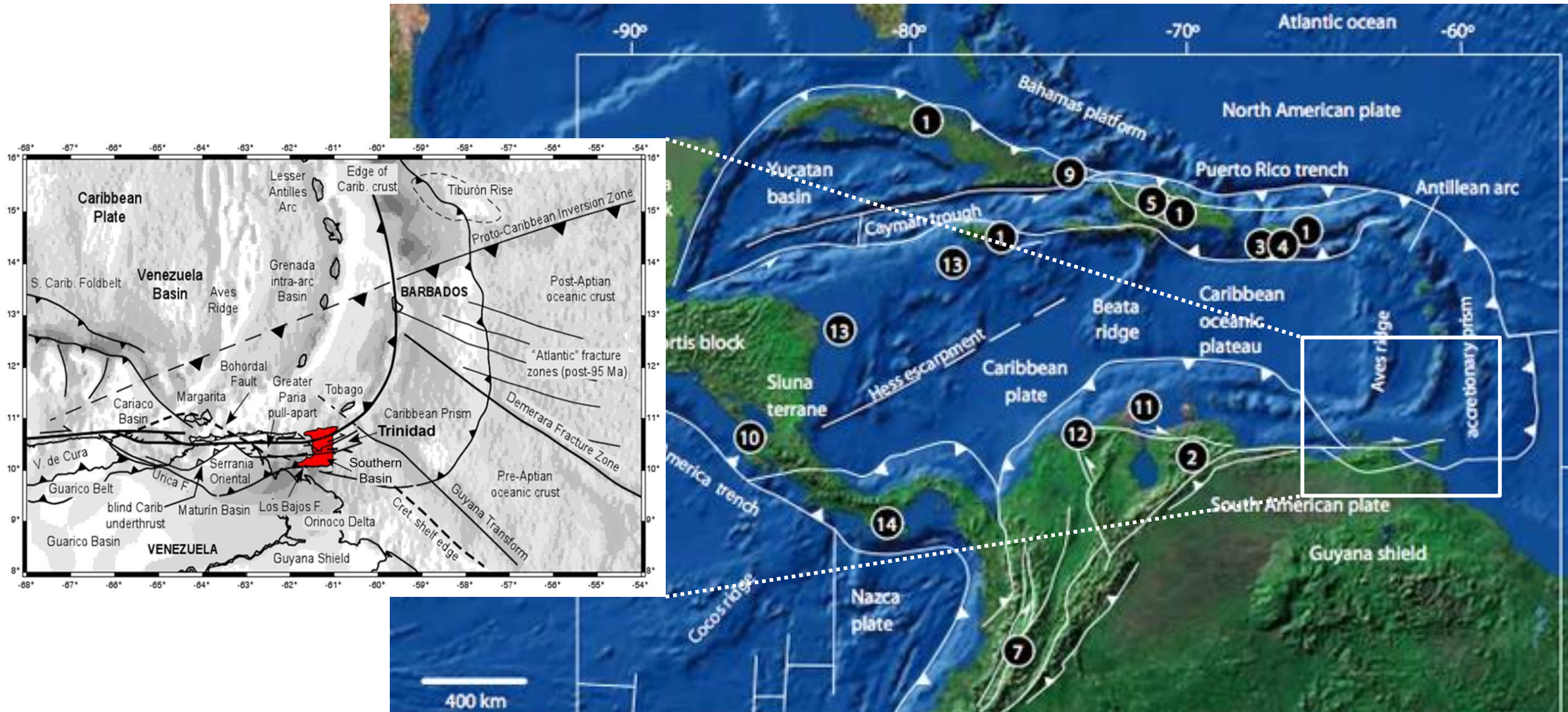


1: <http://www.heritage.org/index/country/trinidadtobago>





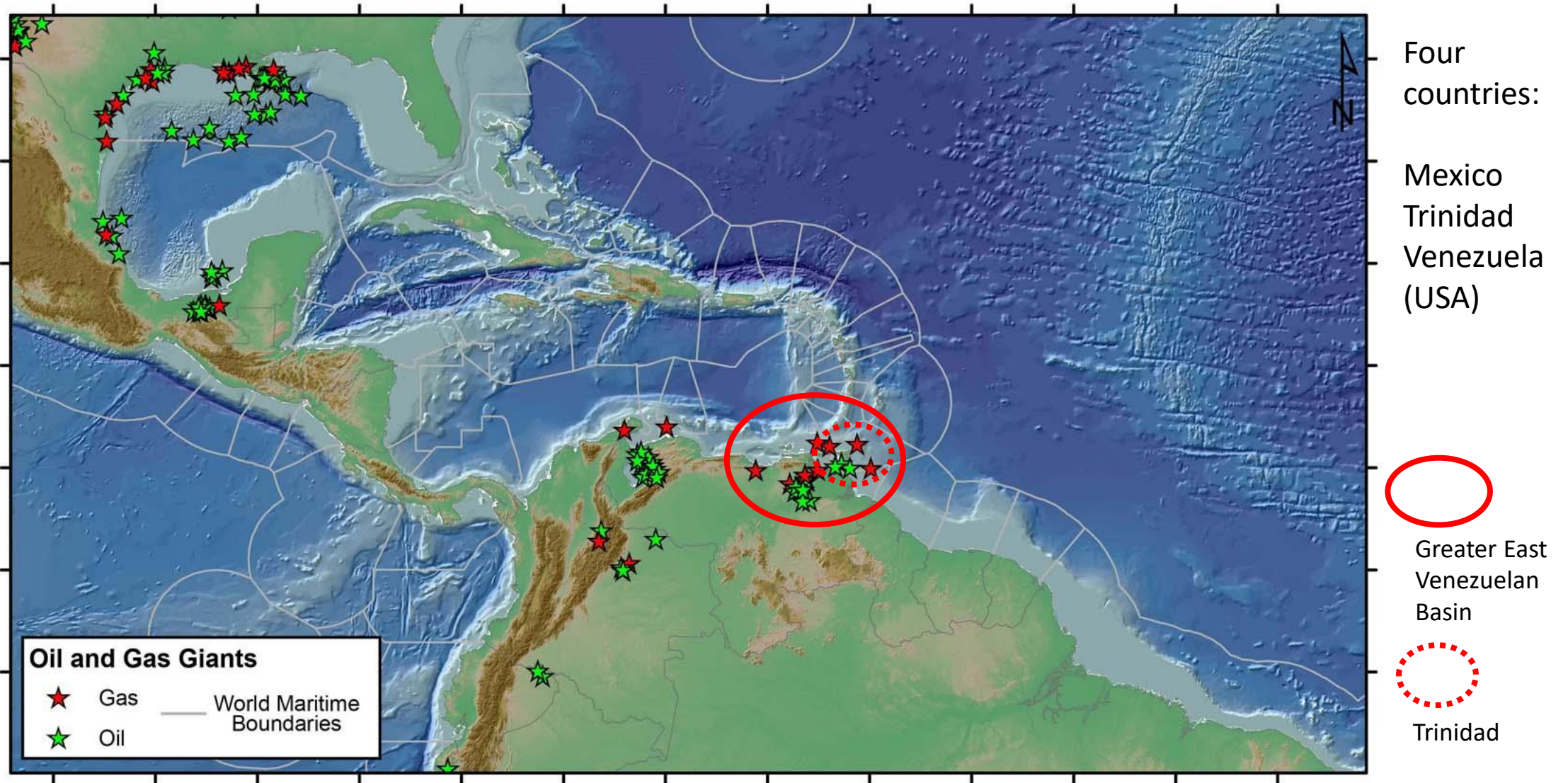
# Caribbean Basin Architecture







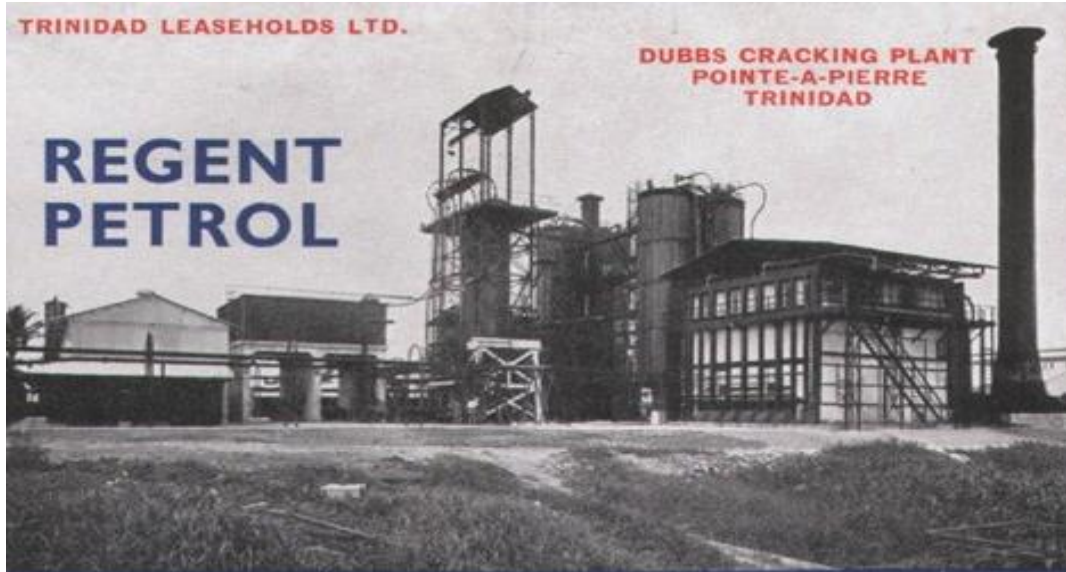
# Petroleum Geology – Giant Field Occurrence







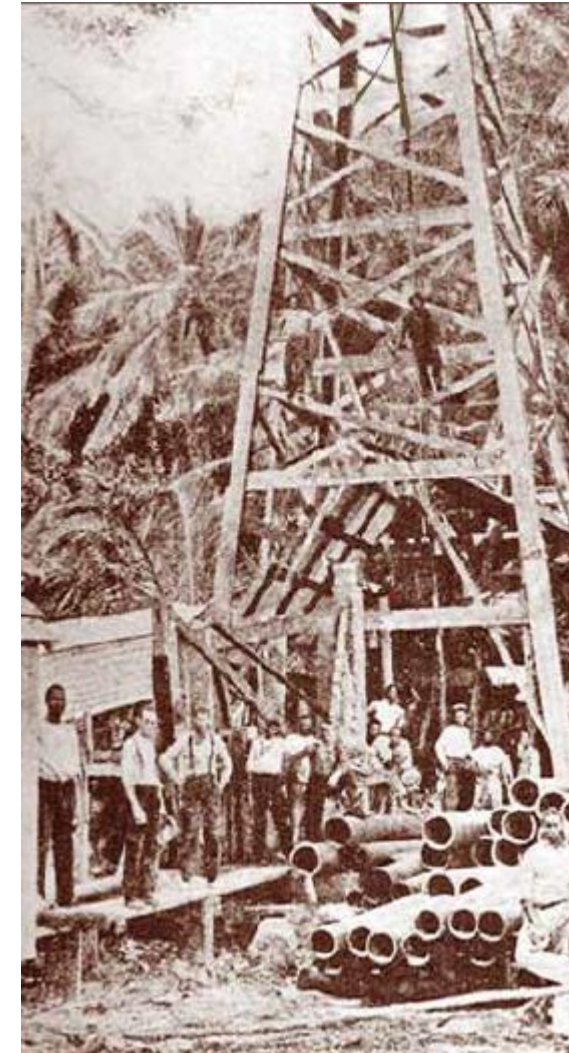
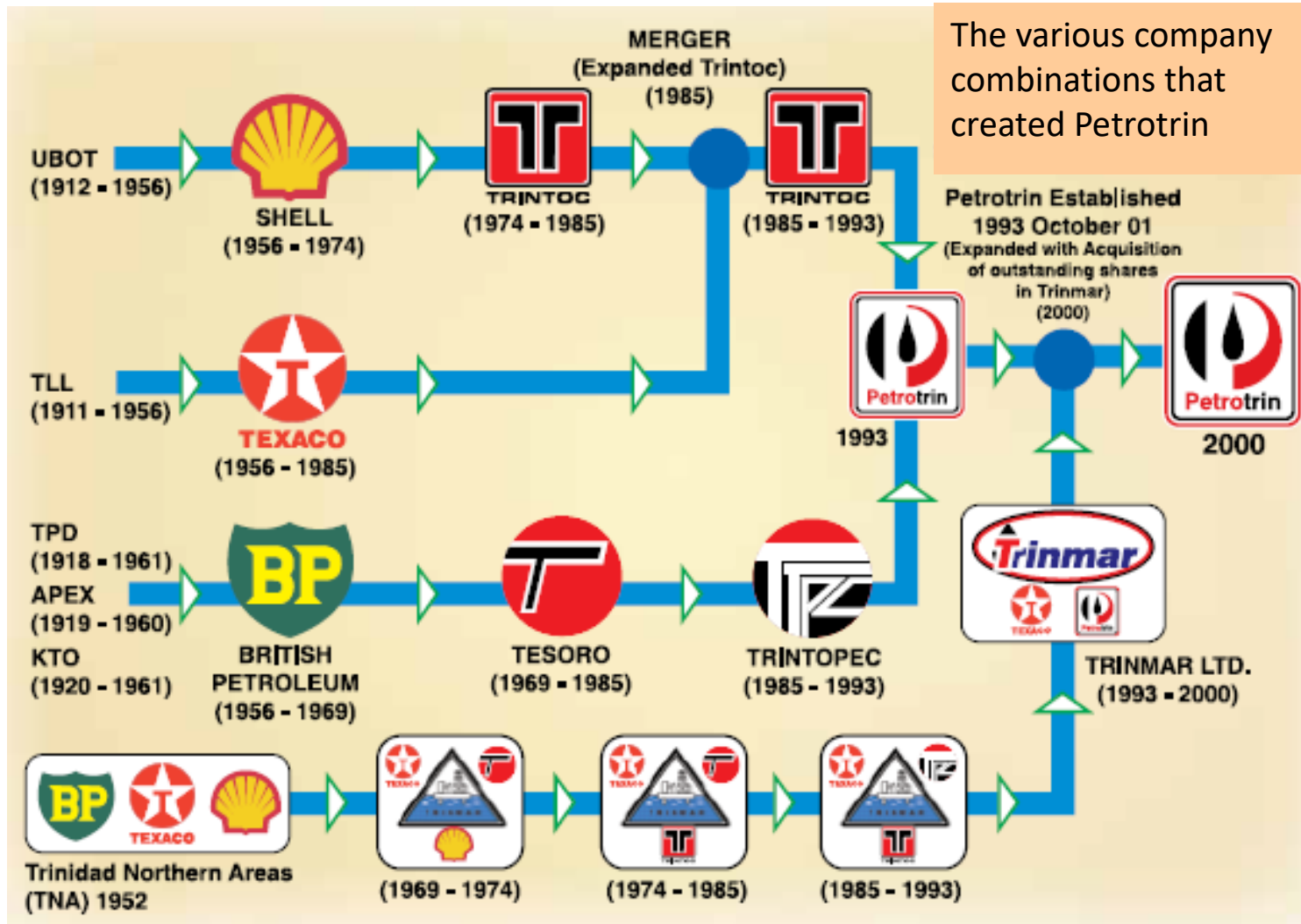
# Brief History of Oil in Trinidad



- First successful drilling for oil was in 1866 at Aripiero near the Pitch Lake
- Successful drilling with rotary rig in 1903 by Randolph Rust in Guayaguayare
- First commercial oil development in 1907/8 TPC N°3 at Guapo (Point Fortin)
- First “gusher” 1909 at TPC N°4 well (reported flowing at 12,000 bopd)
- First refinery opened in 1911 (Point Fortin)
- Pointe-a-Pierre refinery has 165,000 bopd capacity
- Peak oil drilling activity in 1982 with 830,000 feet, total 482,351 feet in 2015
- Over 10,500 onshore wells drilled to date
- Total production has now exceeded 3 billion bbls
- Production 78,660 bopd and 3.58 bcfpd (2015)
- Refinery throughput 125,300 bopd (2015)



# Quick History of Petrotrin



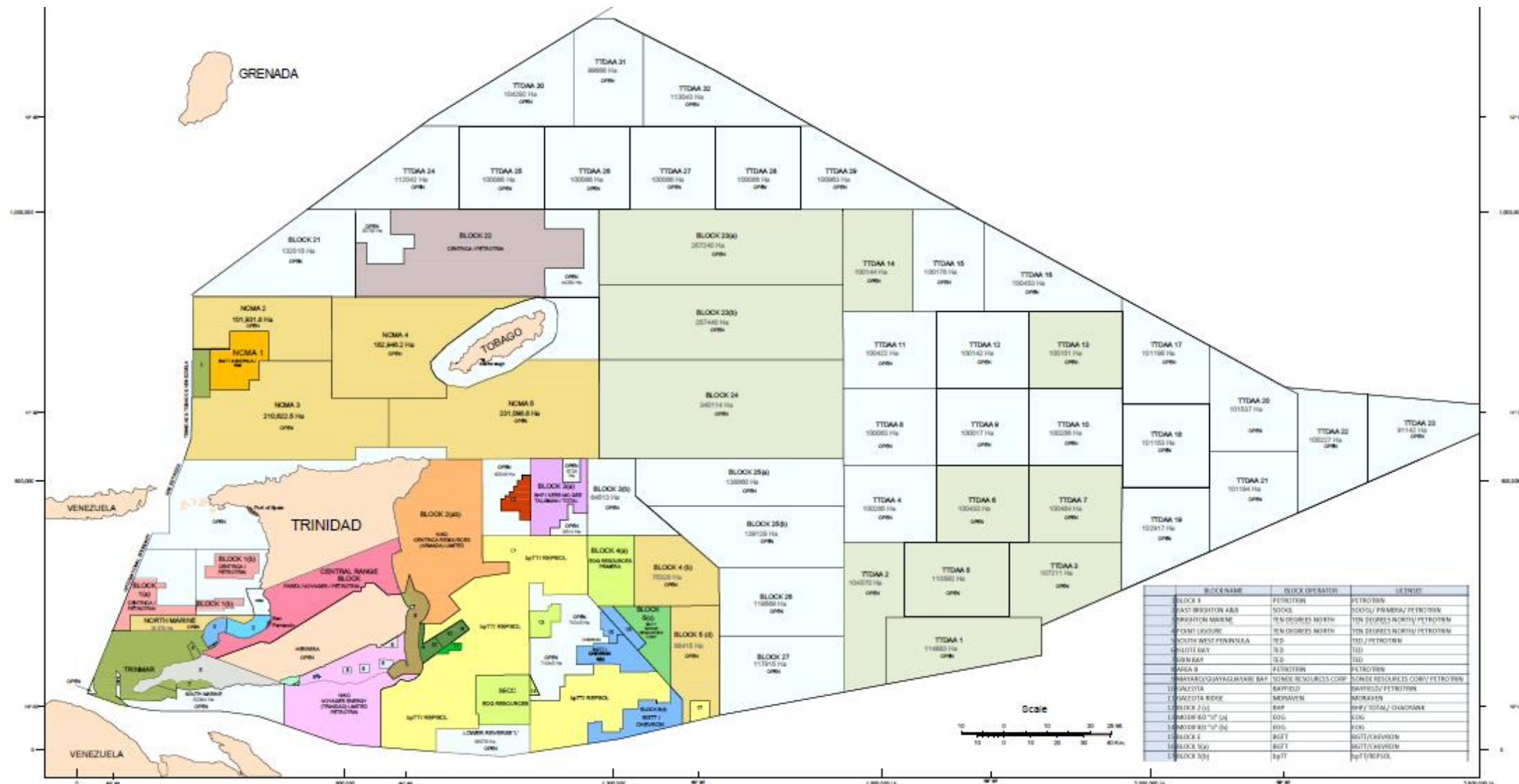
Guayaguayare #3, 1903

First well drilled in Trinidad with rotary drilling equipment, imported from Canada





# Licensing Map



## State Leases

- PSC style contracts with Petrotrin back-in

## Petrotrin Leases (State lands)





- Own operations
- Farm-outs
- Lease operators
- EOR contracts
- Incremental Production Service Contracts

## Private Mineral Rights Leases

- Private mineral rights leased to oil companies
- Petroleum operations are licenced by the State

BLOCKNAME	BLOCK OPERATOR	LEASING
BLOCK 1	PETROTRIN	PETROTRIN
BLOCK 2	PETROTRIN	PETROTRIN
BLOCK 3	PETROTRIN	PETROTRIN
BLOCK 4	PETROTRIN	PETROTRIN
BLOCK 5	PETROTRIN	PETROTRIN
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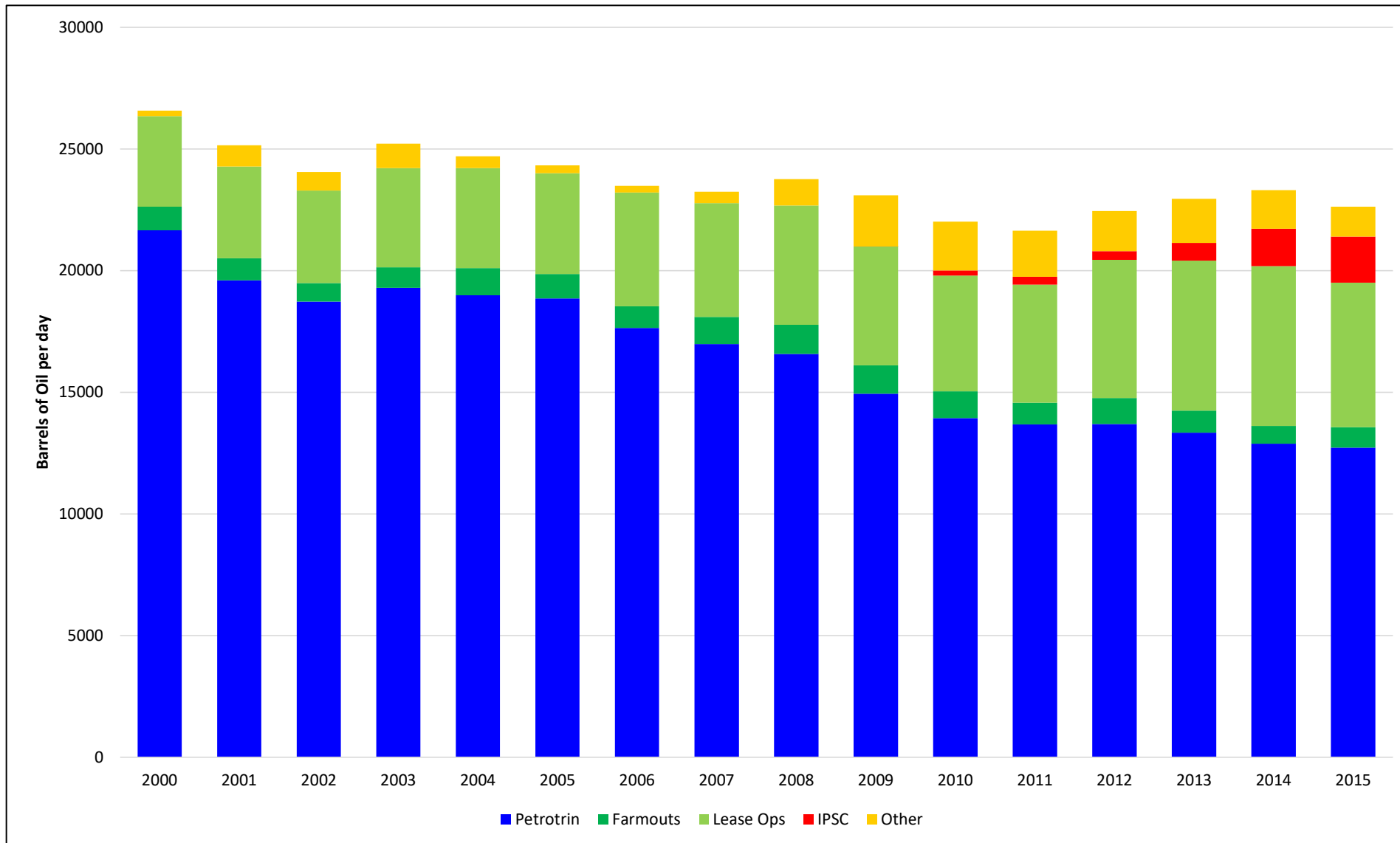
Companies active onshore in Trinidad

London	Toronto	London/Perth	Private
			Lease Operators Ltd
			
			AV Drilling & Workover Ltd
			Beach Oil Field and KP Associates





# Onshore Oil Production



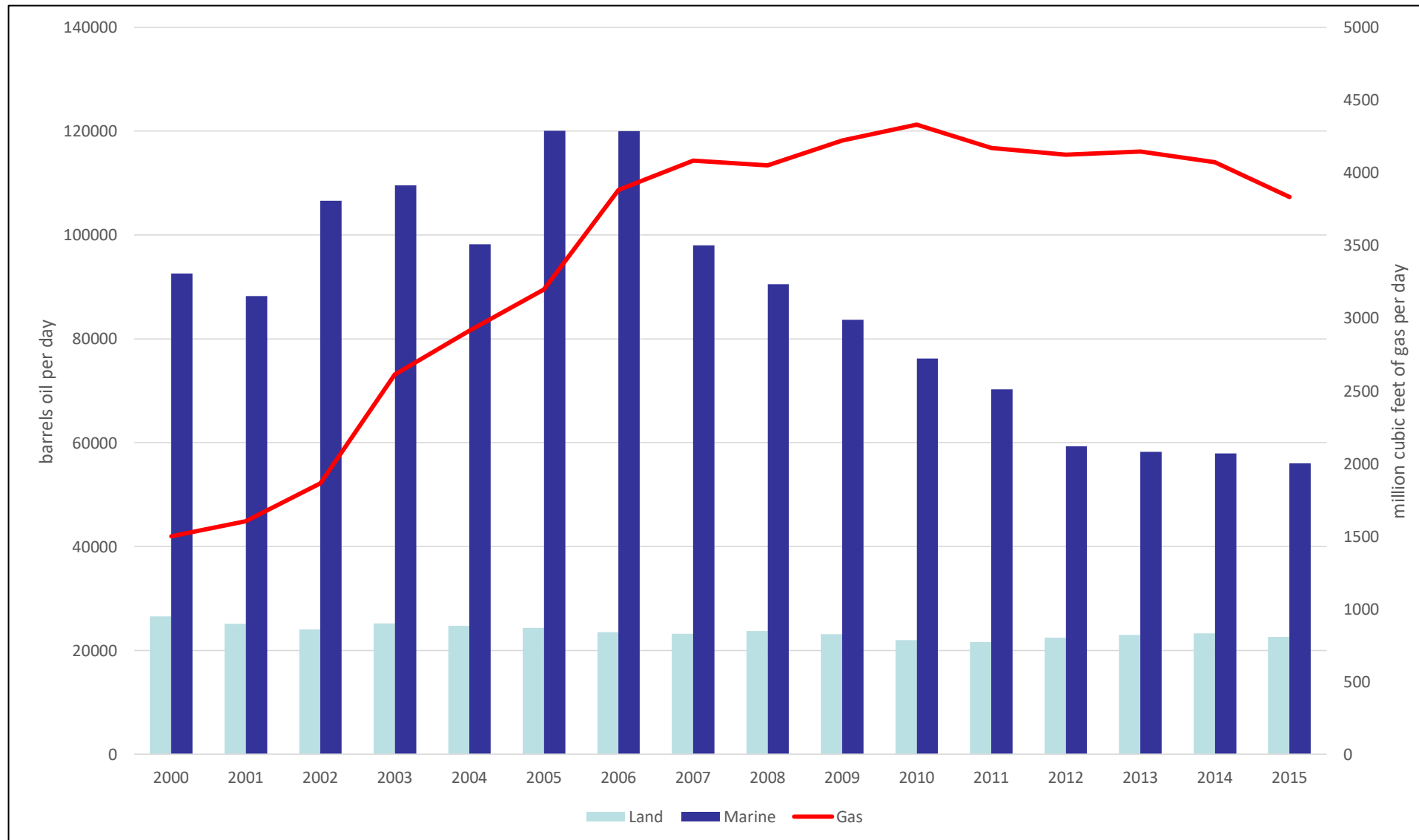
Farmout and Lease Operations introduced in 1989

IPSCs introduced at the end of 2009

Other are non-Petrotrin leases on State and Private land



# Oil, Gas and Offshore Production



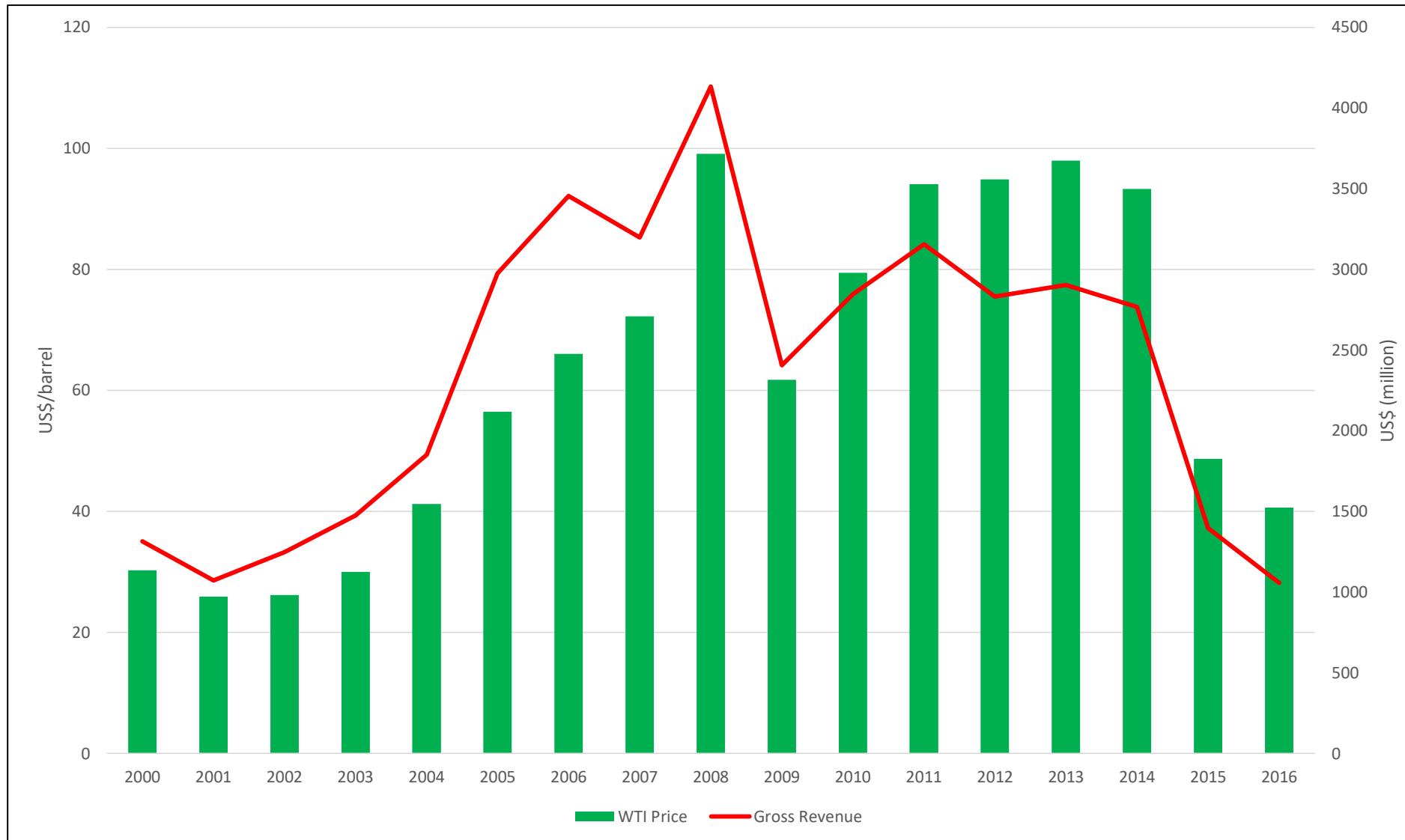
Onshore oil production has been broadly flat, but offshore oil and condensate production have declined rapidly by over 50% in 10 years and gas production has peaked.

Nevertheless there is a chronic shortage of gas for industrial uses





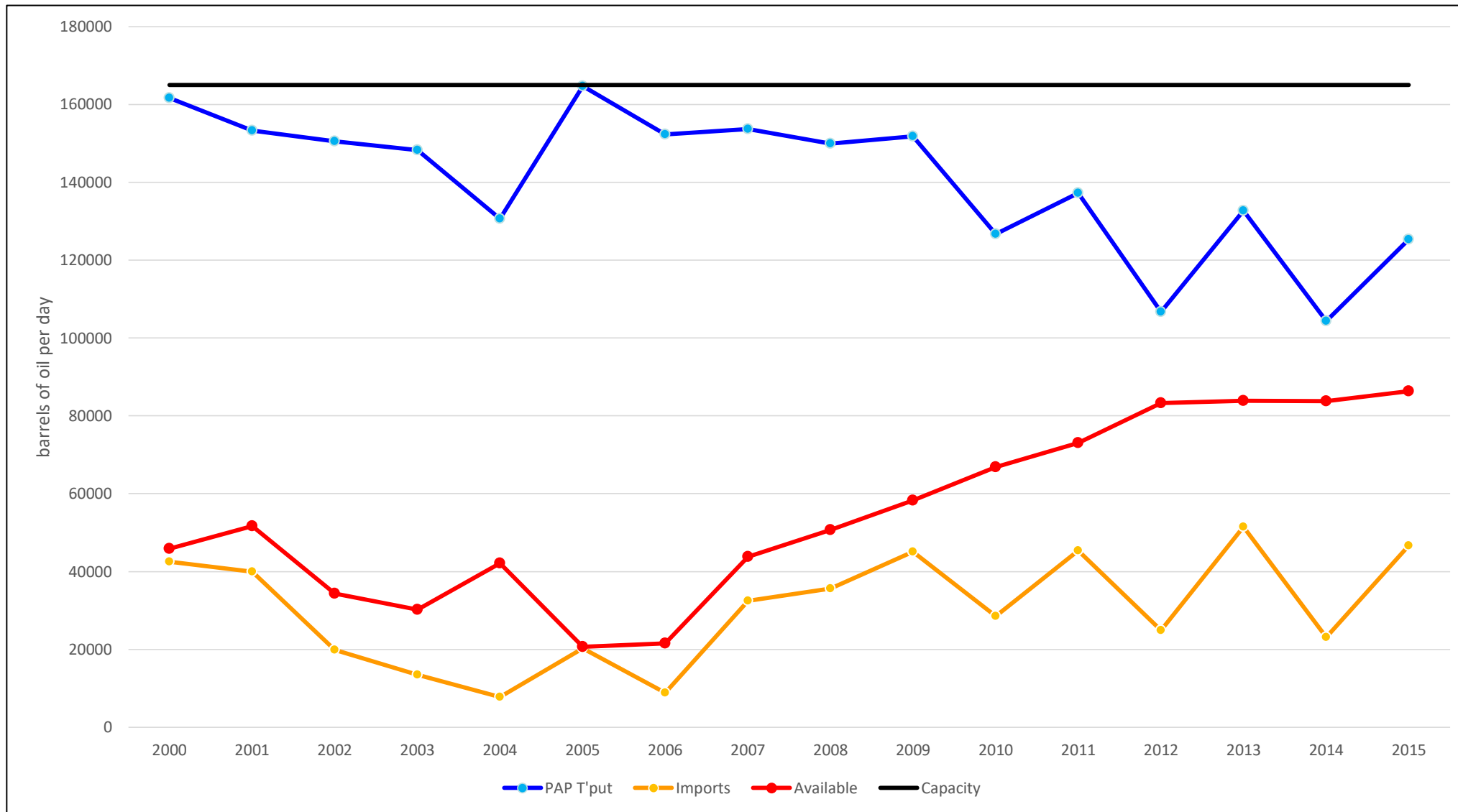
## Impact of oil price



Decline in oil production has been significantly amplified by a fall in oil prices which has greatly exacerbated the fiscal impact, reducing sector gross revenue from over US\$3 billion to under US\$1 billion in the last few years



# Refinery Throughput



Pointe-a-Pierre refinery has a capacity in excess of 165,000 bopd

As indigenous oil production has fallen imports of crude have risen

For every imported barrel per annum Trinidad loses over US\$10,000 or close to US\$1 bn pa





## Lost years 1986-2010

When LGO acquired the Goudron IPSC in 2012:

Production < 30 bopd

No camp facilities

Major infrastructure decay:

- Flowlines
- Oil tanks
- Roads
- Bridges
- Wells

No water treatment facilities

No regulatory approval for new wells

Wells like GY-658 (right) not even on the inventory, ~100 psi on the wellhead







## Goudron Field

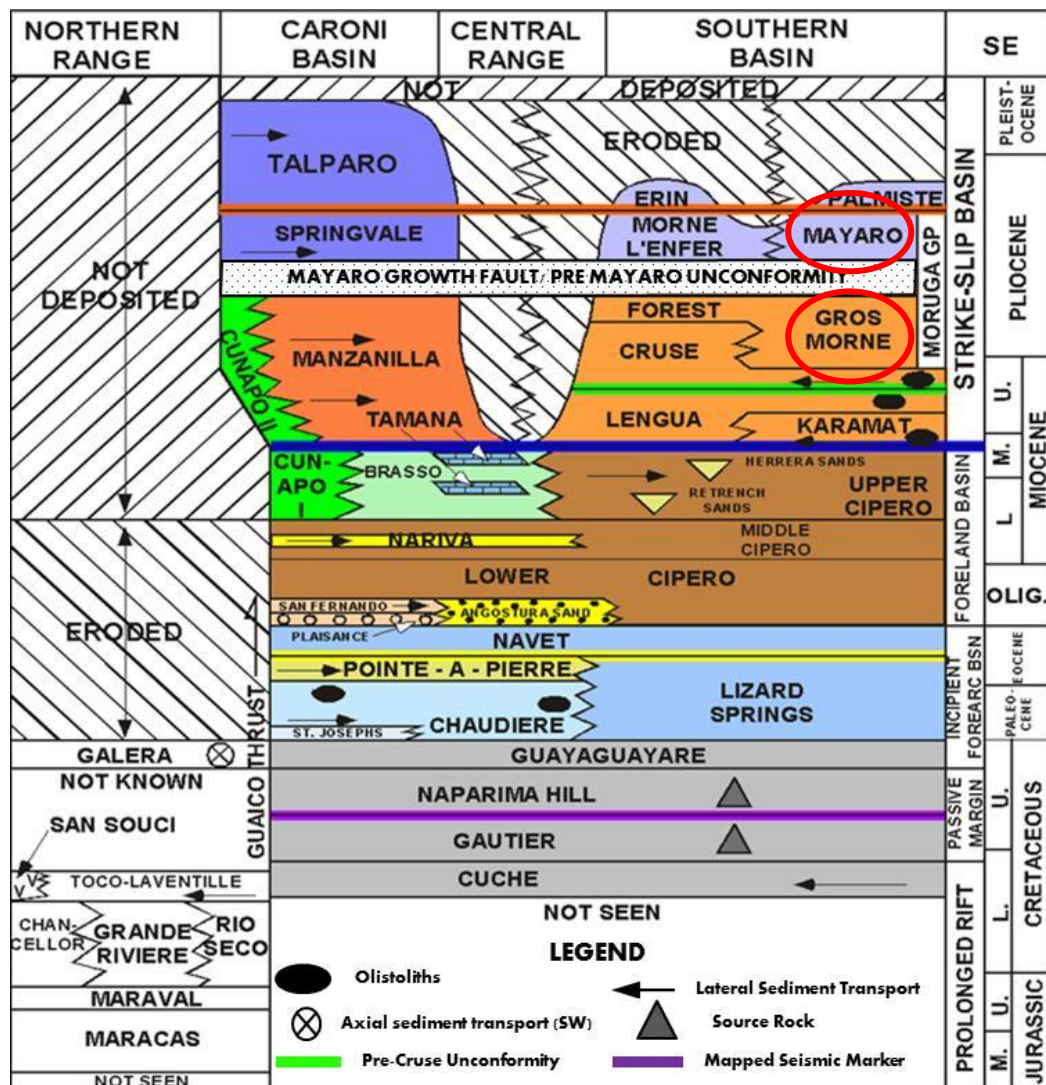


- Goudron is located in primary rainforest in the Trinity Hills
- Produces light sweet oil (average 38° API)
- Discovered in 1927 the field has a long history, but only limited production volume
- Total of 154 wells were drilled before 1981, mostly by Texaco
- Contract is an Incremental Production Service Contract with Petrotrin with an oil price effectively linked to WTI
- Export is by pipeline direct to the Petrotrin Pointe-a-Pierre refinery
- LGO has permitted 60 well locations and has so far drilled 15 C-sand wells to an average depth of 3,500 feet
- LGO was the first company to drill on an IPSC contract (2010 awards) and has exceeded its development drilling obligations by 50%
- Infrastructure has been totally restored with new camp, tank batteries, flowlines, water treatment, power grid, etc.
- Production peaked at over 2,000 bopd. Awaiting new infill drilling to the shallow target at 1,500 feet in 2017





# Goudron Reserves



	Challenge Energy Ltd	LR Synergy	Deloitte LLP
Effective date	1 Jul 2012	31 Mar 2015	30 Apr 2016
Published	July 2012	June 2015	July 2016
1P mmbbbls	0.7	1.5	1.6
2P mmbbbls	7.2	11.4	11.8
3P mmbbbls	30.4	23.6	25.6
3C mmbbbls	63.2	na	63.4
High est. STOIP mmbbbls	350	805	975
Key changes		8 new wells New royalty Expiry 2024	7 new wells New royalty

Prior estimate of STOIP from Petrotrin 1990 = 294 mmbbbls



# Underexplored SW Peninsula

- On trend with the 500 mmbbls Soldado offshore fields complex



- Blocks of oil saturated Herrera and Cruse Sandstone from 7,000 to 12,000+ feet

- In addition to the Icacos Leases (50%), LGO holds rights to over 7,500 acres of other underexplored leases
- All existing data including seismic (2D and 3D), wells and full tensor gravity (FTG) data has been evaluated and the SWP is believed to hold about 1.3-4 billion barrels of unrisked oil in place
- Only one deep well FRM-1; which encountered live oil below 10,000 feet
- LGO acquired a micro-seepage soil survey in 2014, results have encouraging indications for gas and oil entrapment
- Plan to farmout the SWP lease package and to drill wells to deeper Cruse and Herrera Sandstone reservoirs



*Soldado Field from Cedros coast*



A close-up photograph of a person's hand holding a white well log form. The form is partially filled out with handwritten and printed information. A large, bold, white word 'SUMMARY' is overlaid on the top left of the image. The form contains various sections for well data, including 'JOB TYPE: Reactivation', 'Crew Top', 'Surfaces', 'BEFORE', 'AFTER', '1000' (est)', '200 psig', 'Light Salt Water', 'Inactive', 'WELLBORE SANDED', 'WAXED UP', 'PUMP SANDED', 'OTHER', 'ACTIVATE well on rod pump', 'ESTIMATED WINCH HRS', 'ACTUAL WINCH HRS', 'EST. PAYOUT', and a table for 'Perfs - Top' and 'Perfs - Bottom' with columns for 'months' and 'Perfs'. The background is a blurred outdoor scene with green foliage.

- Trinidad is a politically and fiscally stable democracy and is part of a major petroleum province for both oil and gas
- Geologically Trinidad is part of the East Venezuelan Basin with over 3 billion barrels produced over a 150 year history
- Production has been falling overall due to low State reinvestment, but onshore independents have been expanding production consistently
- With over 10,000 wells drilled, mostly before 1986, there remains huge leverage to new technology and for brownfield redevelopment and secondary recovery
- LGO has pioneered a remote oil field development and has increased production and reserves dramatically in the last 4 years
- New opportunities also exist for exploration in proven plays





**Delivering Growth Through the  
Acquisition of Proven Reserves and  
Enhancement of Producing Assets**

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