

Repsol Exploration Day



London, January 25th 2013

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Exploration Outlook

Sustaining E&P long term growth



Repsol Exploration Day

Our Role



- To provide our E&P Division with a resource base that will enable Growth and revert the trend of Reserves replacement in the medium term
- Optimize exploration Investment applying a rigorous prospect ranking adjusted to our technical and operating capabilities
- Develop new capabilities to lever our entry into new ventures
- Permanently screen global basins and ready our data base with the aim of developing an entry strategy in the areas we are targeting for the future

To do it we required...

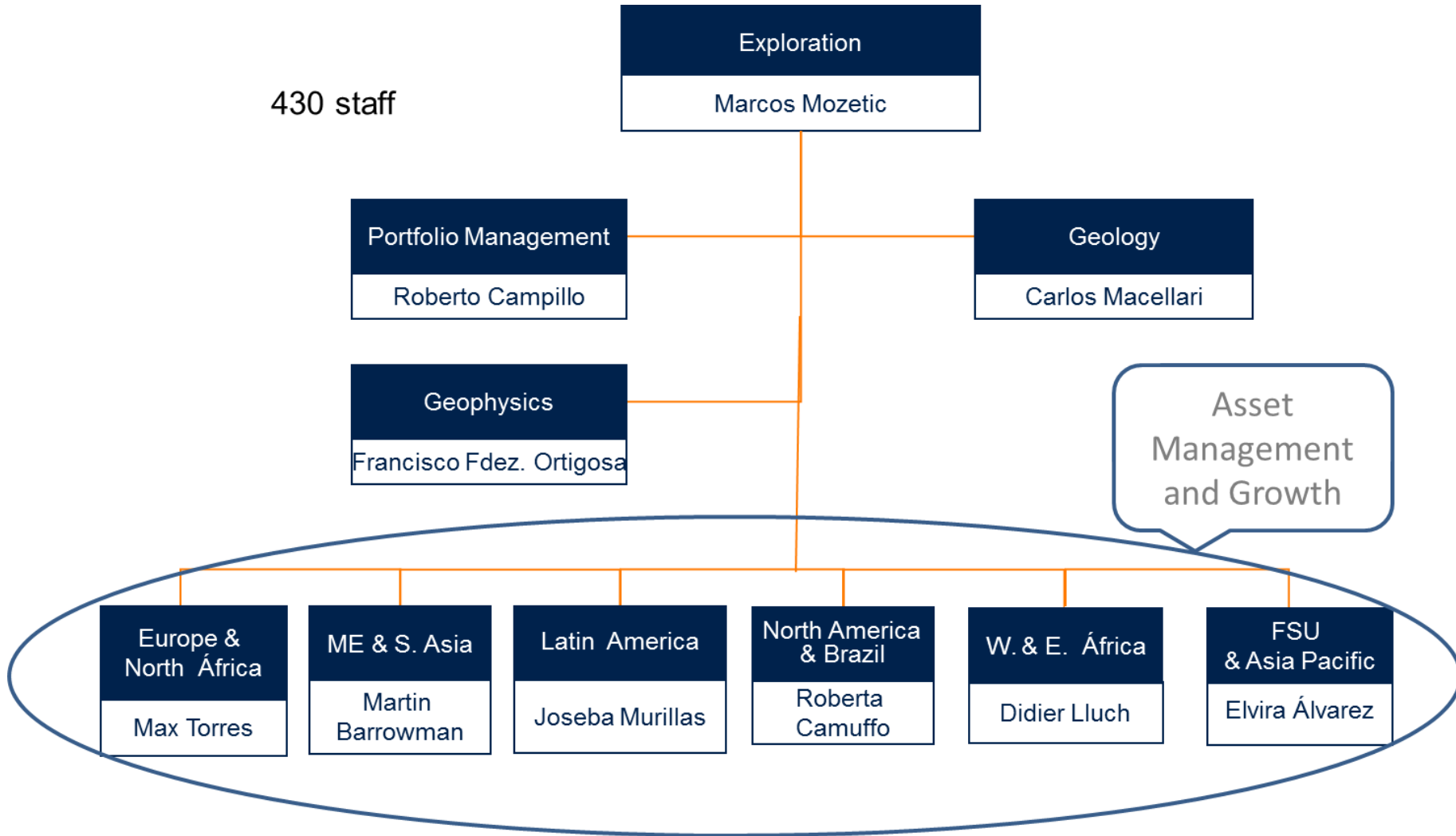


- An adequately sized organization
 - ✓ Global management of our portfolio
 - ✓ Global ranking of prospects
- An organization that allowed for innovation and improvement
- Flexible but defined processes
- Recovery of our activity levels
- Continuous benchmarking
 - ✓ Of our results
 - ✓ Of the our basins vis-à-vis other opportunities

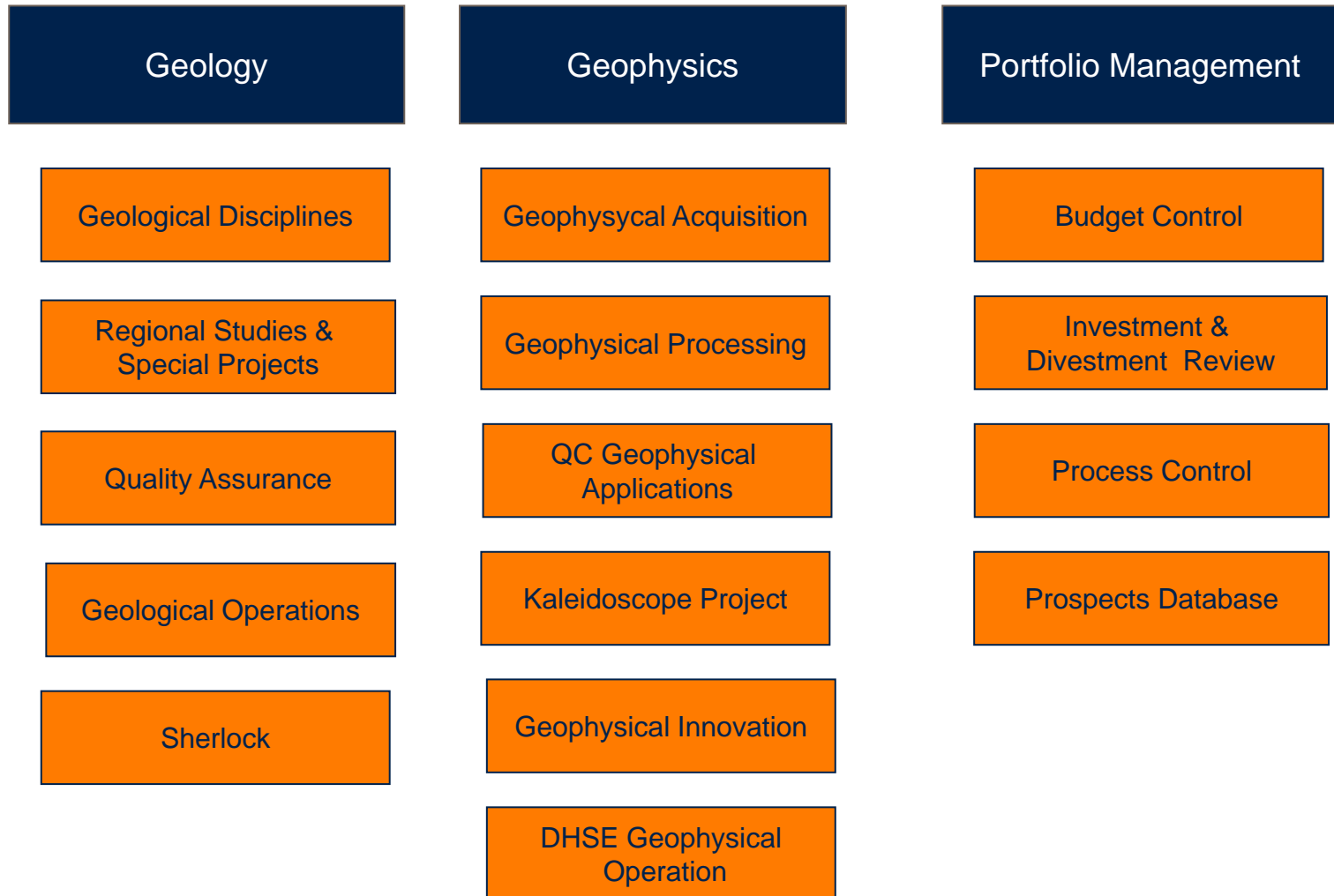
Organization



430 staff



Main Structure



An adequate geographical deployment to lever growth

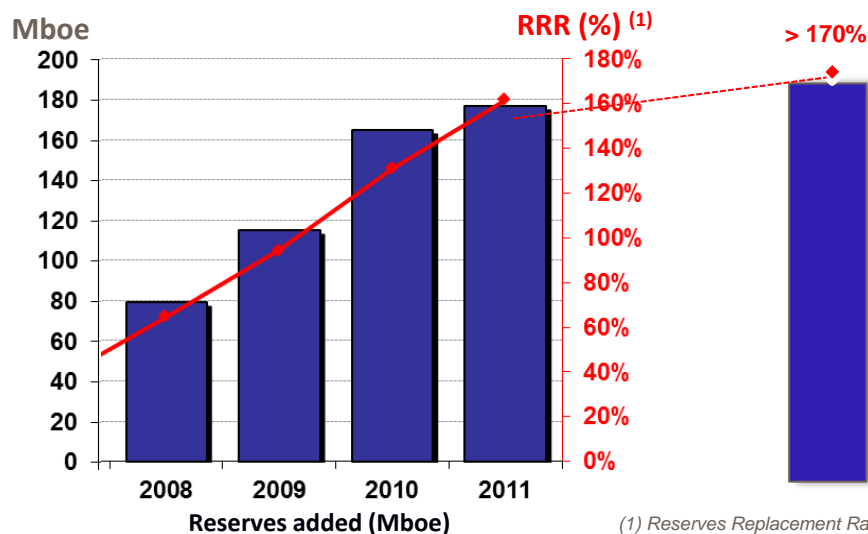


How have we finished 2012?

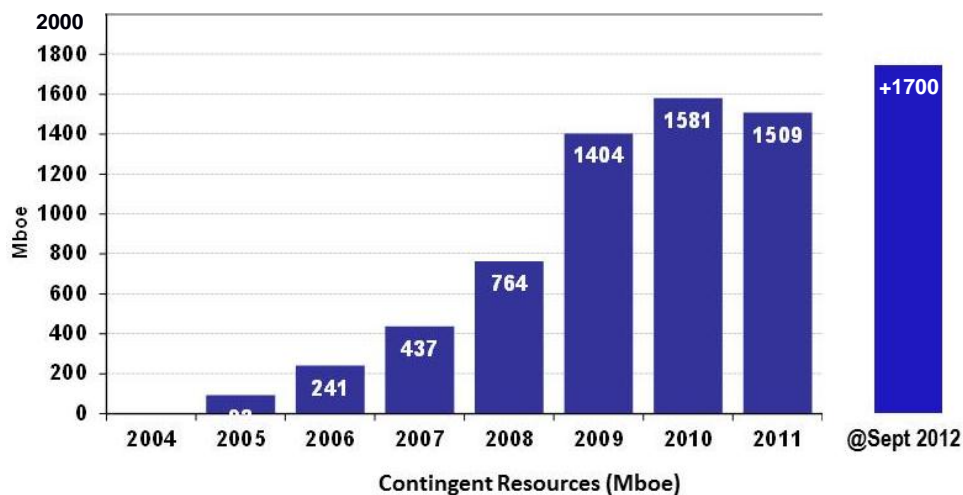


- Delivered +300million barrels in contingent resources...
- ...notwithstanding slightly falling short in finished wells (18), mostly due to an operational setback in Alaska and delays in starting in Libya
- We are fulfilling our acreage replacement goals
 - ✓ 50 new blocks in 2011
 - ✓ Already 23 new blocks ratified in 2012 and some finalising in January

How have we finished 2012?



With a notable improvement in reserve replacement, without exhausting contingent resources bank

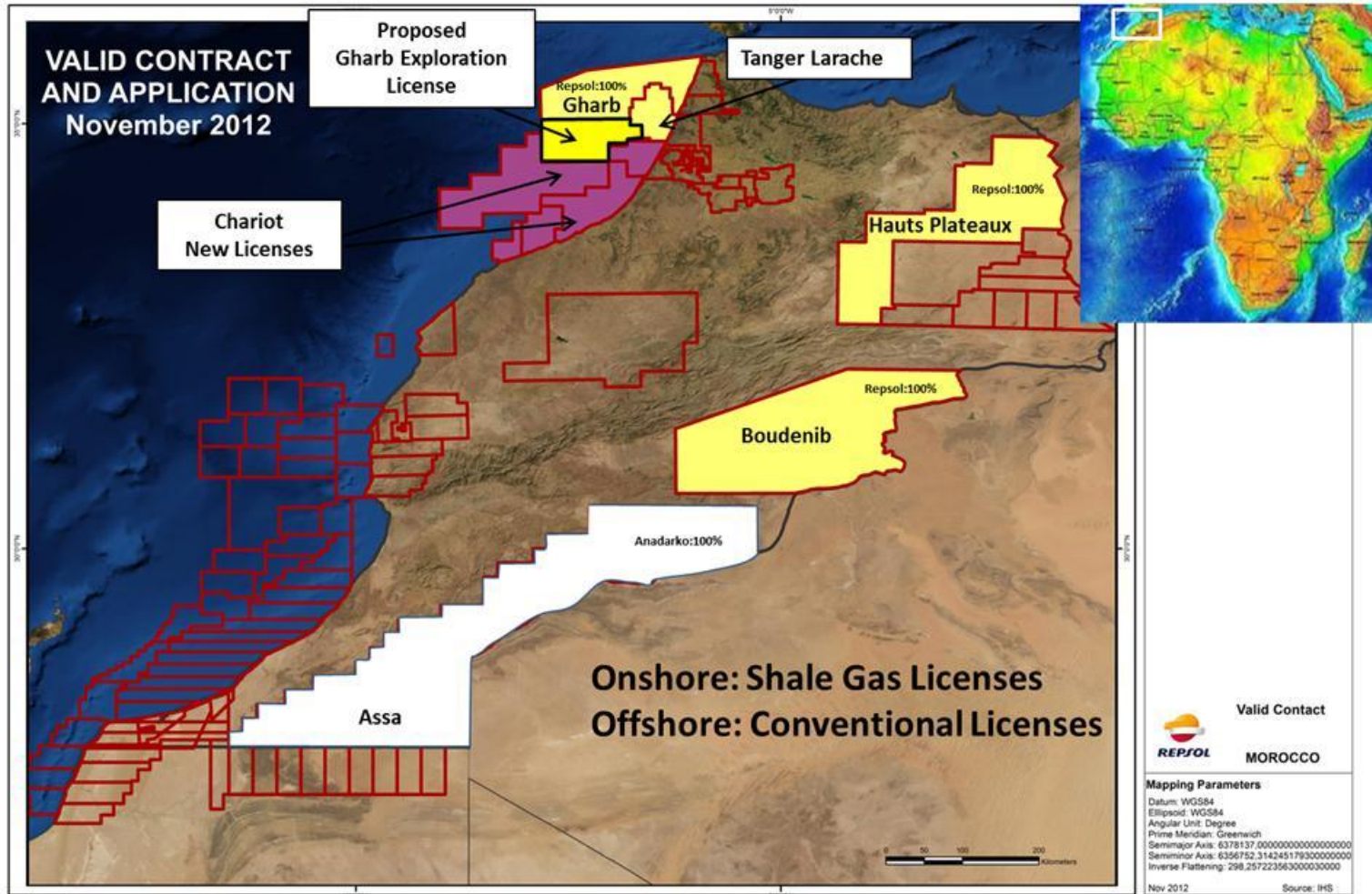


West Africa: A new core for Exploration



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Morocco



Morocco



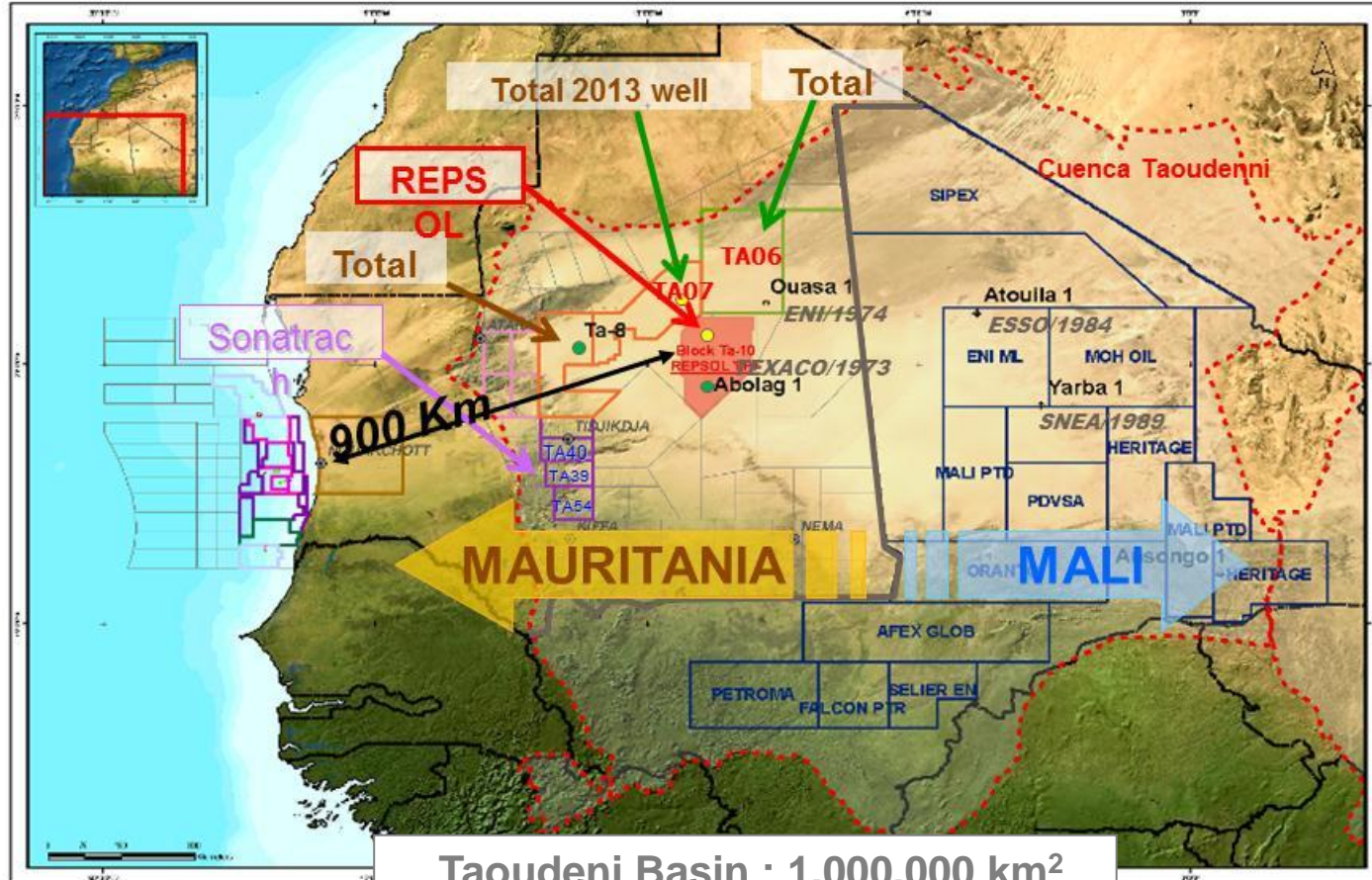
Why?

- Very attractive contractual and fiscal terms
- Domestic energy deficiency
- 5th largest economy and 2nd largest energy importer in Africa
- Proximity to Spanish market
- Underexplored Atlantic margin (3000km shoreline)

Repsol in Morocco:

- Long time presence when only very recently the rest of the Industry has shown high interest for the country. As a consequence Repsol has been able to build a very large and diversified portfolio:
- Offshore: Conventional
- Tanger-Larache License: Shallow gas play
- Gharb Licence: similarity with Nova Scotia, Jurassic and Cretaceous oil play:
- ***Next activity: 3D seismic acquisition***
- Onshore: Unconventional-Shale Gas
- Boudenib License: Objective Silurian “Hot Shale”
- Hauts Plateaux License: Objective Carboniferous Source Rocks
- ***Next activities: complete surface and subsurface studies***

Mauritania



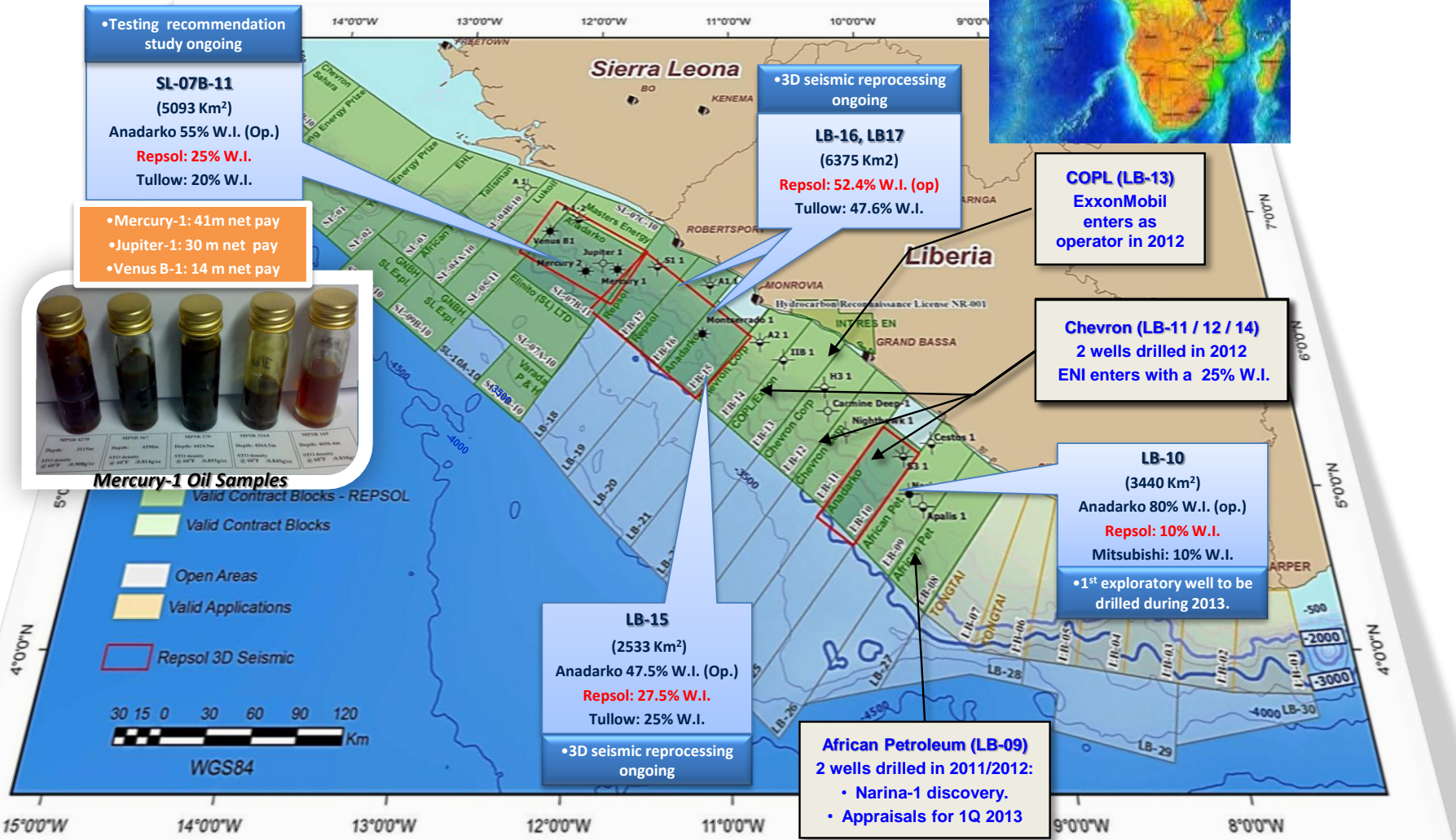
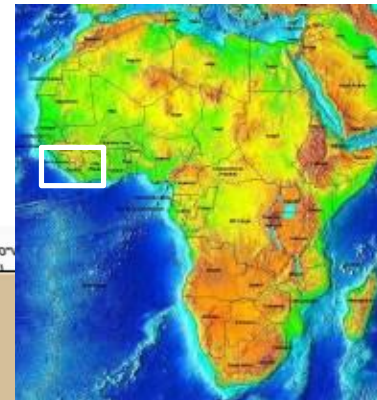
Taoudeni Basin : 1.000.000 km²
=2 x Spain
Block TA-10: 21,665 km²
=Massachussets state

Mauritania



- One of the largest unexplored basin in the world. Analogy with large discoveries in Russia and China. Possible follow-up in other large unexplored basins in Africa.
- Repsol was pioneer in Taoudeni Basin: entry in 2005
- Early entry allowed us to elect preferred block from regional studies:
 - ✓ Existing Gas and condensate discovery in TA-10 block: Abolag-1 (Texaco, 1973)
 - ✓ Regional high within the basin, focus of migration from surrounding kitchens
 - ✓ Numerous evidences of oil generation (subsurface and outcrops) within the block whereas the rest of the basin is more gas prone.
 - ✓ Prospects with large upside and significant follow-up portfolio in the block due to its considerable size.
- ***First well to be drilled mid-2013. Large Cooperation Agreement (rig, services and logistics) with Total, the other active Operator in the area.***

Sierra Leone and Liberia

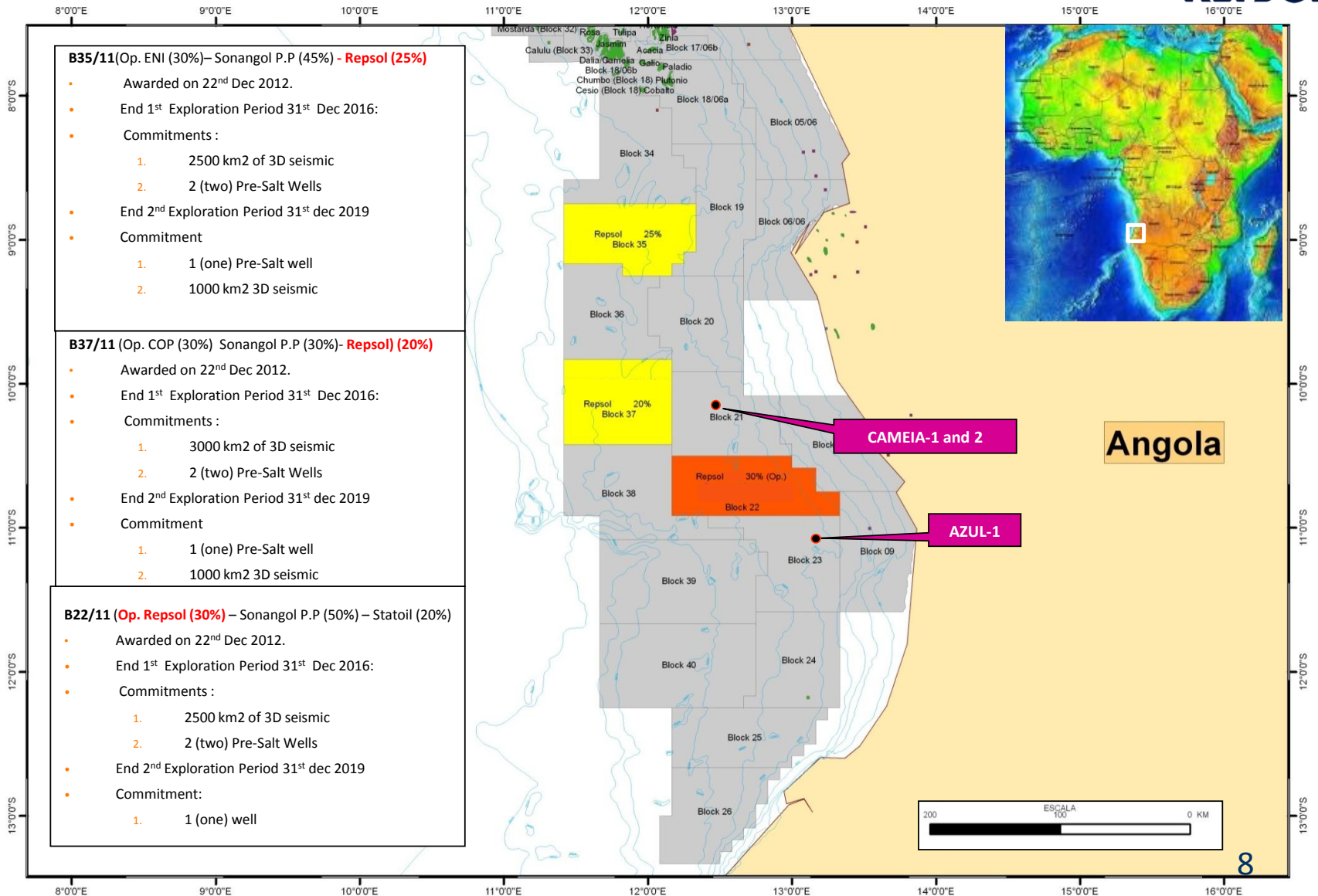


Sierra Leona and Liberia

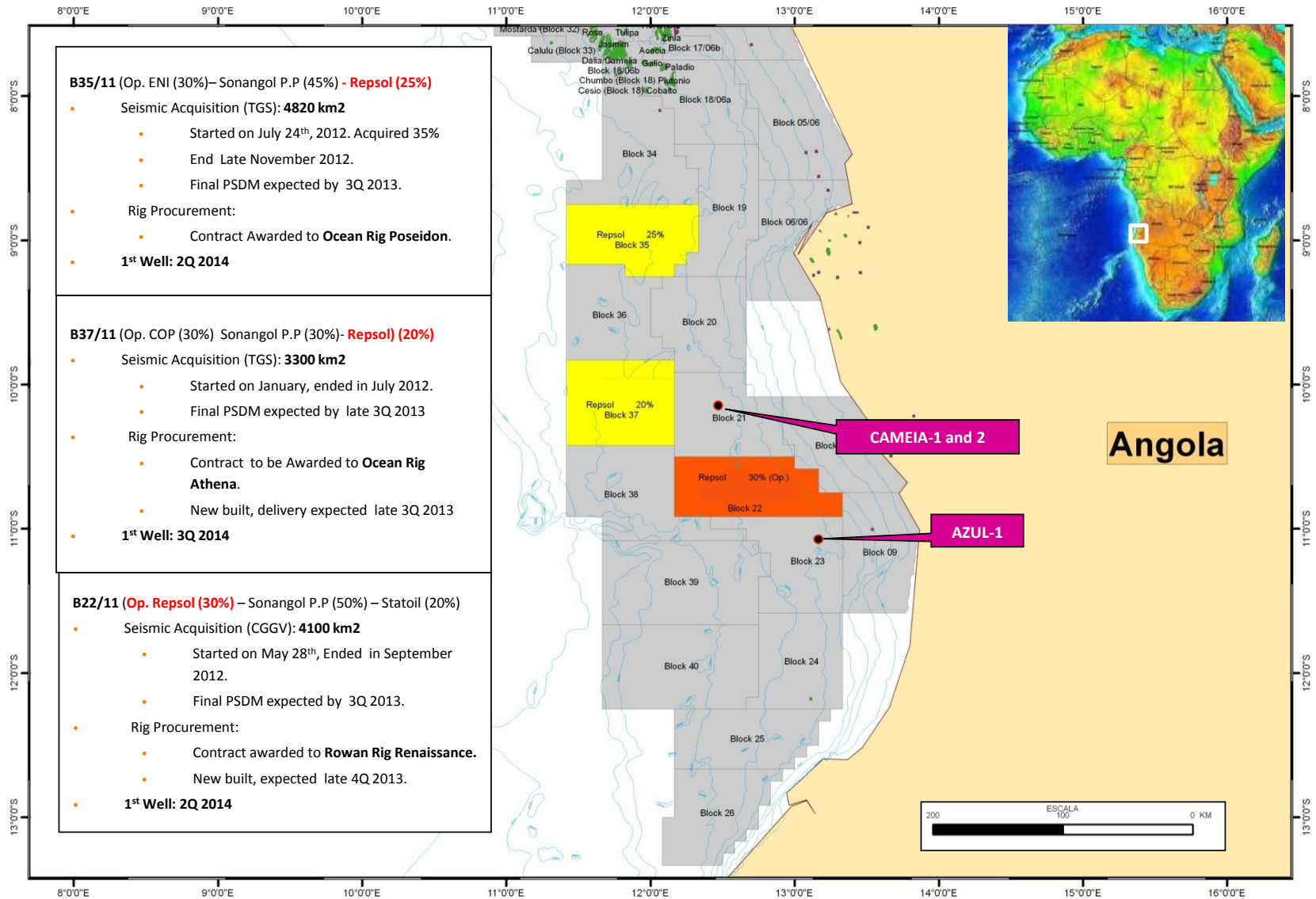


- Repsol pioneered the deep water exploration in SL/LB since 2003. Only eight exploratory deep water wells drilled up-to-date; the first one in 2009.
- Big players such as ExxonMobil, Chevron and ENI are present in the SL/LB deep water margin since 2010, showing the interest in this area.
- Exploratory well results confirm the presence of liquid hydrocarbons (condensate and oil).
- Repsol blocks are located in the northern and central portions of the SL/LB margin accounting for variations in geologic setting through the basin ensuring a thorough evaluation of its potential.
- Main ongoing exploratory activities are:
 - ✓ **Liberia LB-10: *Will drill first exploratory well during 2013.***
 - ✓ **Liberia LB-15, LB-16 and LB-17:** Repsol is performing the time and depth ***reprocessing of the 3D seismic data*** accounting for 6140 km², aiming at improving the seismic image before committing to drill in 2014. This is one of the largest offshore reprocessing projects under a very tight time frame.
 - ✓ **Sierra Leona:** Currently ***performing G&G studies*** based on fluid and core samples acquired during 2011/2012 aiming at recommending testing/drilling to assess well productivity.

Angola: Blocks and Commitments

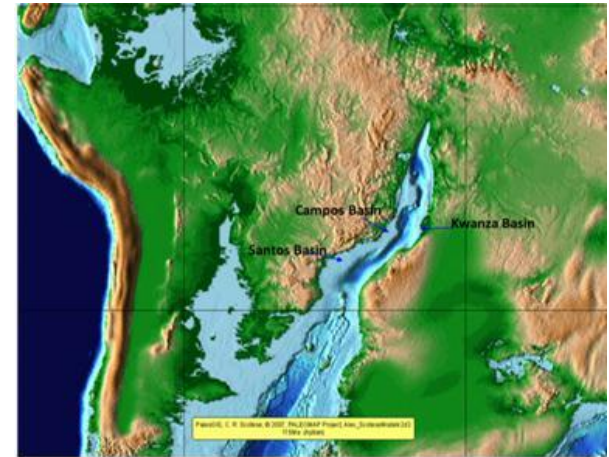


Angola: Exploration Blocks Status



Angola

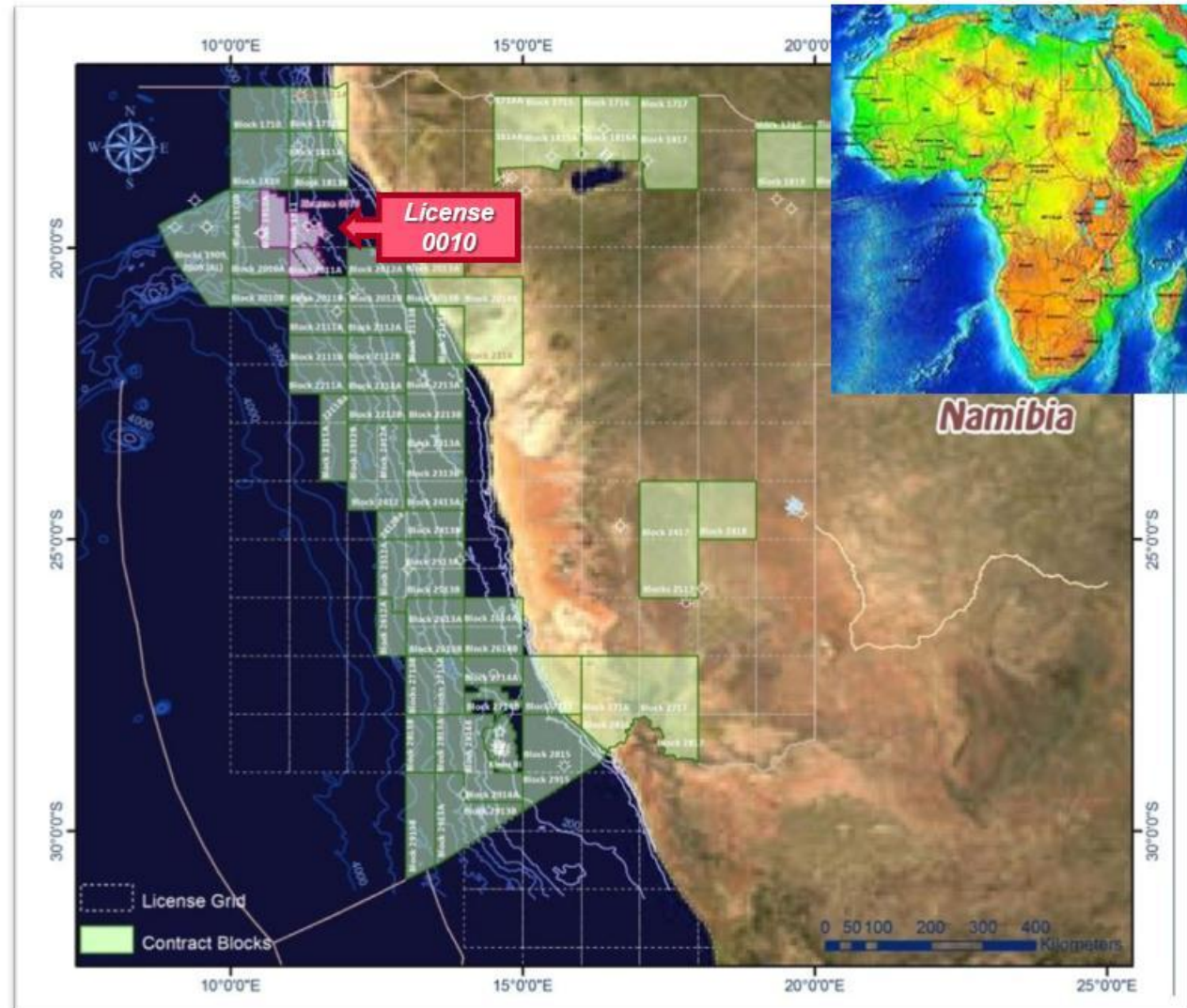
- Looking for Brazilian pre-salt analogues
- Recent two discoveries by Cobalt and Maersk have validated this play concept in Kwanza Basin.
- Repsol competitive advantage:
 - ✓ Technology in pre-salt imaging
 - ✓ Excellent knowledge of this play from our Brazil success story. Most of Angola project G&G staff comes from Brazil group.
- Long term cooperation on knowledge sharing plan with Sonangol:
 - ✓ Replication of Kaleidoscope and Sherlock projects in Sonangol research center.
 - ✓ 27 Masters per year offered to Sonangol in Repsol Formation and Research Center in Madrid
- Opening of Repsol Office in Luanda in February 2013
- New 3D seismic acquisition completed in the 3 blocks
- Rigs secured for drilling early 2014 in the 3 blocks



Rua Amilcar Cabral 102
7th Floor - Luanda

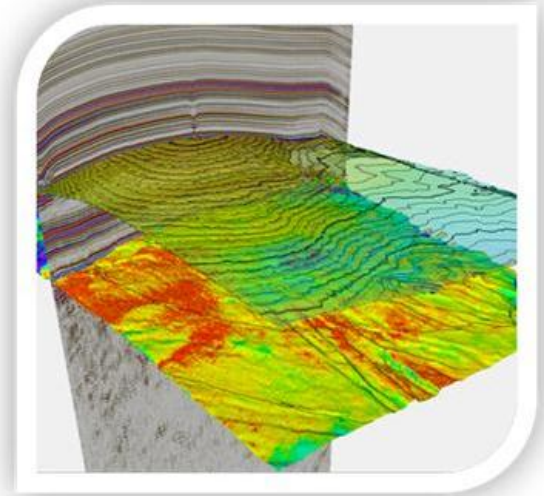
Namibia

- License 0010 (11,637 km²)
- Located offshore northern Namibia (Walvis Basin).
- Repsol started in Dec. 2012 as operator.
- First exploratory (deep water) well planned for 1Q-2014.

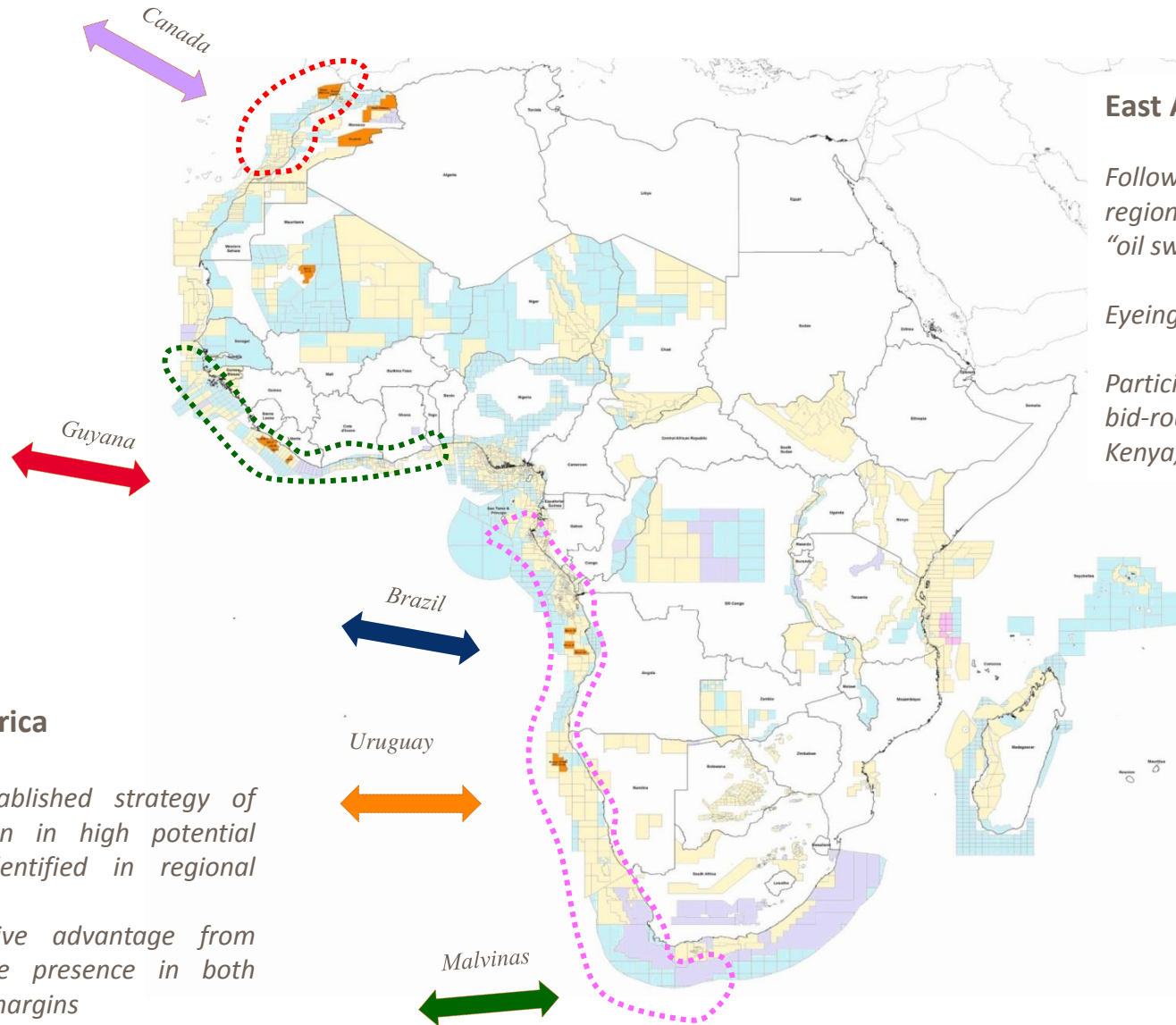


Namibia

- Stable country and favorable fiscal terms.
- License 0010: marks the entry of Repsol in Namibia as part of an effort to increase the Atlantic margin hydrocarbon exploration in high potential areas.
- Carefully selected based on regional and detailed G&G studies that incorporate extensive in-house knowledge related to Atlantic margin in both African and America's sides: high reward license with SR in oil generation window and very large structural traps.
- **Ready-to-drill: ongoing preparations to drill in 1Q-2014** with a secured last generation new-built UDW rig.
- Substantial exploratory **follow-up** within the license (at least three additional large 4 way dip closures).
- Considered as an unexplored play: Tapir South-1 well (Chariot, 2012) is not an analog: different hydrocarbon sourcing and trap style.



New ventures in East and West Africa



East Africa

Following the results of regional studies focus on "oil sweet spots"

Eyeing the gas plays

Participation to the 2013 bid-rounds in Tanzania, Kenya, Seychelles

West Africa

Well established strategy of acquisition in high potential areas identified in regional studies.

Competitive advantage from our large presence in both Atlantic margins

Europe & North Africa: Why Europe?



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Europe HC Play Map

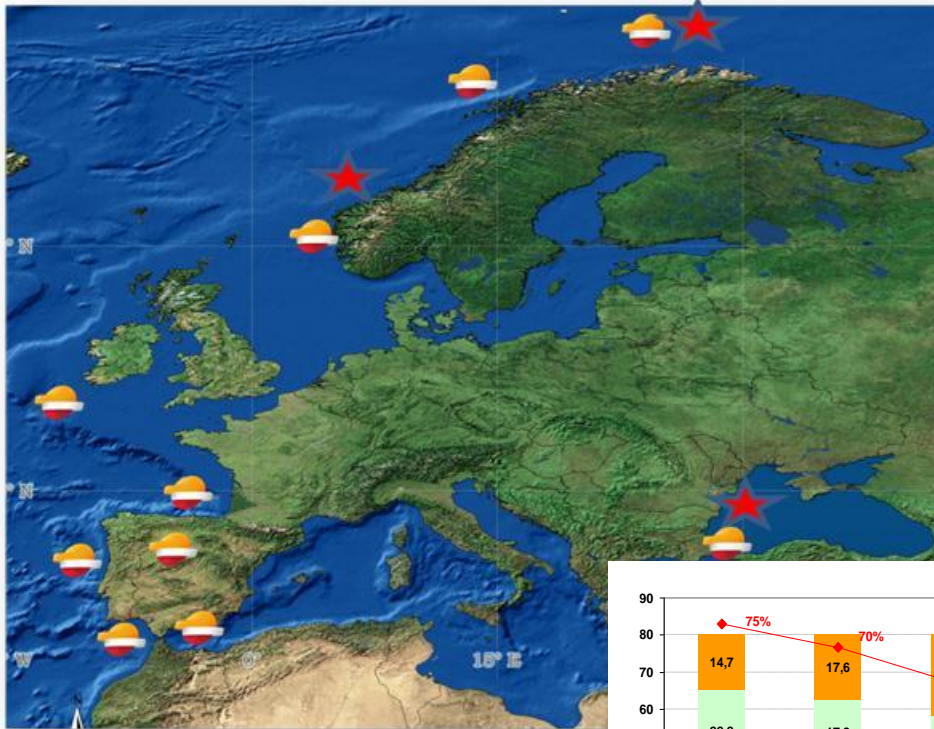


Exploration Europe 2013



Themes:

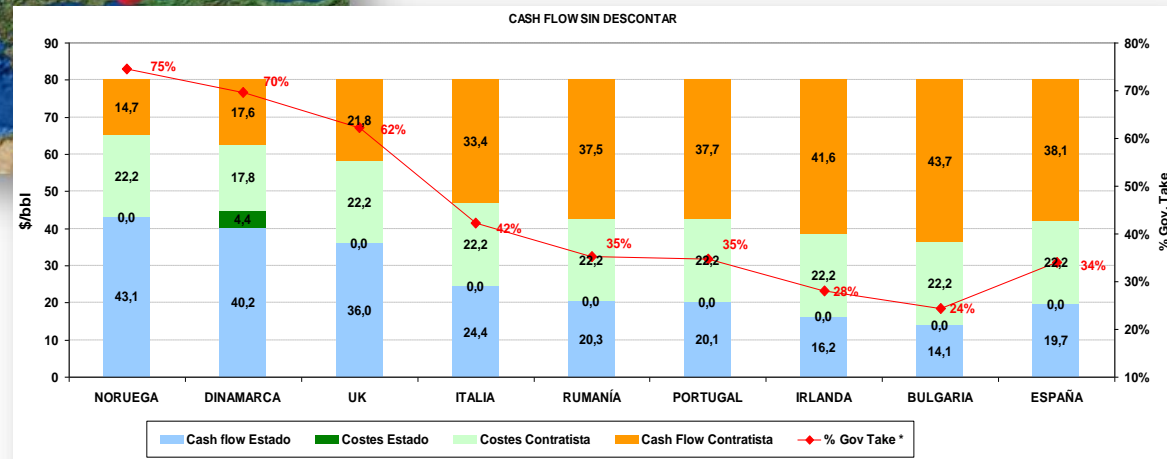
Growth in high potential plays in Europe and looking for contracts value



High Potential
New Plays
in Europe



Repsol
Acreage

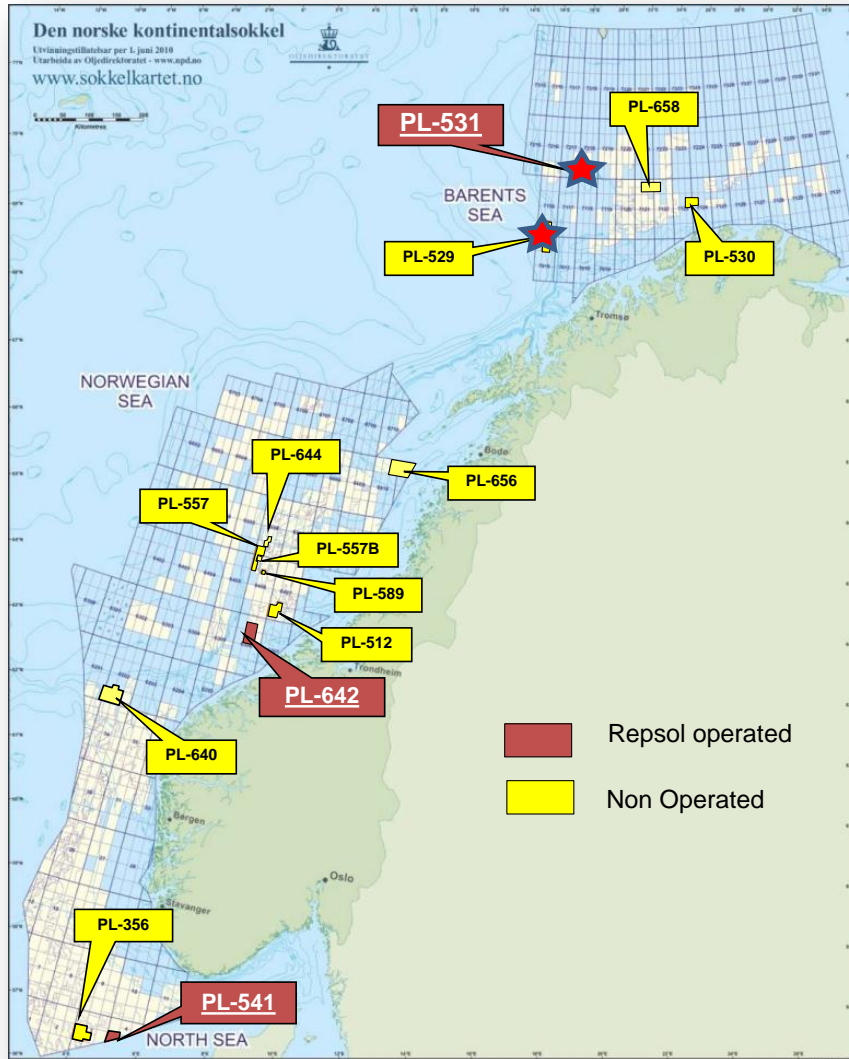


Repsol Growth Topics in Europe



- Built portfolio with high impact prospects : Dunquin, Polshkov High, Bartolomeu Dias, Bonna, Darwin and others
- Taken positions in large high impact prospects with large EMVs and IRR seeking contract value
- Taken position and advantage of the excellent fiscal and contractual regimes and secure business environment in Europe
- Plays and growth rationale:
 - ✓ *Extension of the Kimmeridgian shales to the West to match Canada's Orphan basin success.*
 - ✓ *Tertiary Mediterranean and Black Sea source rocks as proven in Levant and Romania Offshore*
- Actively pursuing entry in other high impact plays : *Lebanon Levant basin, Spain Deep Mediterranean and Romania*

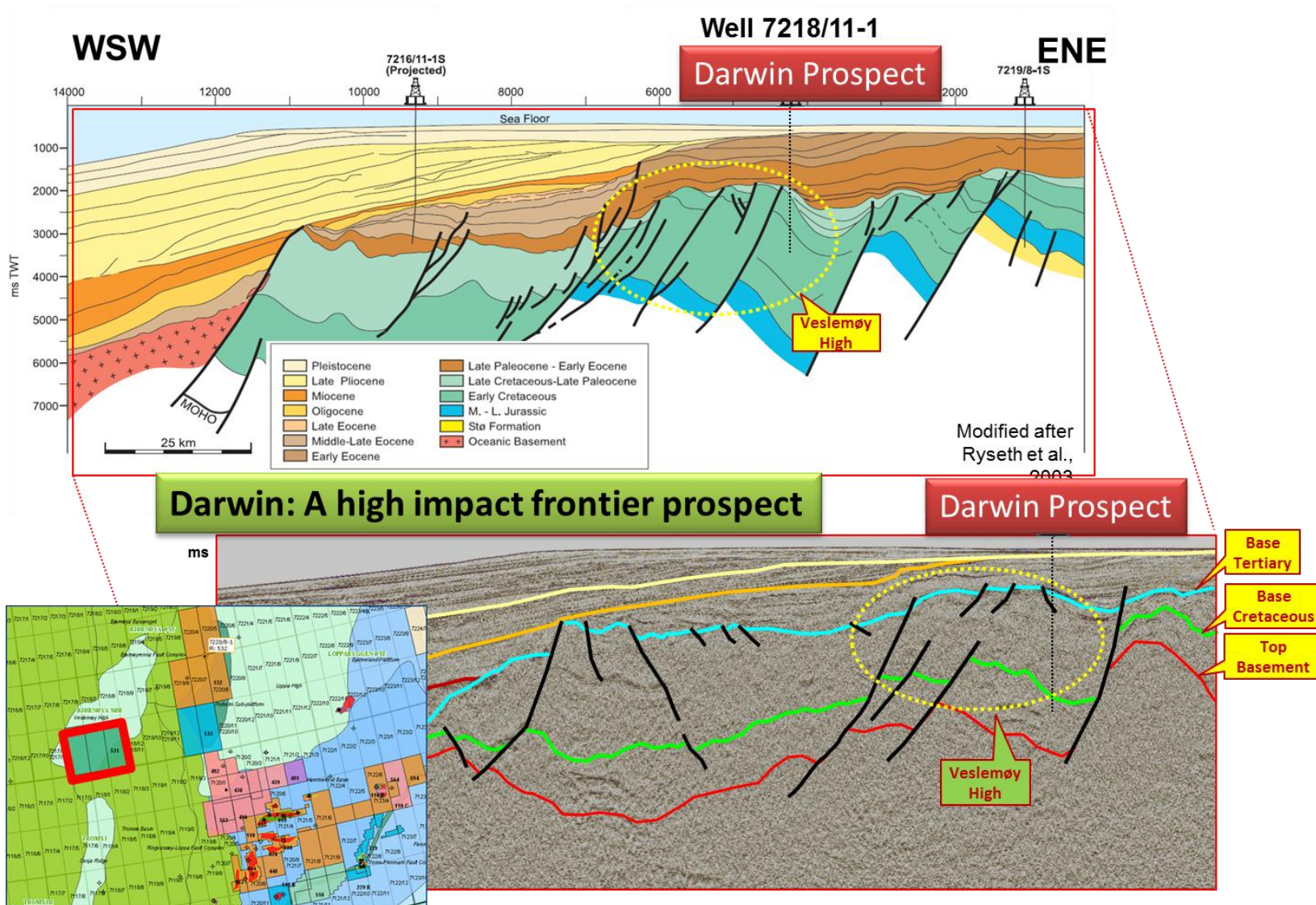
Repsol Norge Portfolio



- 2008 -Prequalification of Repsol as Operator on NCS.
- 2009 -First Award: PL512 (Norwegian Sea) APA08
- 2010 -Opening of the office in Oslo.
-Awarded PL-541 (Operator) and PL-557.(APA09)
-Farm in in PL-356 (DetNorske Op.)
- 2011 -Awarded PL-589 (APA10)
-Farm in in PL-529 (ENI Op.),
-Farm in in PL-530 (GdF Op.)
-Farm in in PL-531 (Marathon Op.) Take over as operator
-Heilo well (PL-530), Barents Sea
- 2012 -Awarded PL-640; 642 (Op.); 557B; 644; 656; and 658. (APA11)
-Ulvetanna well (PL-356), North Sea
- 2013/14 Four firm wells
-Darwin well (PL-531), Barents Sea (1st Repsol op. well)
-Brattholmen well (PL-541), North Sea (2nd Repsol op. well)
-Bønna well (PL529), Barents Sea
-Imsa well (PL-589), Norwegian Sea

★ High impact frontier prospects

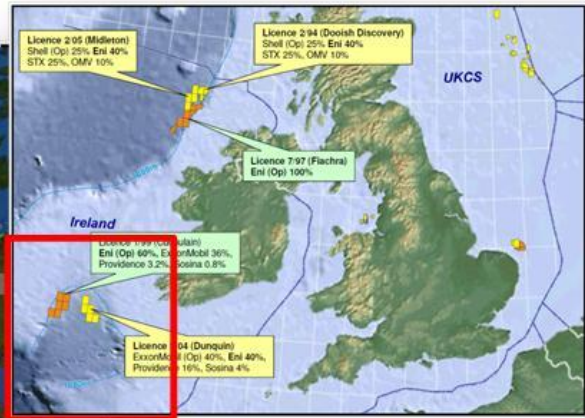
Norway Barents Sea Operated PL531 Licence



Ireland Location Map and Repsol acreage

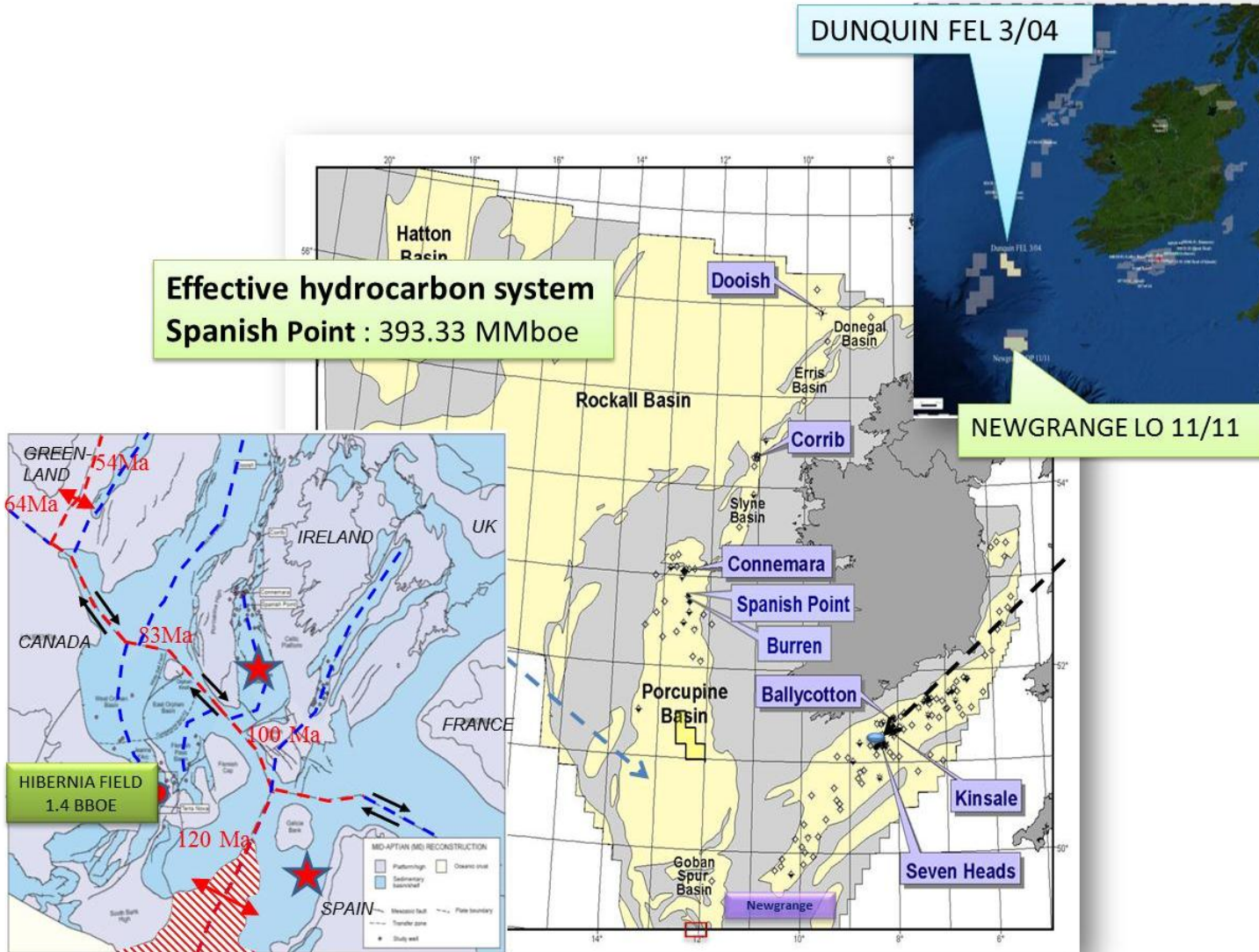


DUNQUIN FEL
 3/04
 Farm-in, 2010
 Exxon, 27.5% (op)
 ENI, 27,5%
 Repsol, 25%
 Providence, 16%
 Sosina, 4%



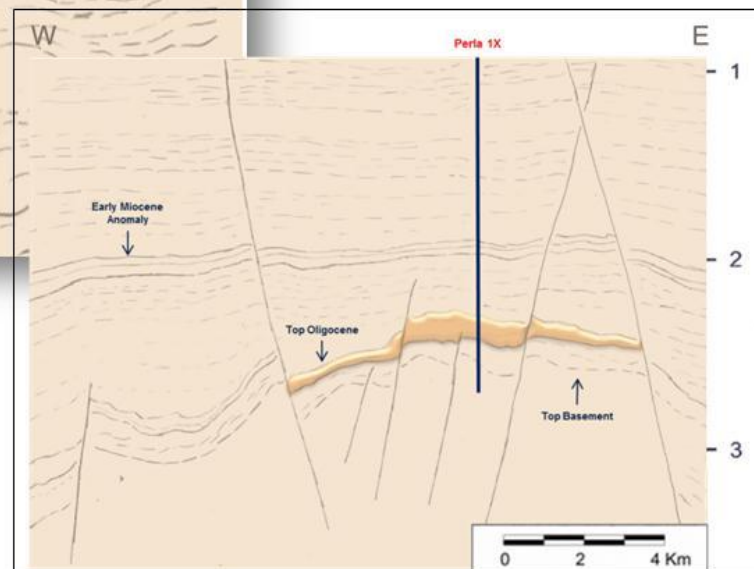
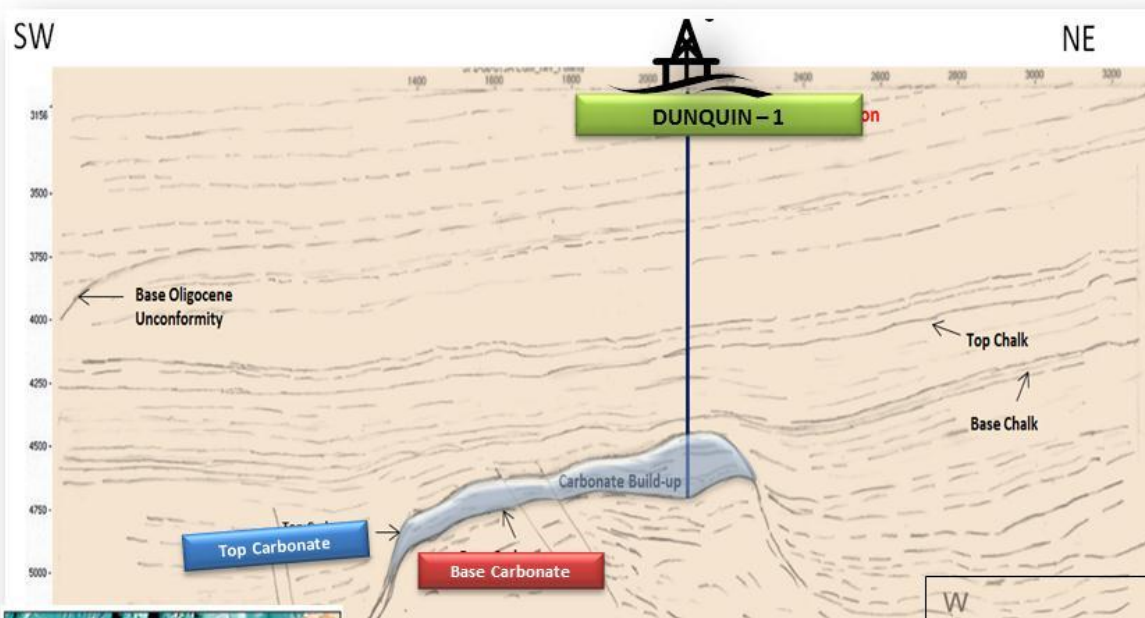
NEWGRANGE LO
 11/11
 BidRound, 2011
 Providence, 40% (op)
 Repsol, 40%
 Sosina, 20%

Porcupine Basin Discoveries

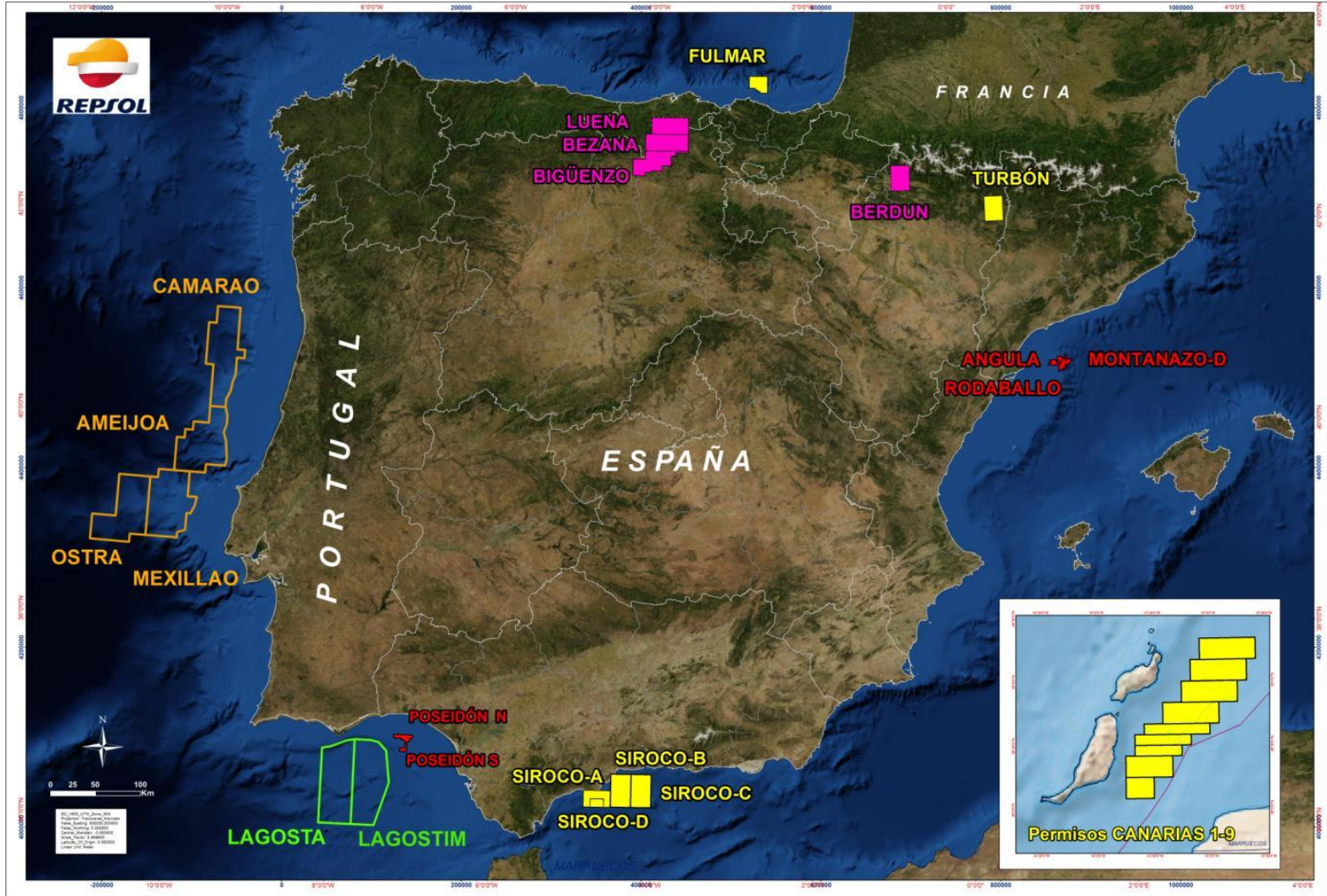


Basemap from PAD Spec. Pub. 3/06

Dunquin High Impact Prospect

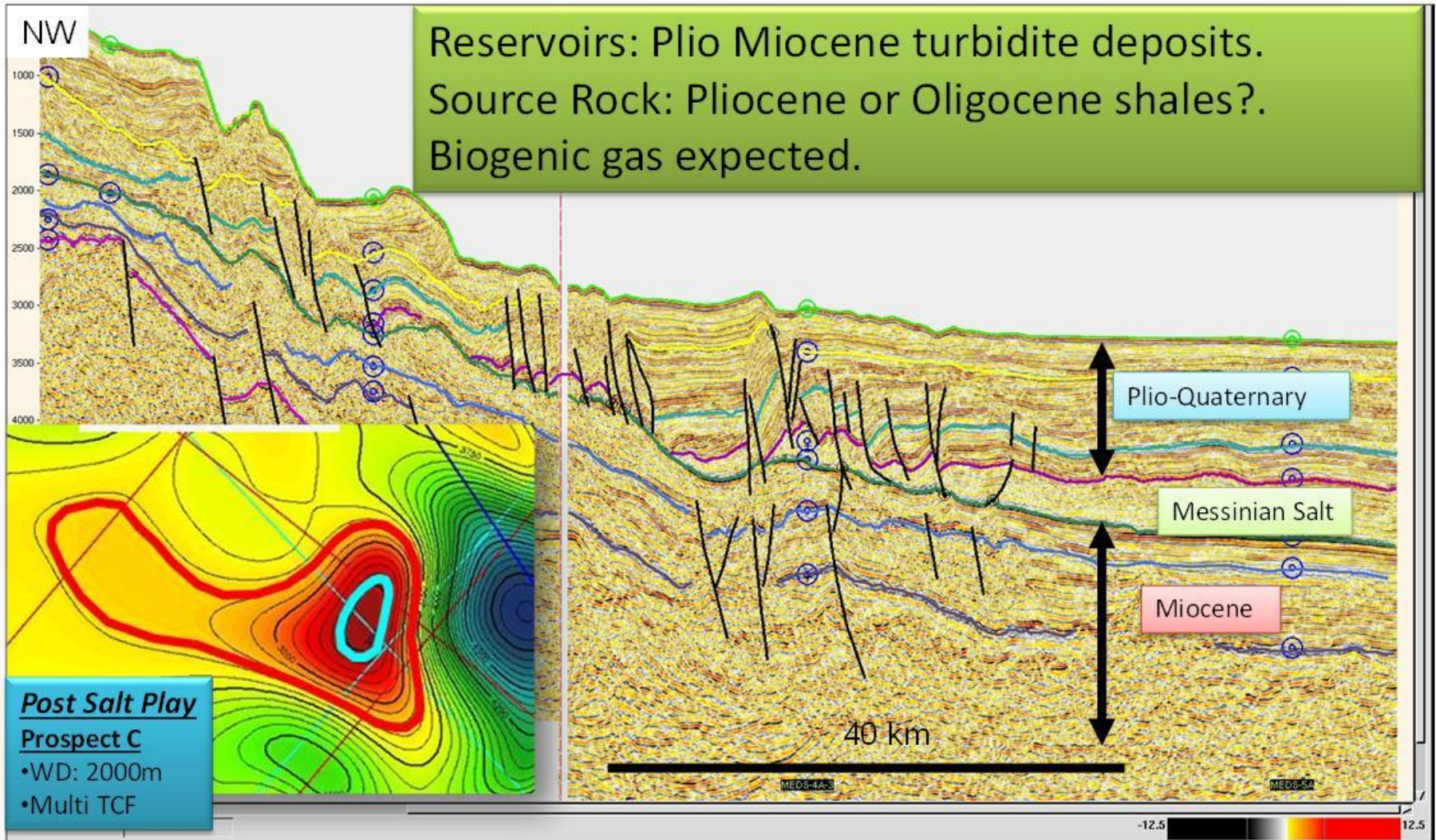


Repsol Iberian Exploration

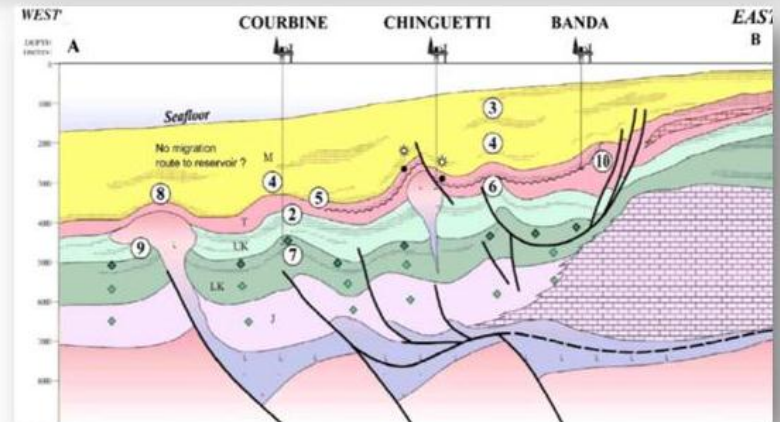
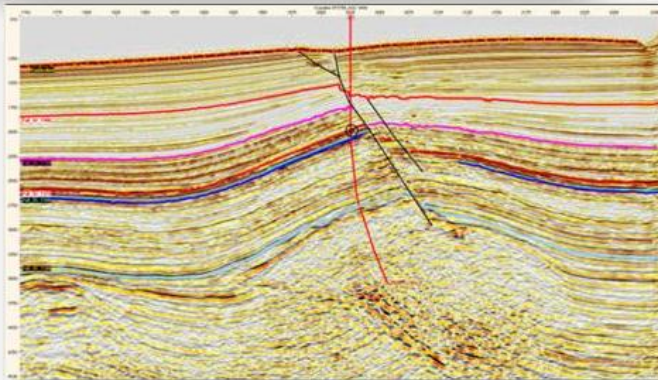
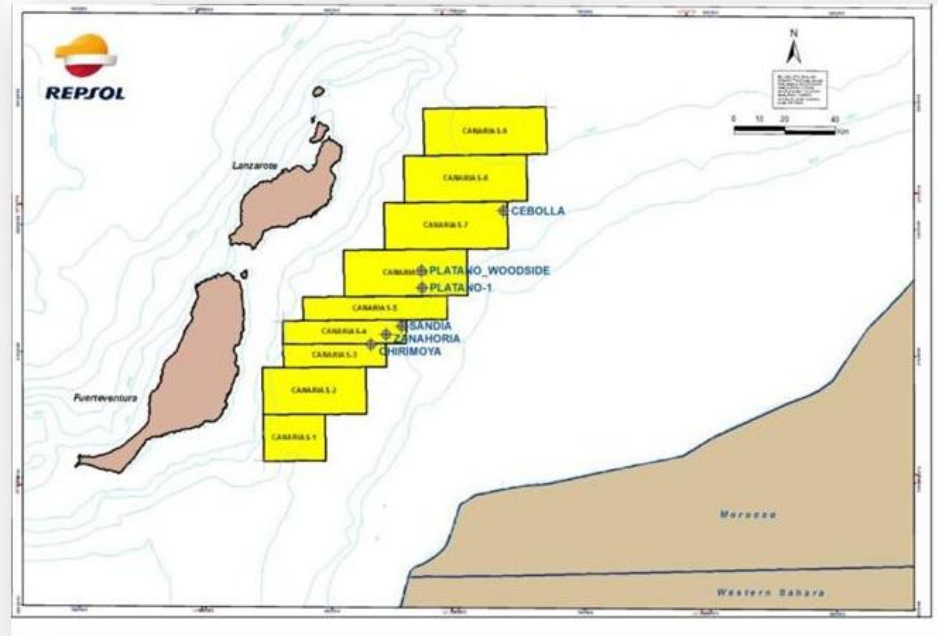
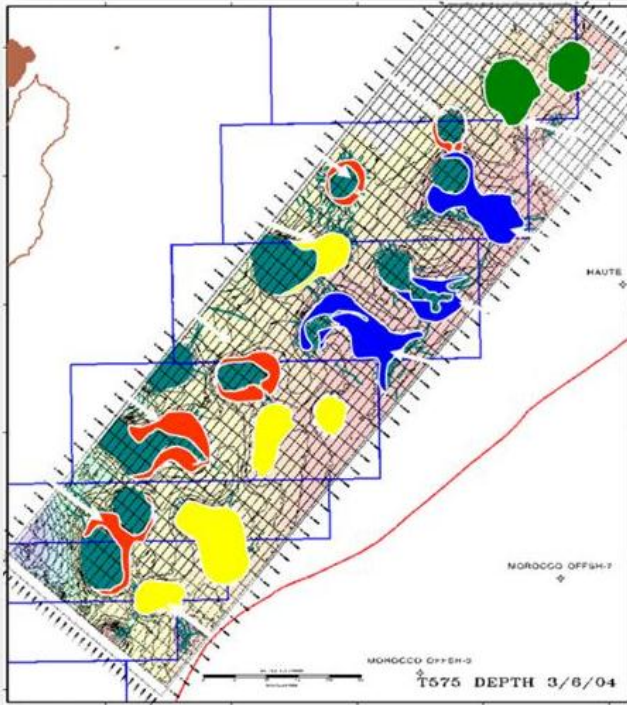


Spain Deep Mediterranean Plays

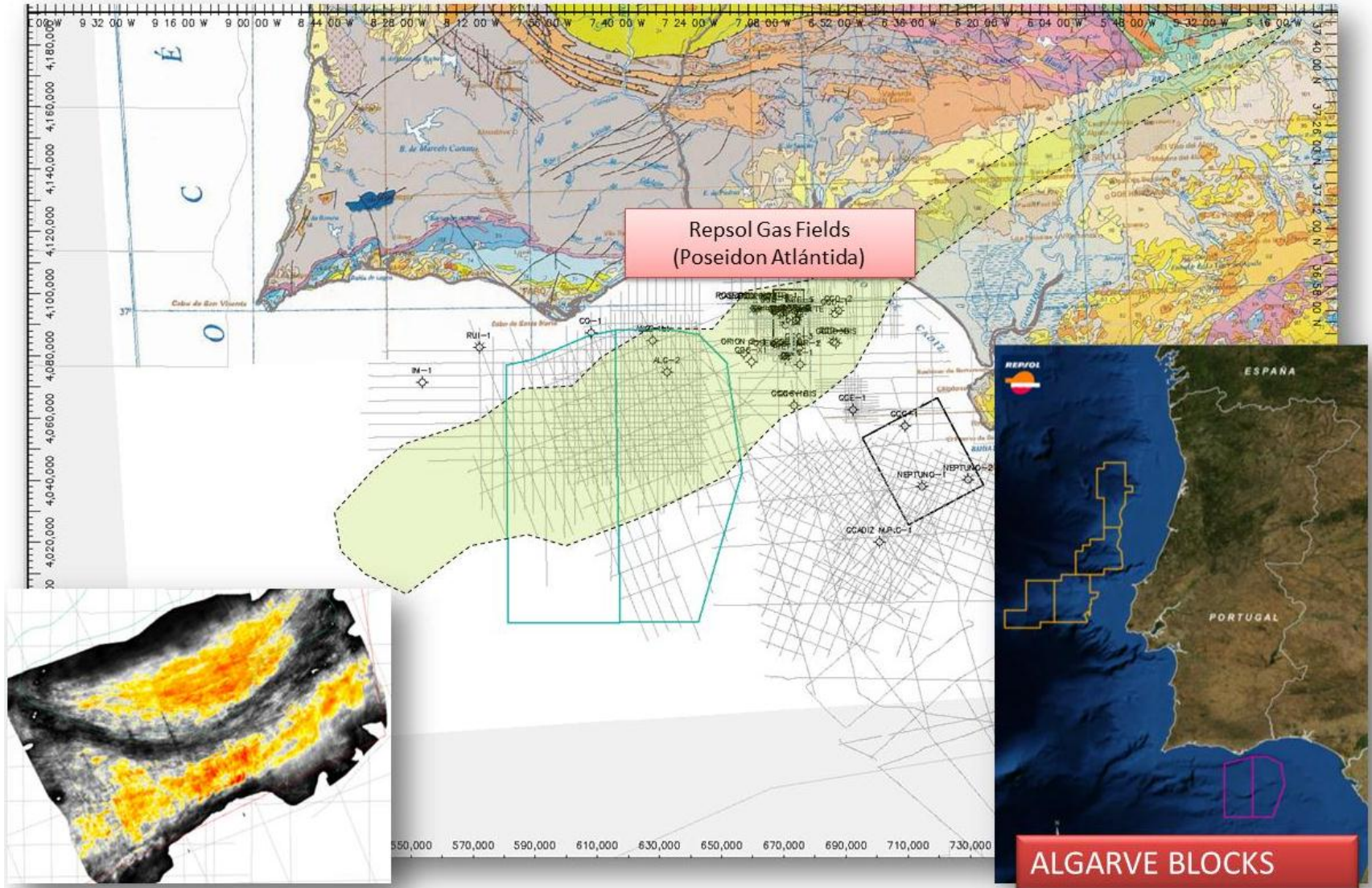
A Levantine basin analog?



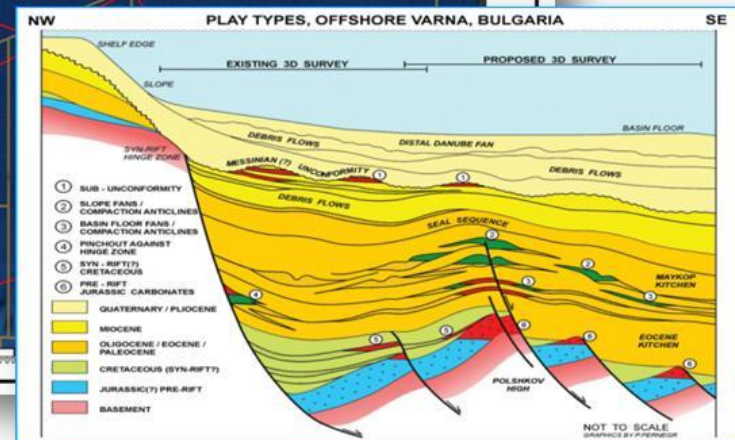
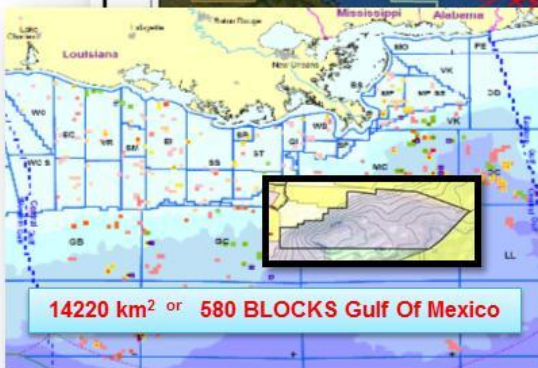
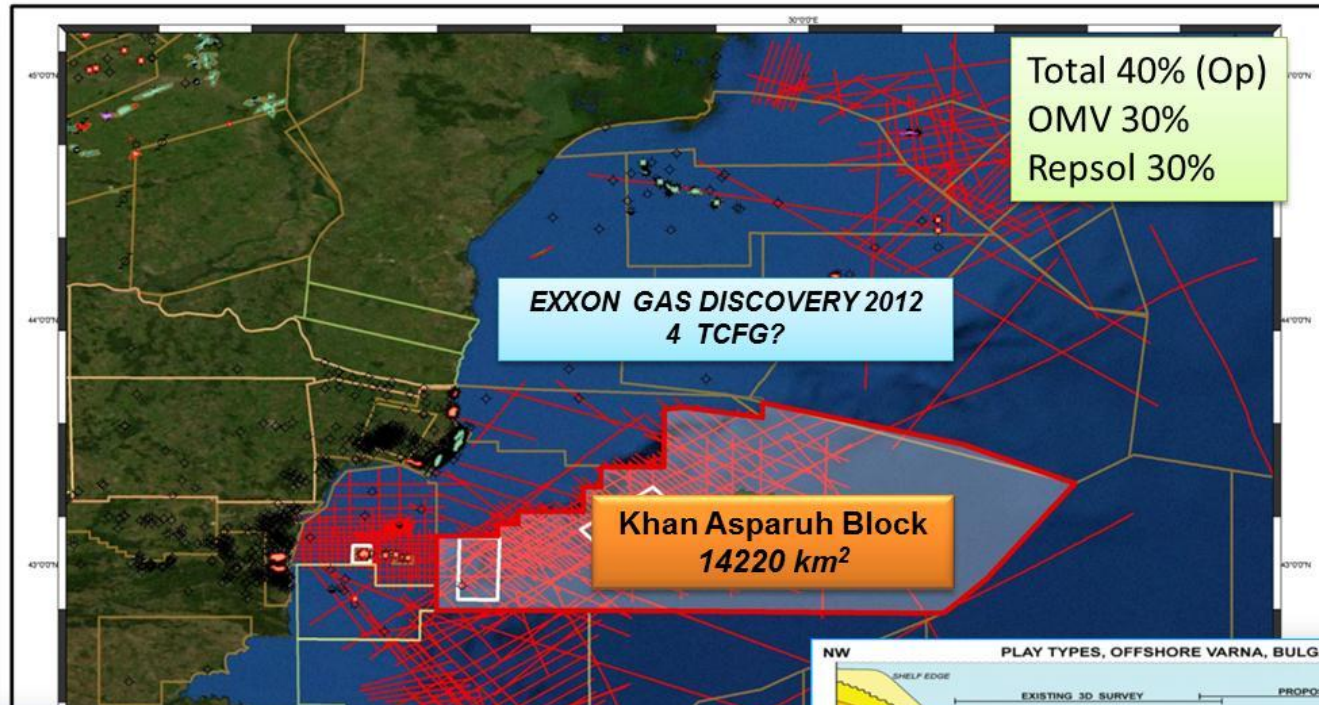
Canary Islands: A new play opener



Golfo de Cadiz Tertiary Turbidite System



Bulgaria : The Han Asparuh Block



North Africa 2013

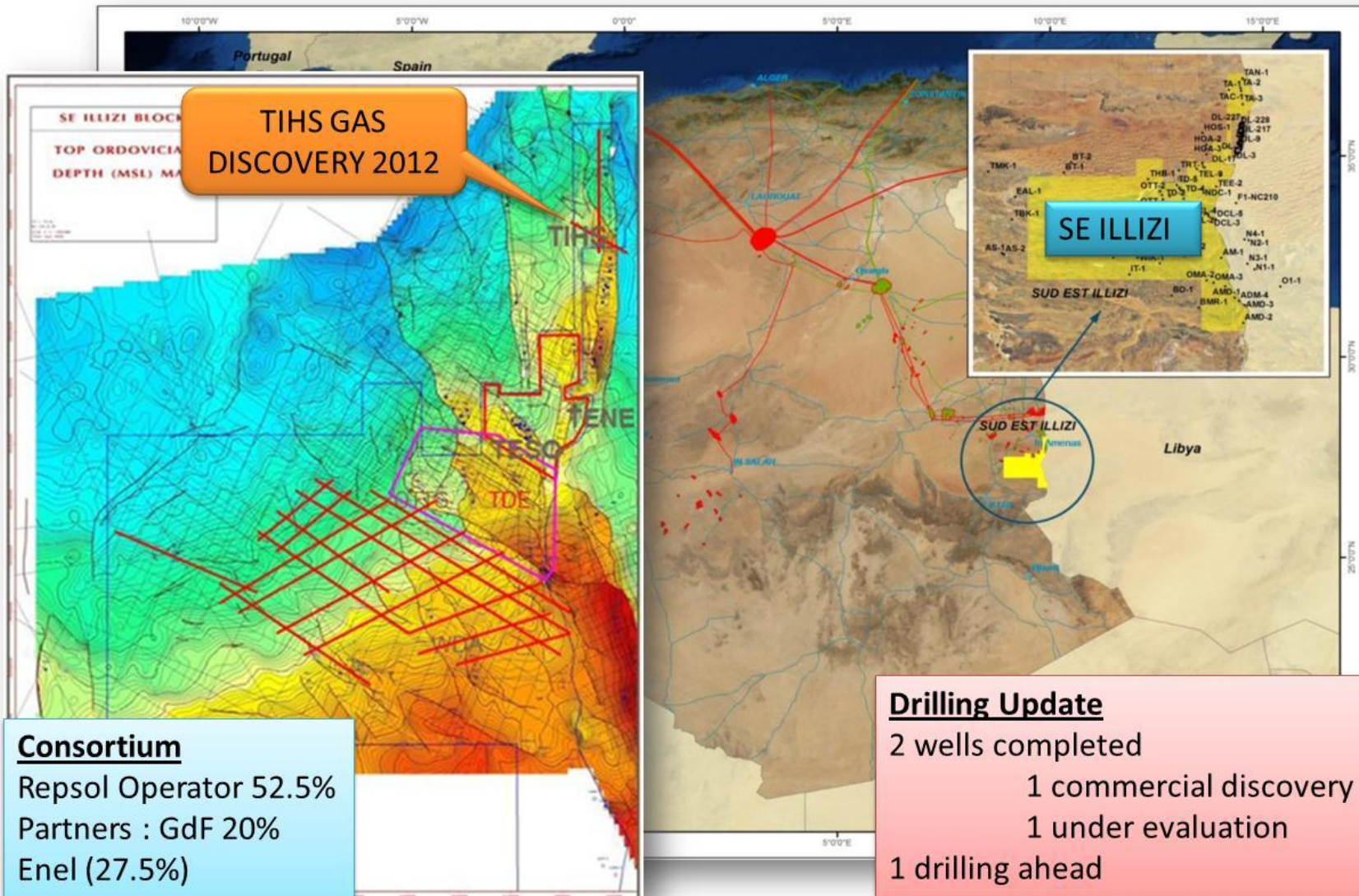


Themes:

Maximizing potential in legacy assets in North Africa and regional knowledge

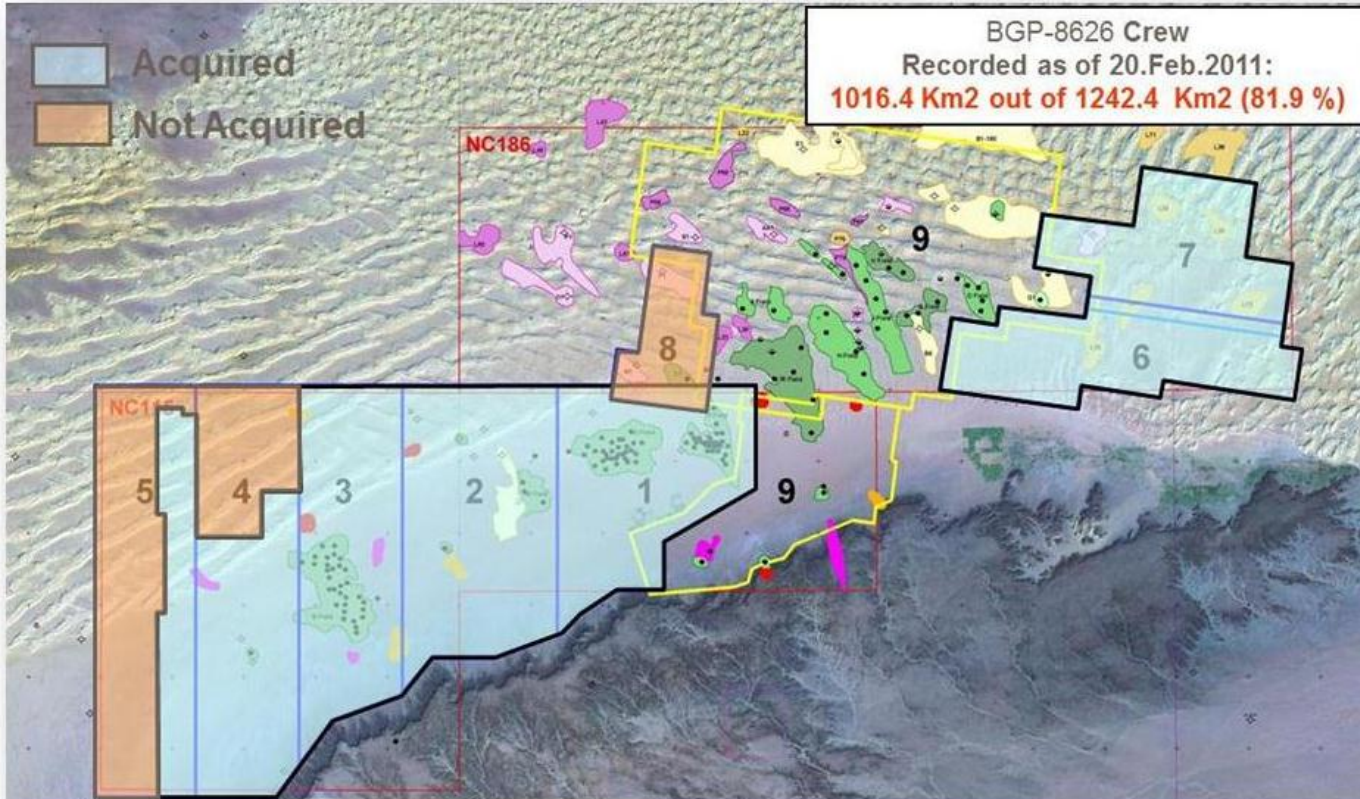
- ✓ Next cycle exploration around mature fields in Libya
- ✓ Applying regional expertise in Paleozoic plays i.e. Algeria, S.E. Ilizi discoveries
- ✓ Opening frontier plays in Offshore Tunisia

Algeria SE- Illizi Blocks



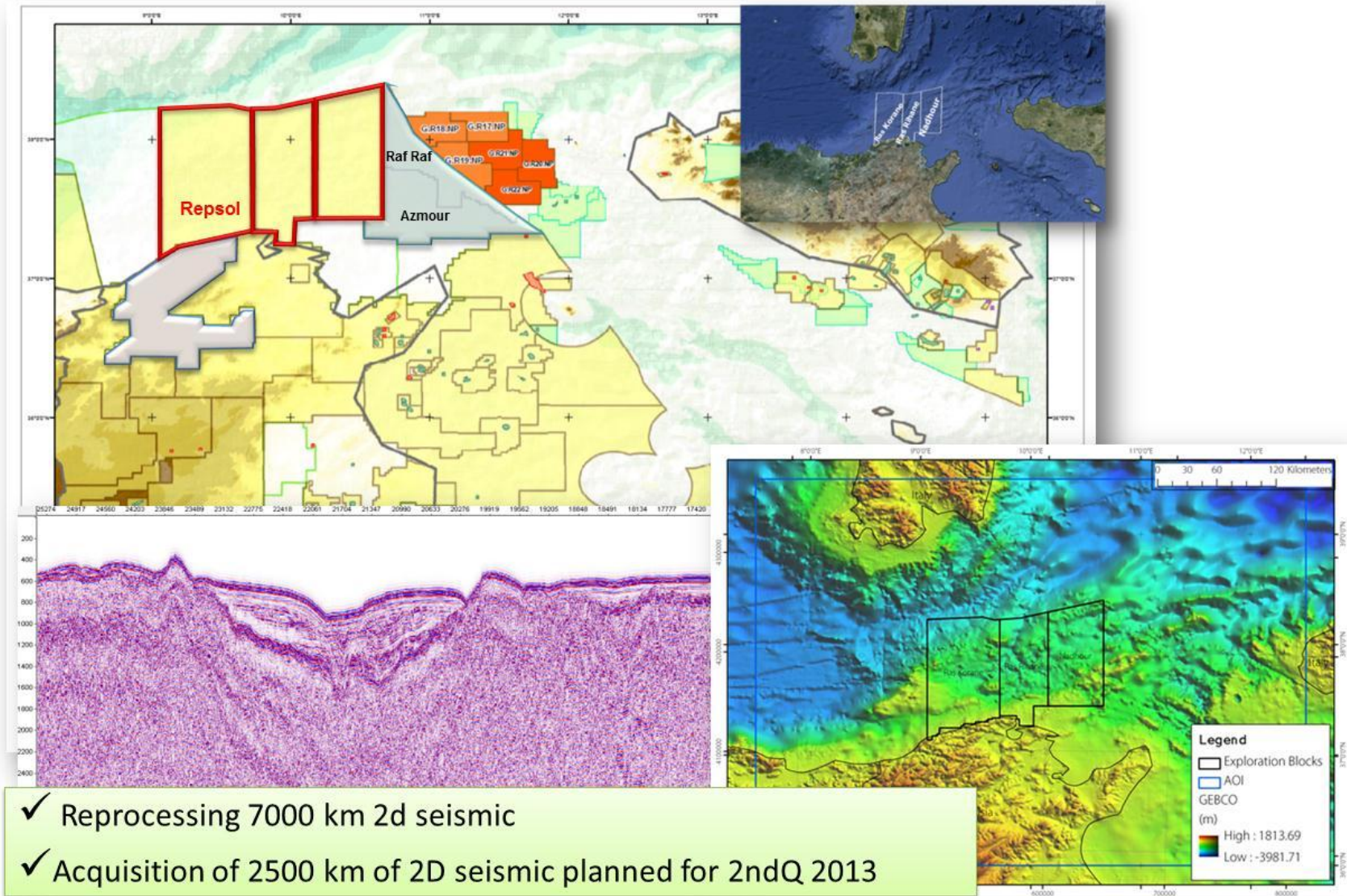
Libya Blocks NC186 and NC115

Repsol Legacy Assets – Infill Exploration



- ✓ Resumed exploration activities from Tripoli and Madrid to maximize asset value
- ✓ Seismic company preparing for activity resumption in March 2013
- ✓ 7 wells to be drilled on new 3D prospects with contracted rig starting February 2013

Technical Frontier Tunisia Offshore



Unconventionals in Spain?



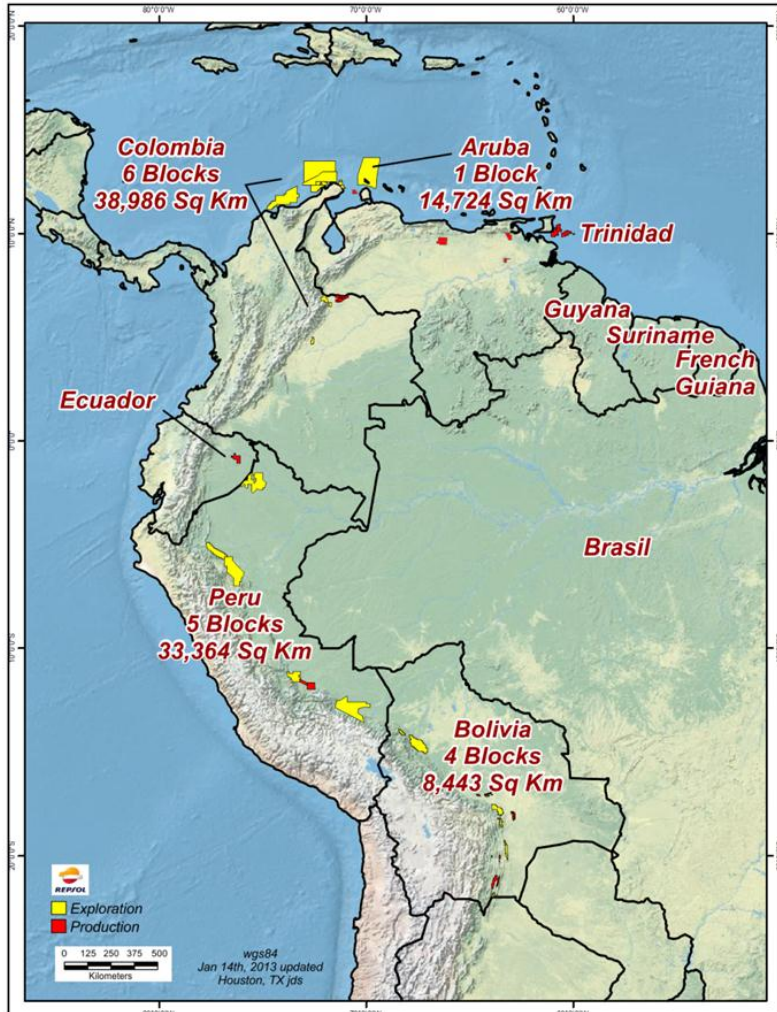
North Latin America: A Legacy Core with a New Perspective



Repsol Exploration Day

Latin America Region

Acreage Position



- Repsol's Latin America Regional Exploration Unit covers 16 exploration blocks, 9 of them operated.
- Repsol is the leading private operator in the region in terms of acreage with 96K km² (48K km² net).
- Repsol operates a diverse portfolio that expands from Caribbean Deep Water to Andean foothills settings.
- In addition to the exploratory acreage, Repsol's production portfolio in the region consists of 43 blocks
- Repsol total assets in the region expand through 7 countries.

Latin America Region

Recent Discoveries

Perla (VEN)



Huacaya (BOL)



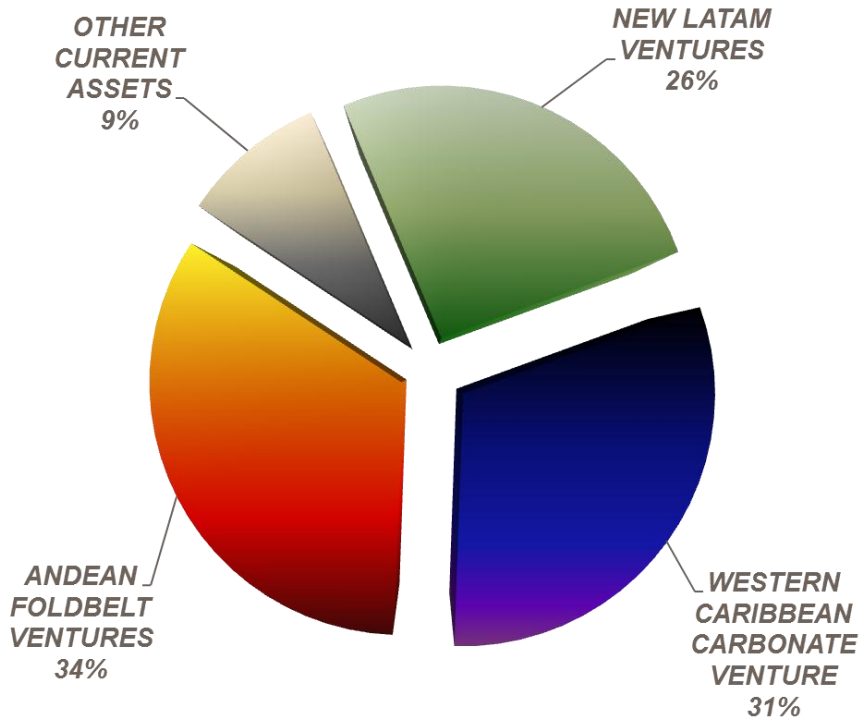
Sagari (PER)



- Between 2007-12 Repsol drilled in this Region 31 wells, resulting in 12 discoveries (39% success rate).
- Repsol operated in the period 3 large gas discoveries (Kinteroni, Huacaya, Sagari), and a supergiant (Perla).
- With 1.2 BBOE of net contingent resources discovered since 2007, Repsol leads the region in followed by ENI and Petrobras.
- Net exploration expenditures in the region since 2007 amount to 718 MUSD, representing a finding cost of 60¢/boe.

Latin America Region

Active Exploration Ventures



- 65% of the 2012-16 expenditures for the LatAm region will focus on two ventures:
 - ✓ Western Caribbean Carbonates
 - ✓ Andean Foldbelts
- Less than 10% of the expenditures will be allocated to other active assets in the region.
- More than 25% will be assigned to New Ventures.

% Latin America Exploration Expenditures¹
Repsol 2012-2016 Strategic Plan

¹Excluding Brazil

Western Caribbean Carbonates Venture

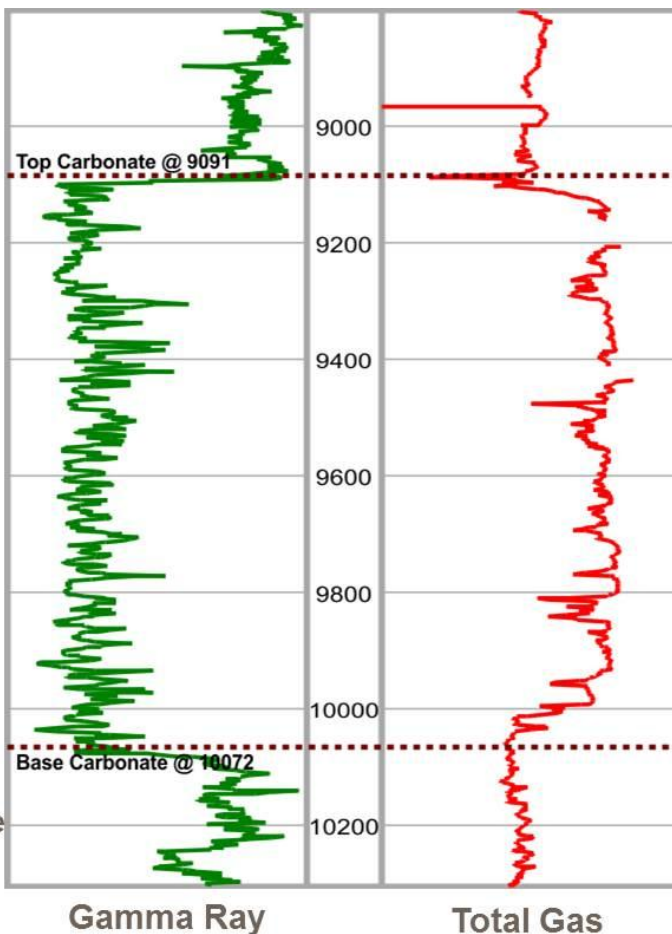
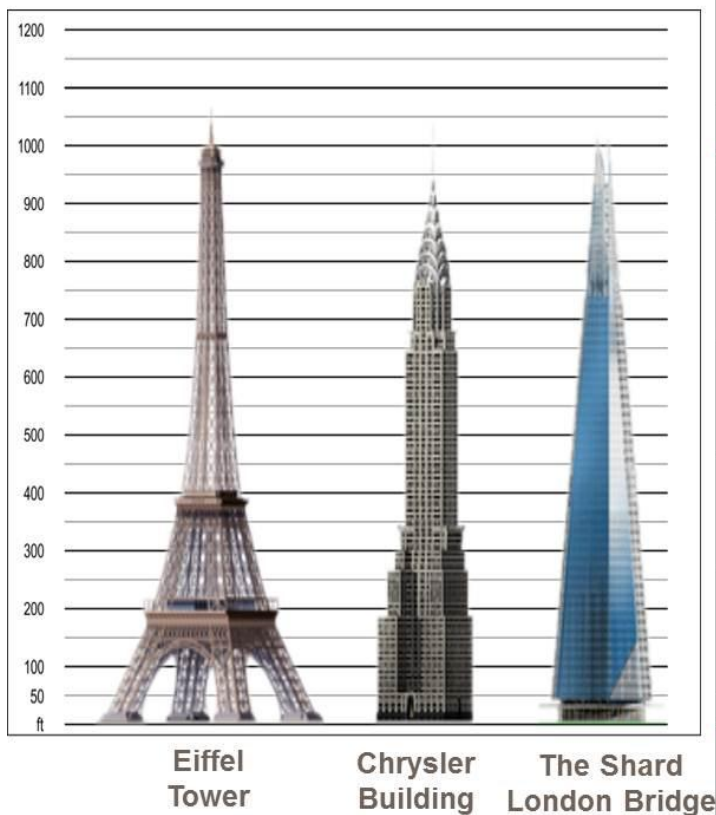


Western Caribbean Carbonates Venture



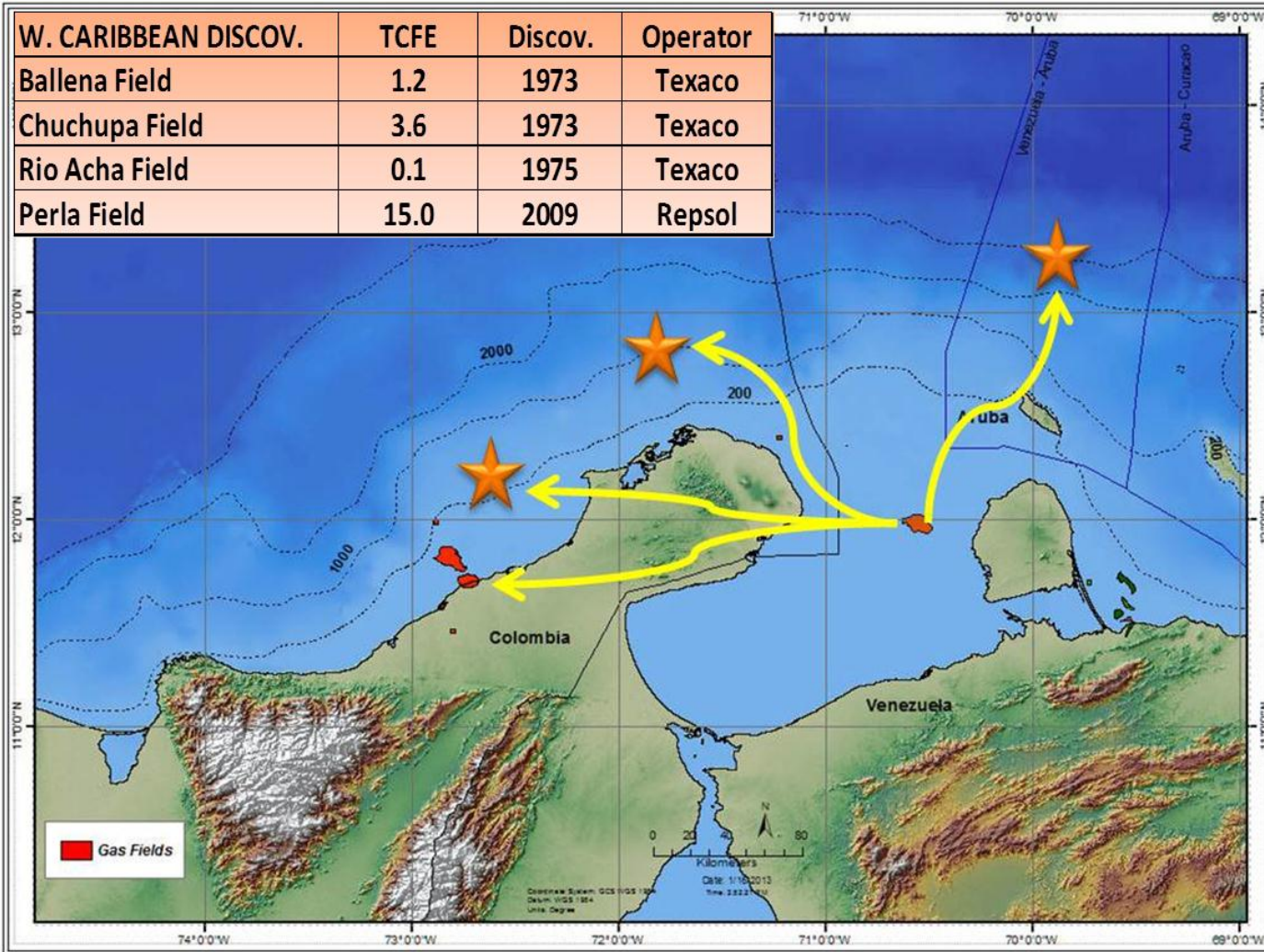
Perla Giant Gas Field (Cardón IV)

Drilled 2009, ~15 TCFE, ~900 ft Carbonate, >1,000 ft Gas Column



Western Caribbean Carbonates Venture

The Search for Perla Analogs in the Region

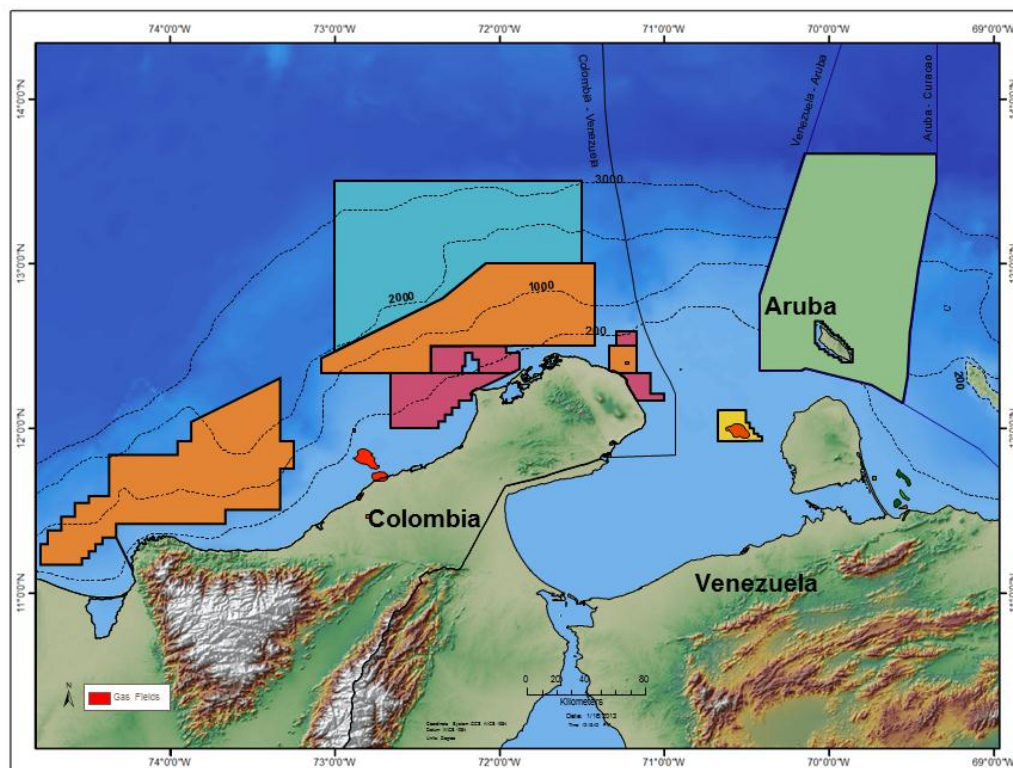


Western Caribbean Carbonates Venture

Acreage Expansion 2010-2012



2009	2010	2011	2012	2012	2012
PERLA DISCOV. CARDON IV Repsol 50%-ENI 50%	TAYRONA REP 30% Farm-In PBR40-REP30-ECP-30	RC-11 & RC-12 REP 50% Farm-In ECP 50%-REP 50%	GUAJIRA OFF-1 Ronda Colombia REP 50%-ECP 50%	ARUBA PSC Direct Negotiations REP 100%	RC-11/12 Operatorship Transfer



Western Caribbean Carbonate Venture

Exploration Activities 2010-2018



2009	2012	2013	2014	2014	2015	2016-18
PERLA DISCOV. CARDON IV 5 wells drilled to date	1700 km ² 3D TAYRONA REP Depth Processing	6000 km of 2D ARUBA/GUAJIRA	2000 km ² 3D RC-12/ARUBA/ GUAJIRA	DRILLING TAYRONA/RC-11 Deep & Shallow Water	DRILLING RC-12 Deep or Shallow Water	DRILLING ARUBA-GUAJIRA Deep Water



Andean Foldbelts

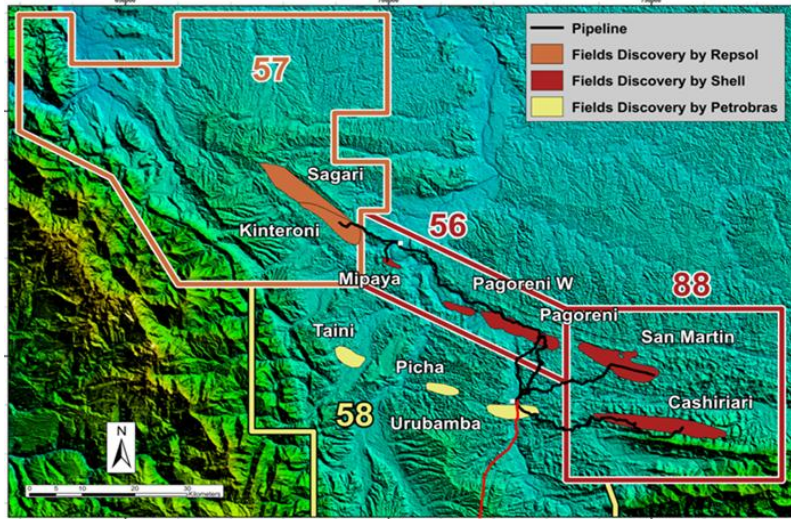


Andean Foldbelt Exploration Ventures



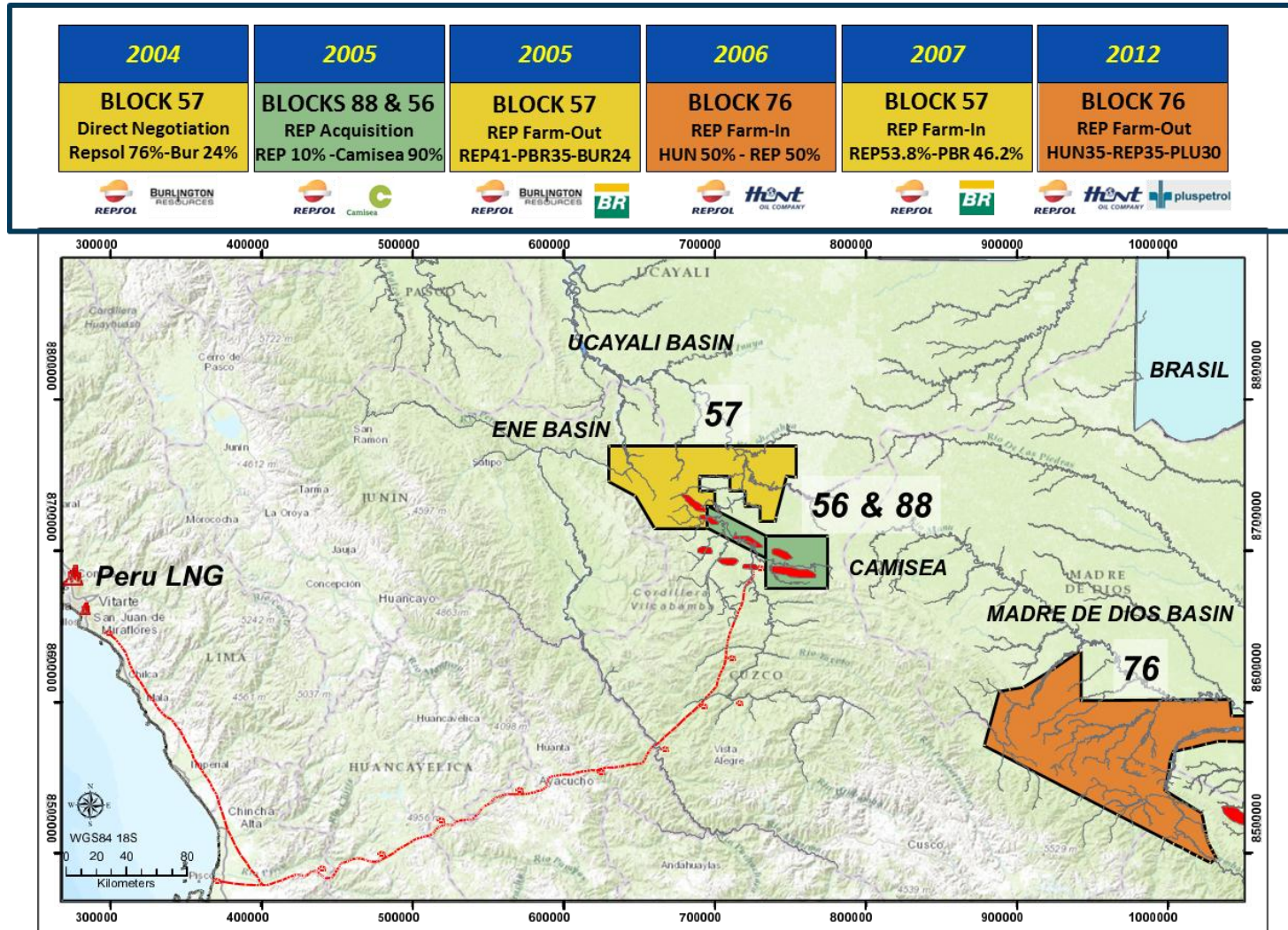
- Significant sectors of the Andean Foothills remain poorly explored for above and below the ground reasons.
- Foldbelt exploration is one of Repsol's core competencies expanding from:
 - ✓ Below the ground: Seismic Imaging and Structural Interpretation
 - ✓ Above the ground: Jungle and Mountain Operations and Community Relations.
- Repsol currently maintains an extended foldbelt acreage position from North Perú to South Bolivia.

Andean Foldbelts South Peru Paleozoic Gas Venture



- Play discovered by Shell in 1984, remained stranded for lack of markets.
- Reactivated by the Camisea consortium in 2000.
- Gas production to Lima started in 2004 through a 715 km Transandean pipeline.
- Repsol acquired 10% of Camisea Upstream and 20% of Perú LNG in 2005.
- First LNG cargo leaves Peru in 2010.
- Repsol expanded its exploration position around Camisea, ~4TCFE discovered to date, significant potential remaining.

South Peru Paleozoic Gas Venture Acreage (2004-2012)

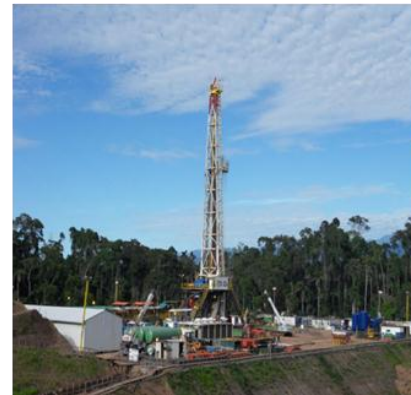


South Peru Paleozoic Gas Venture

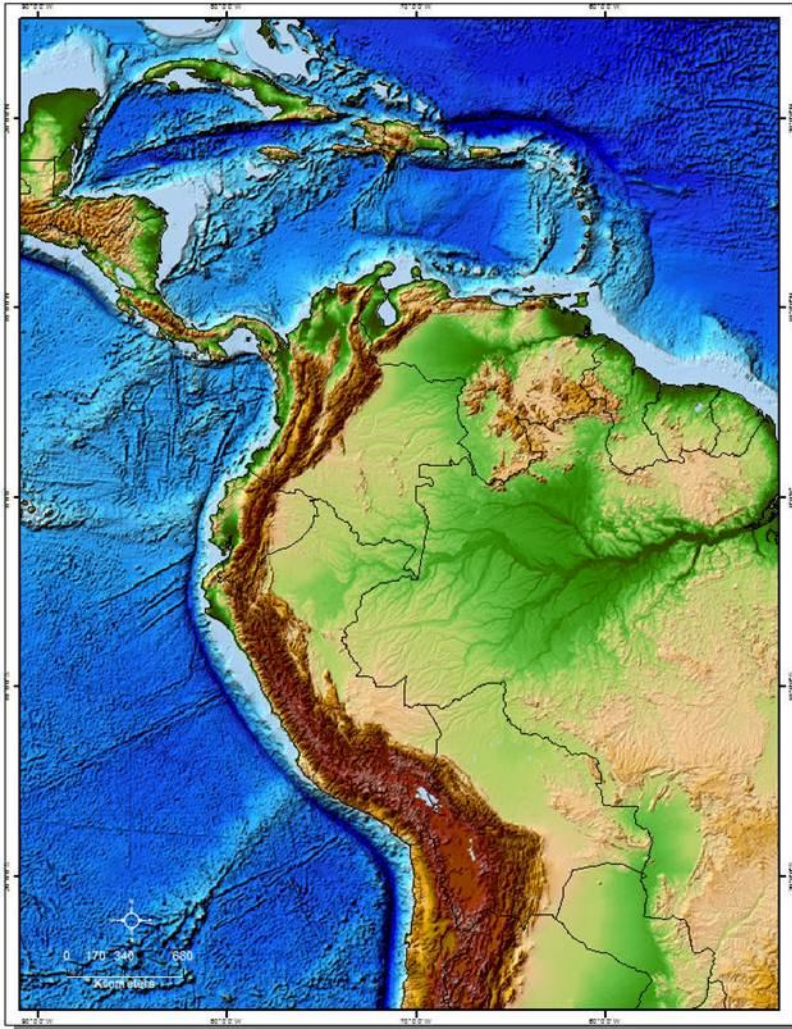
Exploration Activities (1984-2015)



1984-88	1999	2004	2007	2012	2013	2014-15
CAMISEA DISC. ~12 TCFE SHELL,current 88&56	CANDAMO DISC. ~2 TCFE EXXON,current N.Park	FIRST GAS CAMISEA PROJ. Camisea Consortium	KINTERONI DISC. ~2 TCFE 3 wells drilled to date	SAGARI DISC. ~2 TCFE Waiting on appraisal	FIRST GAS BLOCK 57 155 MMCFD	DRILLING BLOCKS 76&57 2 to 4 well program



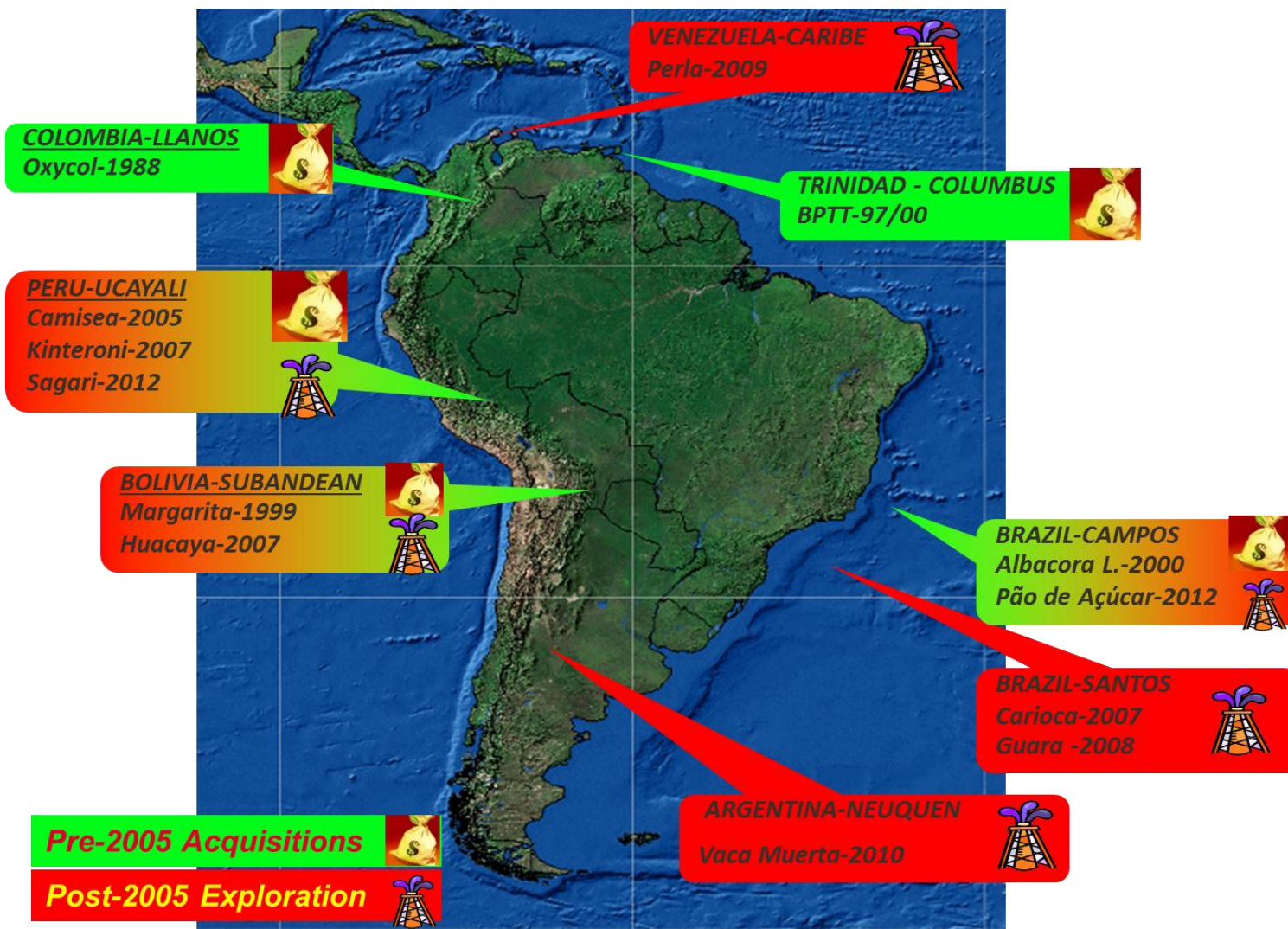
Latin America New Ventures



- Repsol New Ventures teams constantly monitor LatAm activity, reviewing most available prospects above 100MBOE.
- Significant resources are also dedicated to new geological concepts in Frontier Basins.
- Technical effort focused on selected 'Areas of Interest' capable to replace the current portfolio.
- Five new contracts signed in 2011-12.

Repsol in Latin America

Historic Track Record of Access to Giant Plays

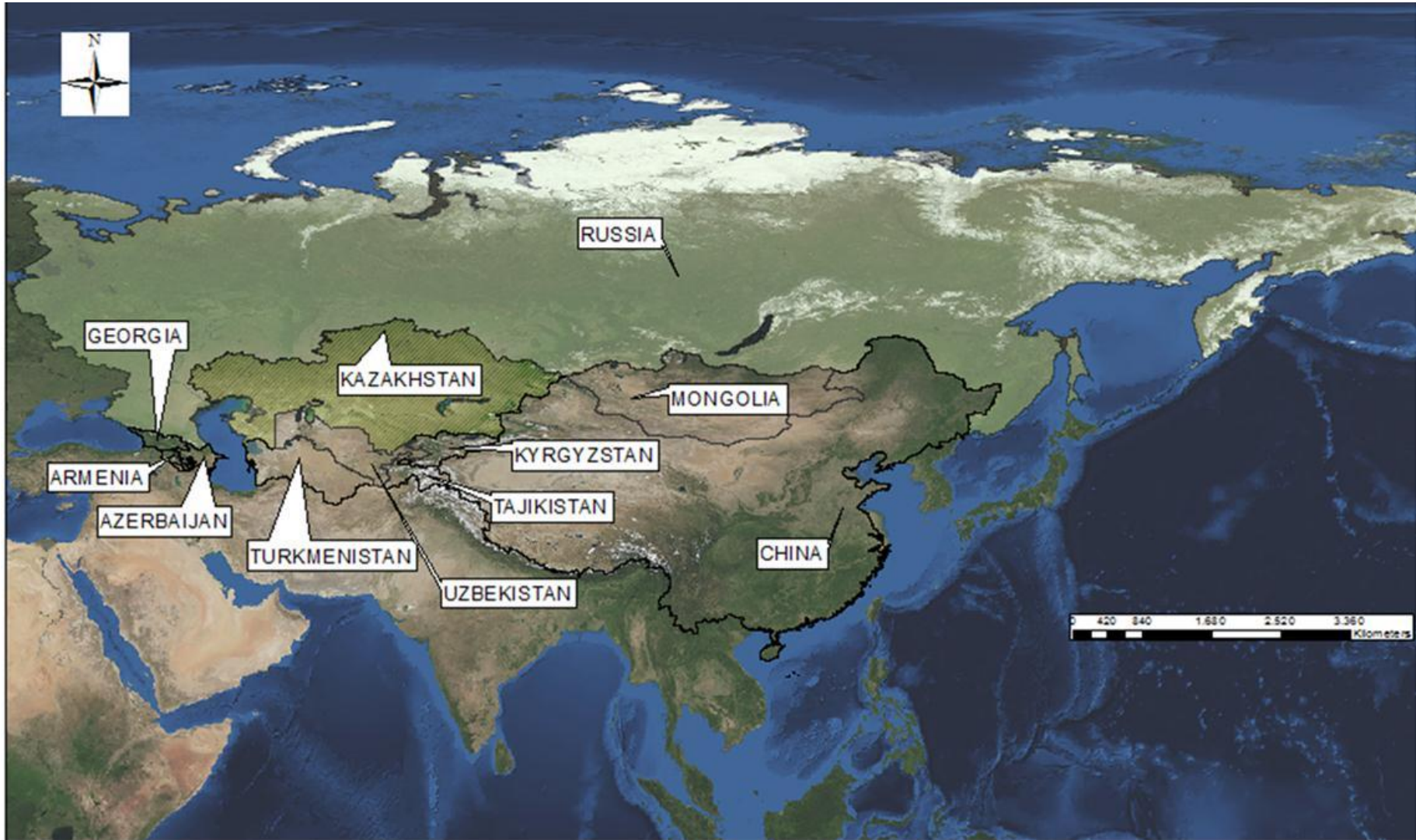


Russia, FSU & Asia Pacific: Opening a New Hemisphere

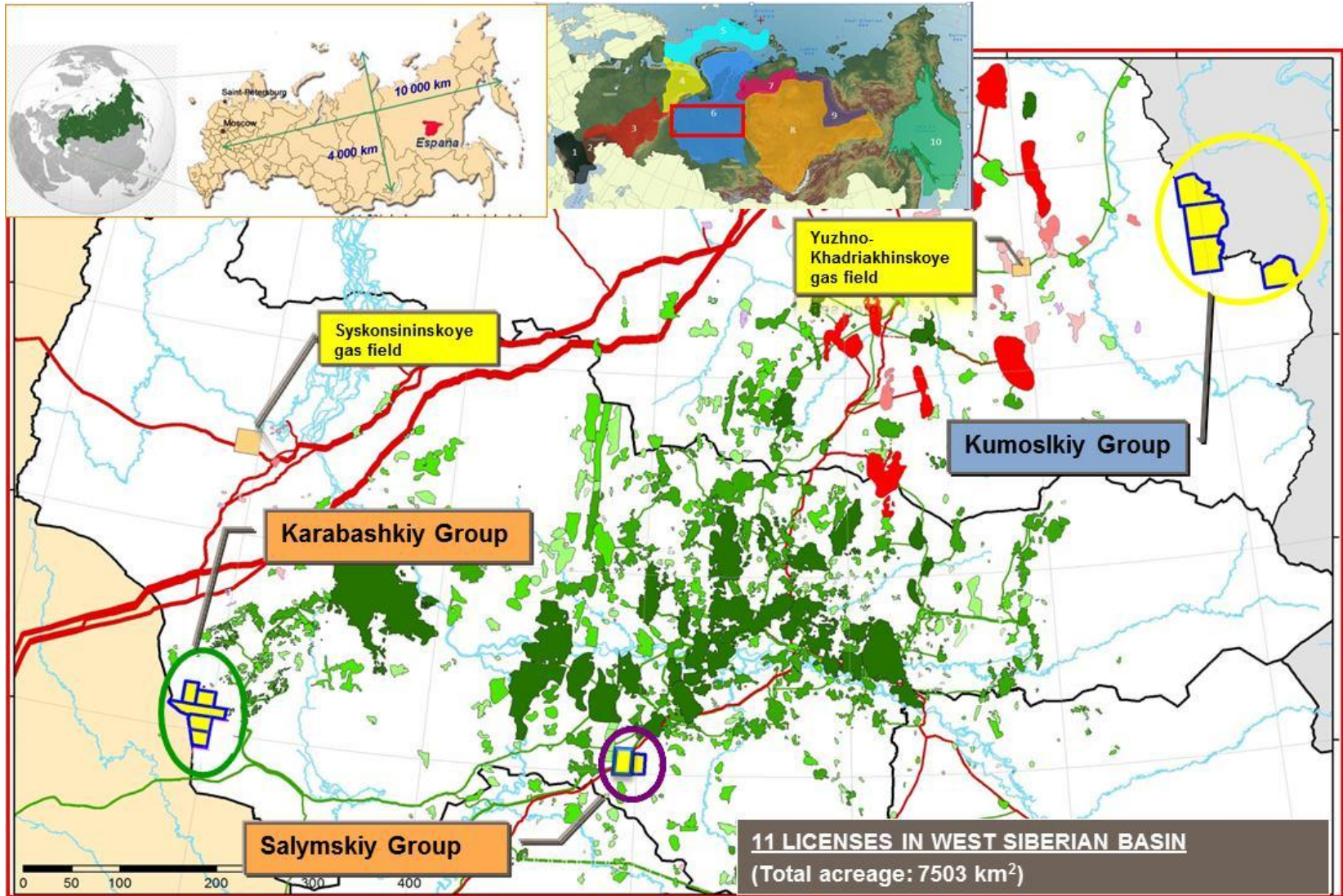


Repsol Exploration Day

RUSSIA & FSU



Repsol acreage in Russia WSB (2013)



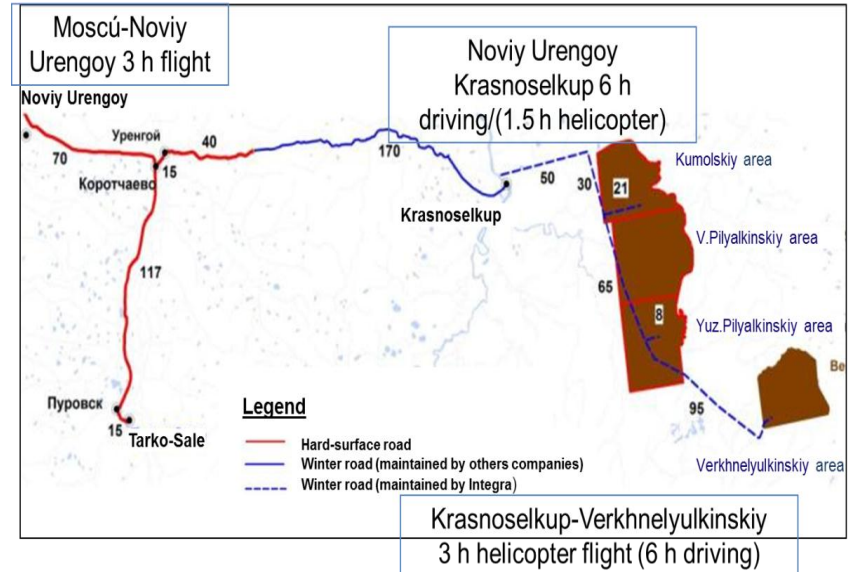
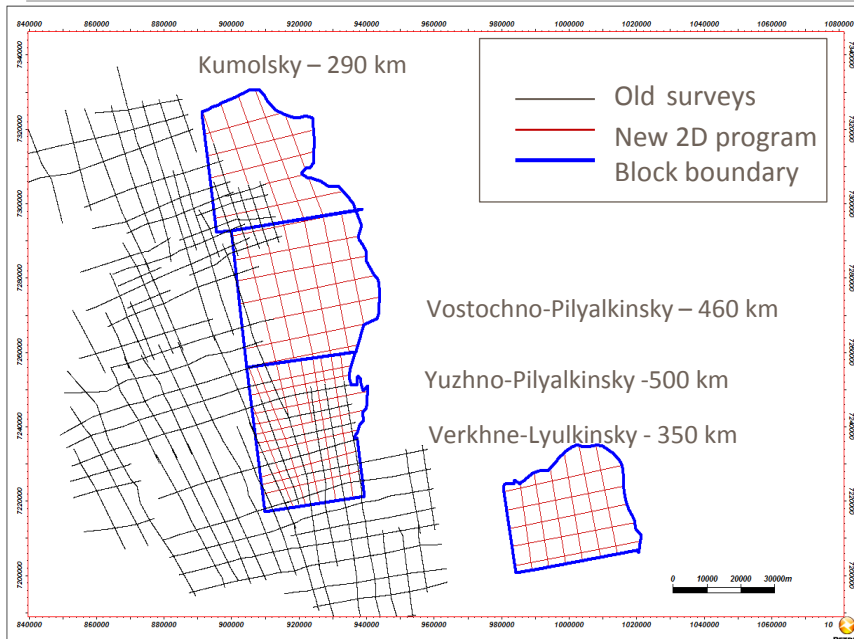
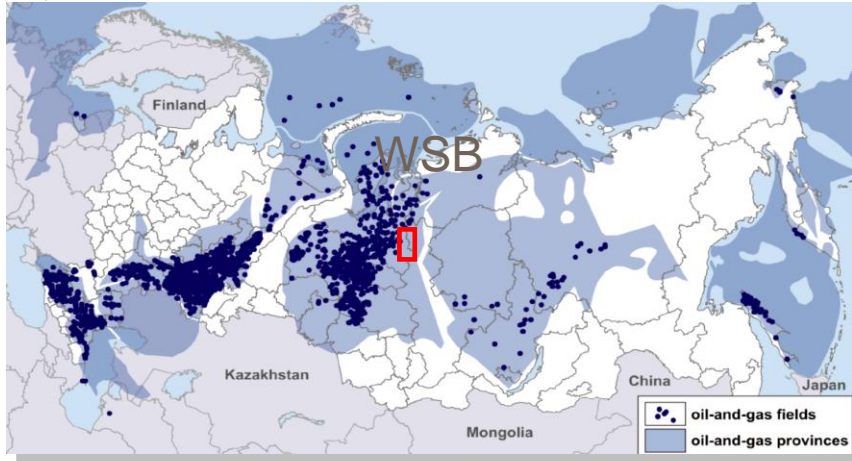
Russia: Growth, Drilling, Seismic Acquisition

- January 2013 11 licenses Repsol 100%. 4 incorporated in 2012
- Karabashkiy 1 & 2 Blocks: Drilling campaign Gabi 1 & Gabi 3 wells
- Kumolskiy + 3 Blocks: 1600 km seismic acquisition operation
- Regional studies:
 - ✓ General WSB + Eastern border of WSB (regional Kumolskiy) + Western border of WSB (regional Karabashkiy) + Salimsky WSB
 - ✓ TP



West Siberian basin

Seismic Acquisition operation 2012-2013

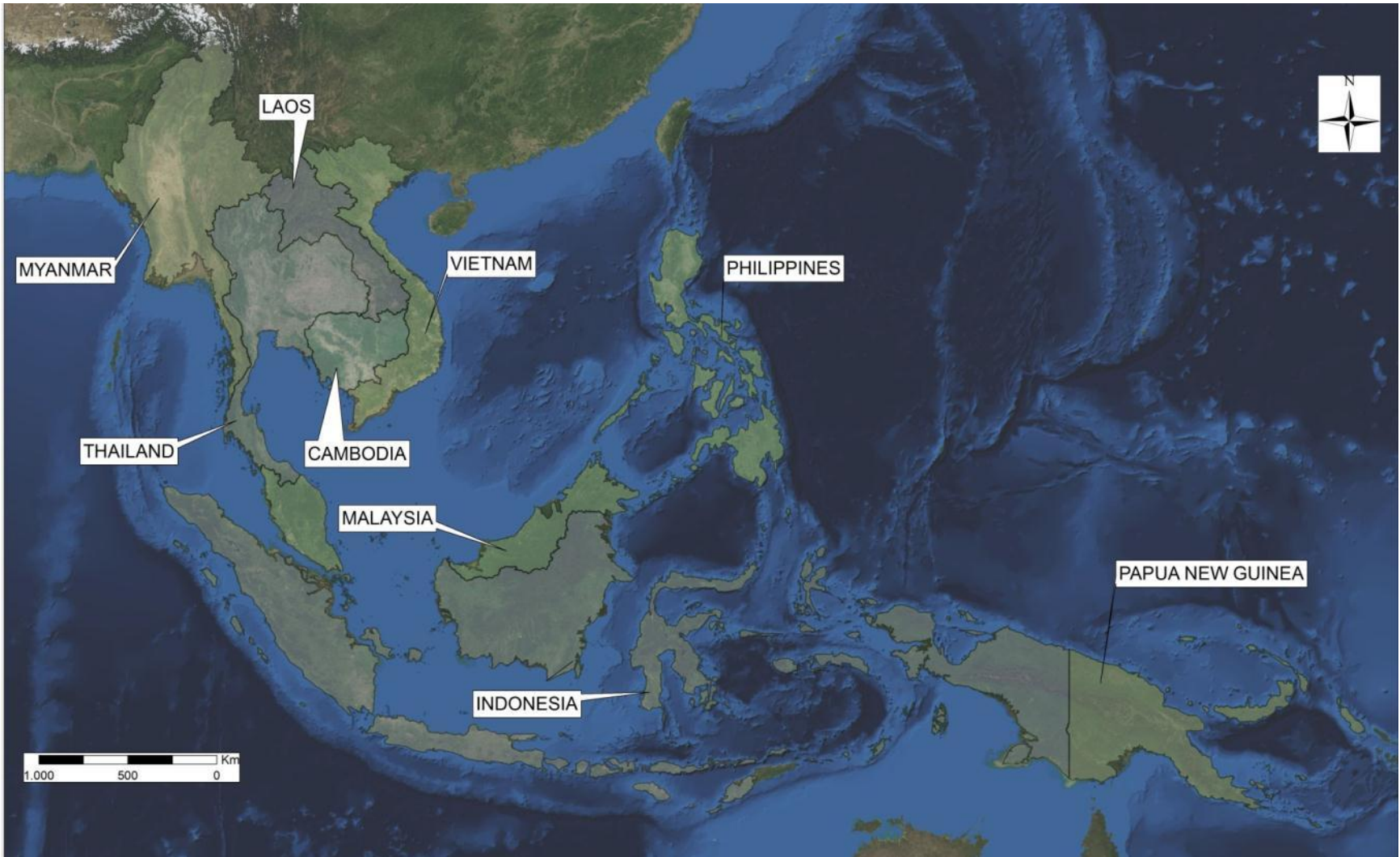


- Remote area, difficult logistics
- Difficult communication, long distances by winter roads 85%-90% covered by forest of variable density. Many water bodies and small rivers
- Wild animals (Bears, Foxes, Wolves)

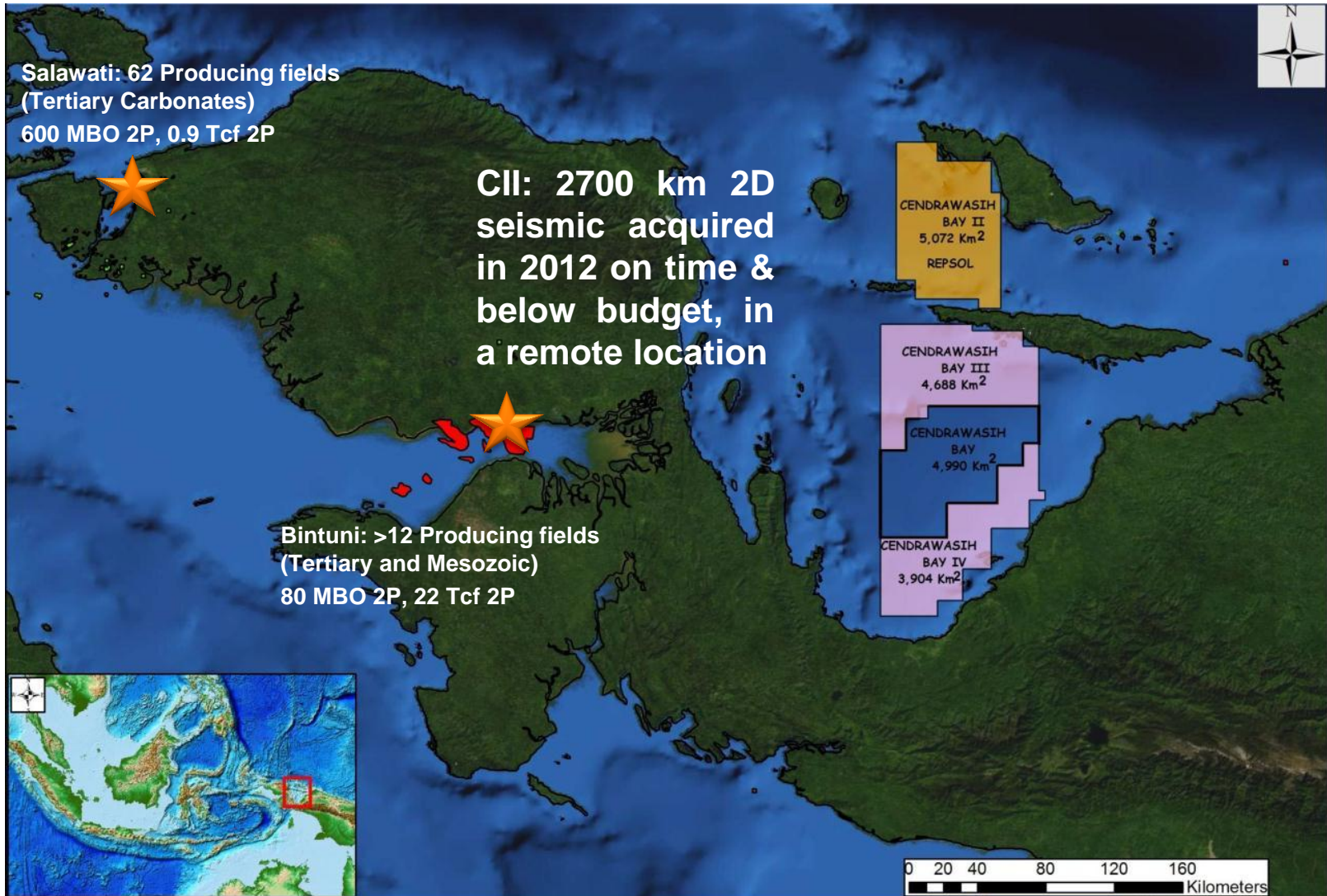
Kumolskiy+3 Blocks: Seismic Campaign



SE ASIA

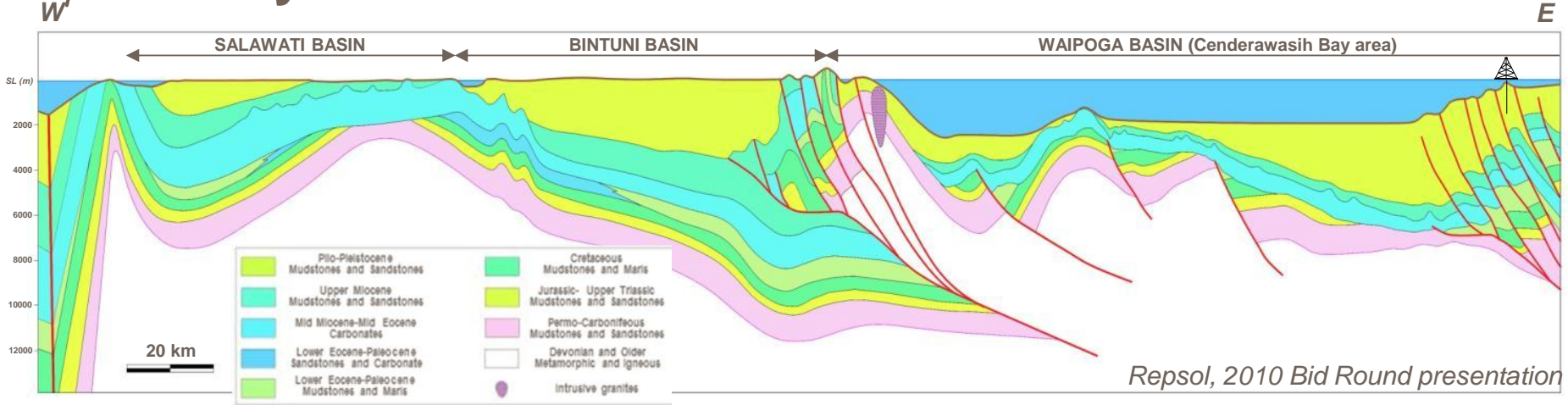


Indonesia: Cendrawasih Bay Blocks Frontier Area



Regional Setting of Waipoga Basin

Nearby fields



- 62 Producing fields (mostly Tertiary Carbonate)
- 600 MMbbl 2P Oil reserves 0,9 Tcf 2P Gas reserves

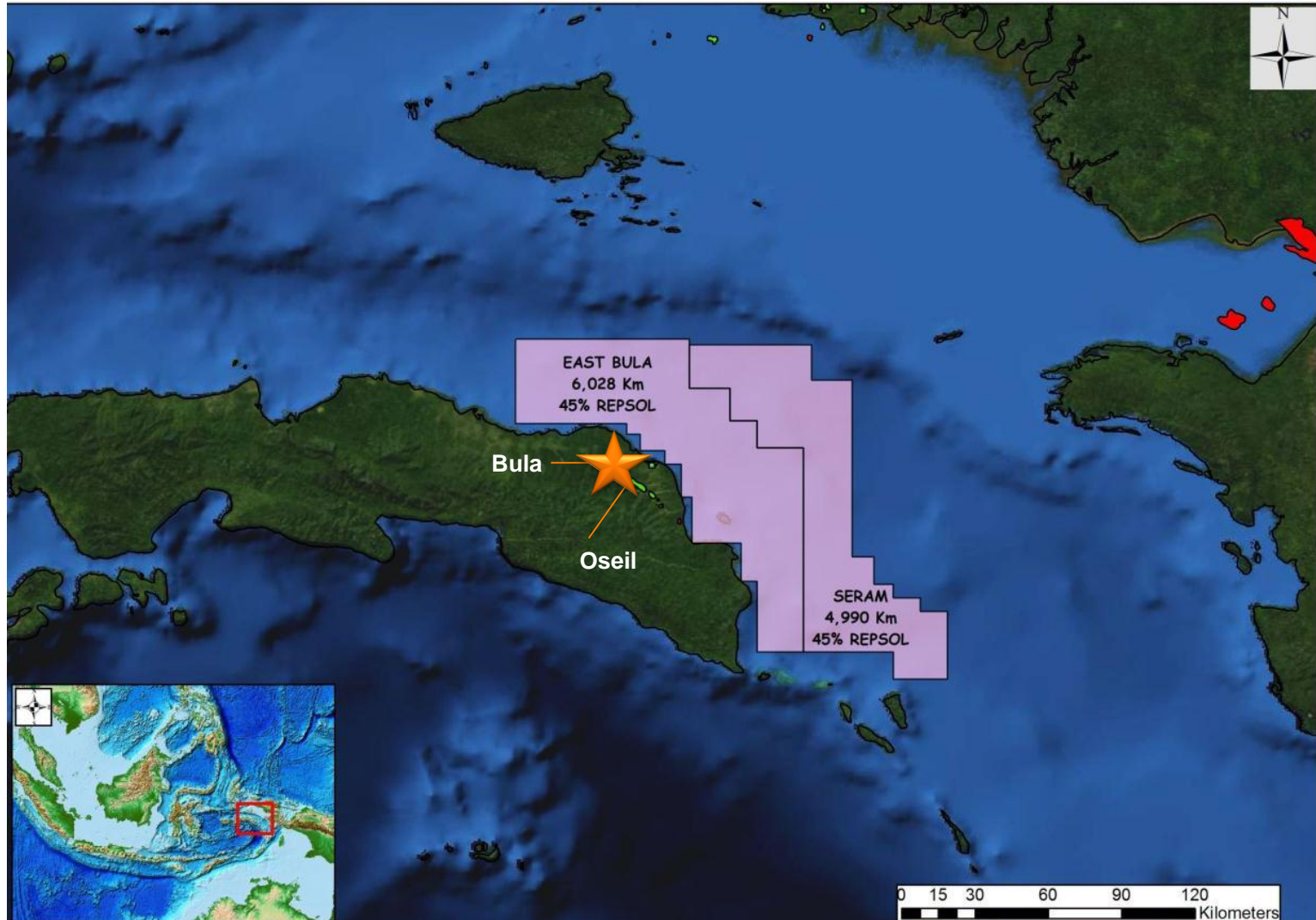
- 12 Producing fields (Tertiary and Mesozoic)
- 80 MMbbl 2P Oil reserves 22 Tcf 2P Gas reserves

- Cendrawasih is a **frontier basin**, no wells deeper than Pliocene
- Speculative pre-Pliocene stratigraphy
- Analogues: Bintuni & Salawati

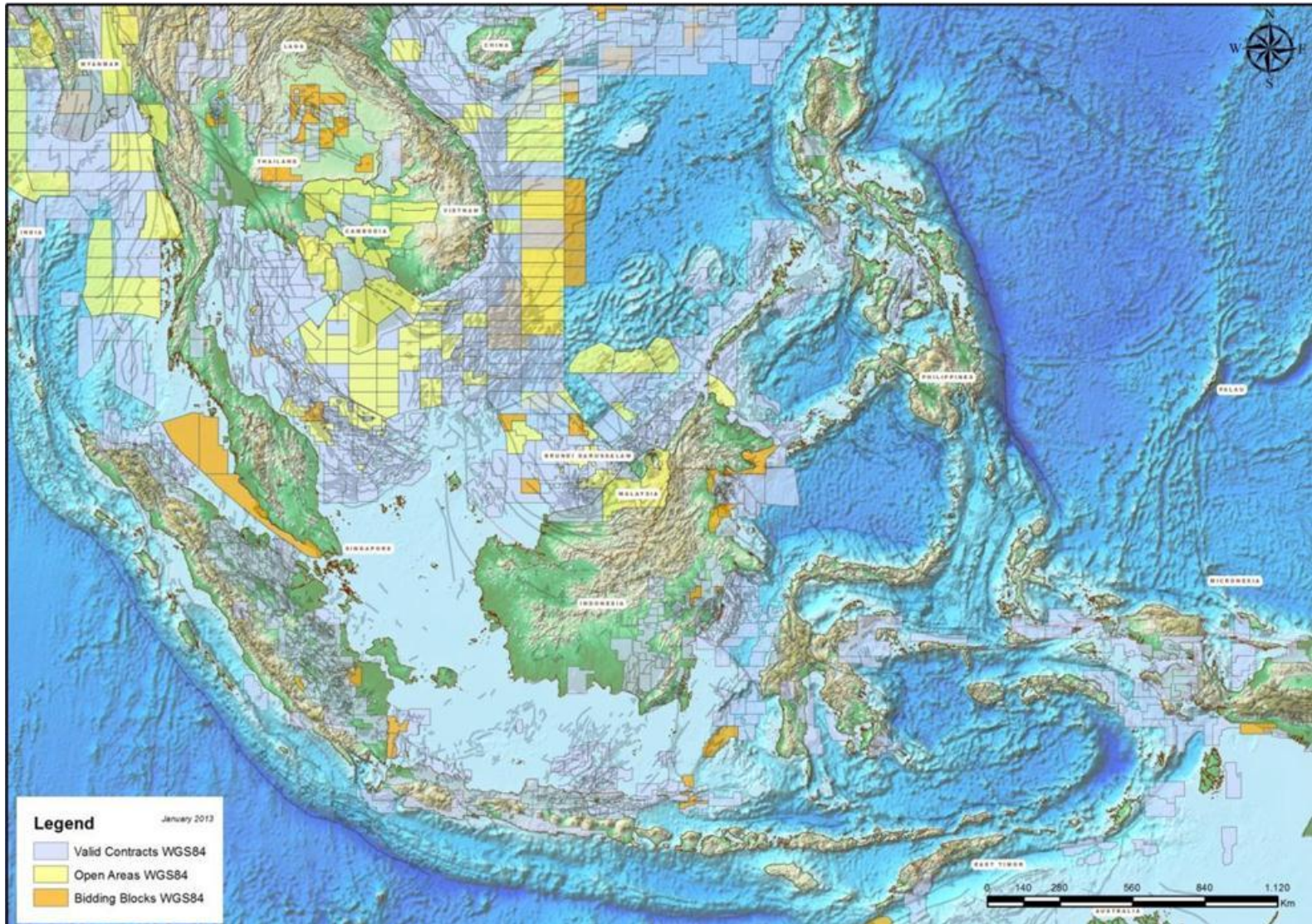


Basin	Field	Depth (mTVDSS)	API ⁰	T (C°)	Vert Closure (m)	Area (km ²)	HC Column (m)	Net pay (m)	Porosity (%)	OIIP (MBO)
Bintuni	Mogoi	450	39	55	160	3	150	150	12	115
Bintuni	Wasian	900	40	60	150	4	60	50	12	65
Bintuni	Wiriagar	460	38	55	76	4	60	45	21	112
Salawati	Cendrawasih	980	28	82	137	1,5	35	28	22	28
Salawati	Walio	715	34	80	366	14	170	48	23	410
Salawati	Moi	1340	18	75	76	1,5	67	12	20	16
Salawati	Klamono	100	19	35	250	2	200	52	23	79
Salawati	Klaserai	880	35	66	180	1,5	14	10	20	14
Salawati	Sele	640	35	80	60	3	42	38	14	44
Salawati	Kasim	925	37	76	305	2,5	143	47	23	119
Salawati	Salawati	1550	38	75	226	1,5	176	141	19	78
Salawati	Jaya	870	42	83	274	2	114	50	29	79
Salawati	Arar	2670	Gas	151	96	2,5	96	35	17	165 bcf
Salawati	Klain	2700	Gas	150	66	2	66	20	16	110 bcf

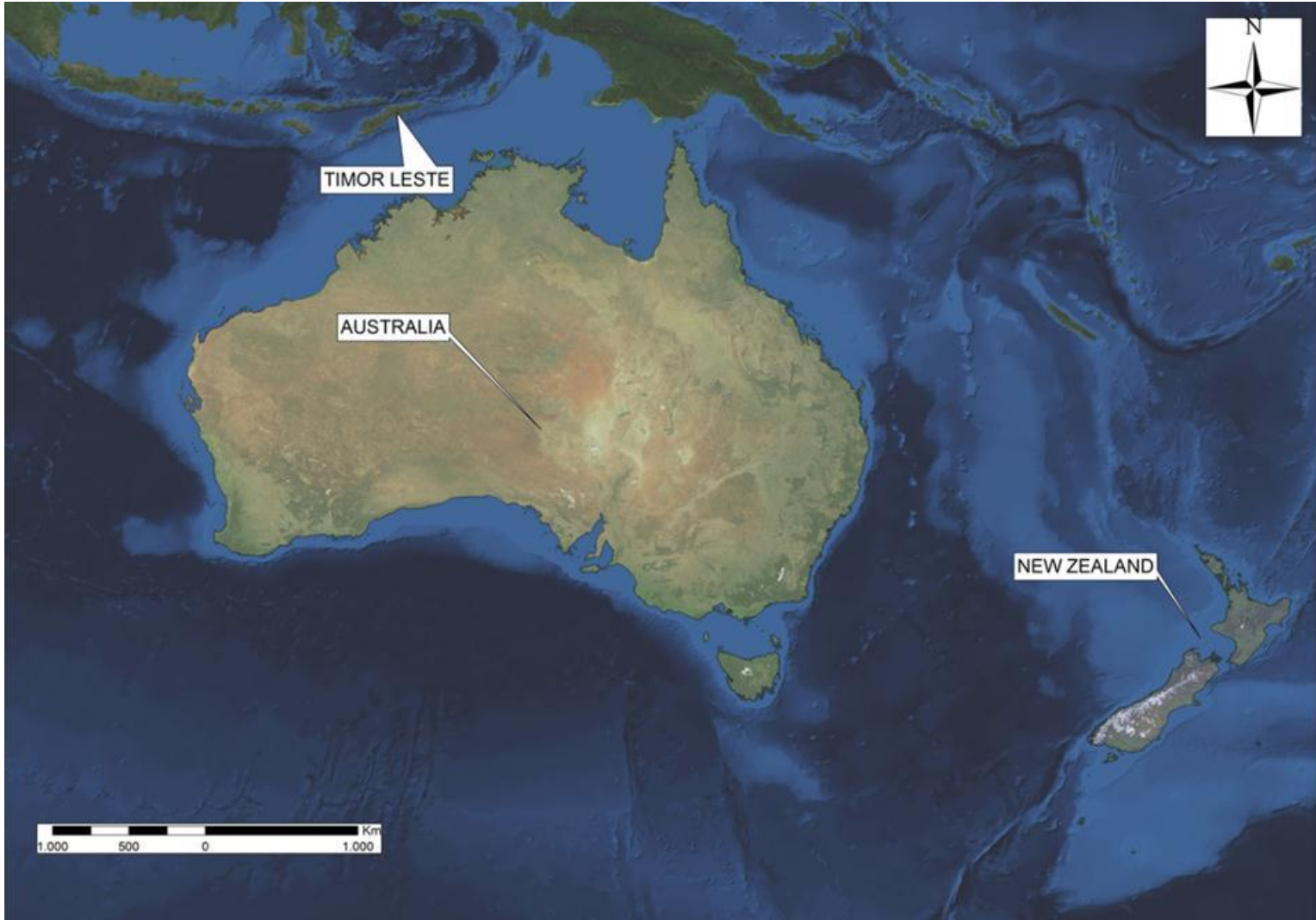
Indonesia: Seram, East Bula Blocks the Challenge of Complex Areas



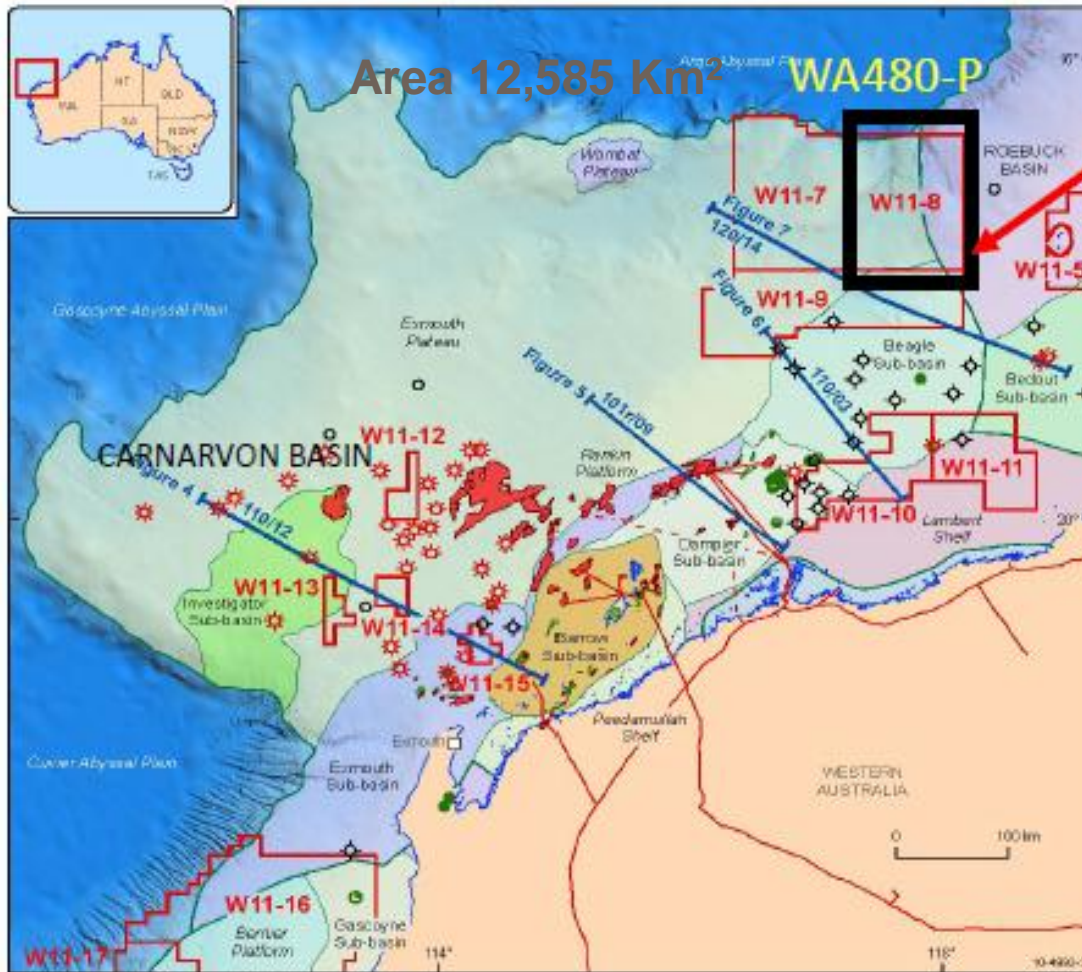
New Areas: Back to basics again



Australia & New Zealand



Block WA 480-P



WA-480-P:

- Repsol 100%.
- Award 20th August 2012.
- Deep water frontier block, 1000 to 1600m, 300 km from shore.
- Commitments: 1st year 3D Seismic: 2000 km², 20 MUS\$.

Middle East & South Asia: Where the Oil is



Repsol Exploration Day

Middle East & South Asia

Geographical Coverage

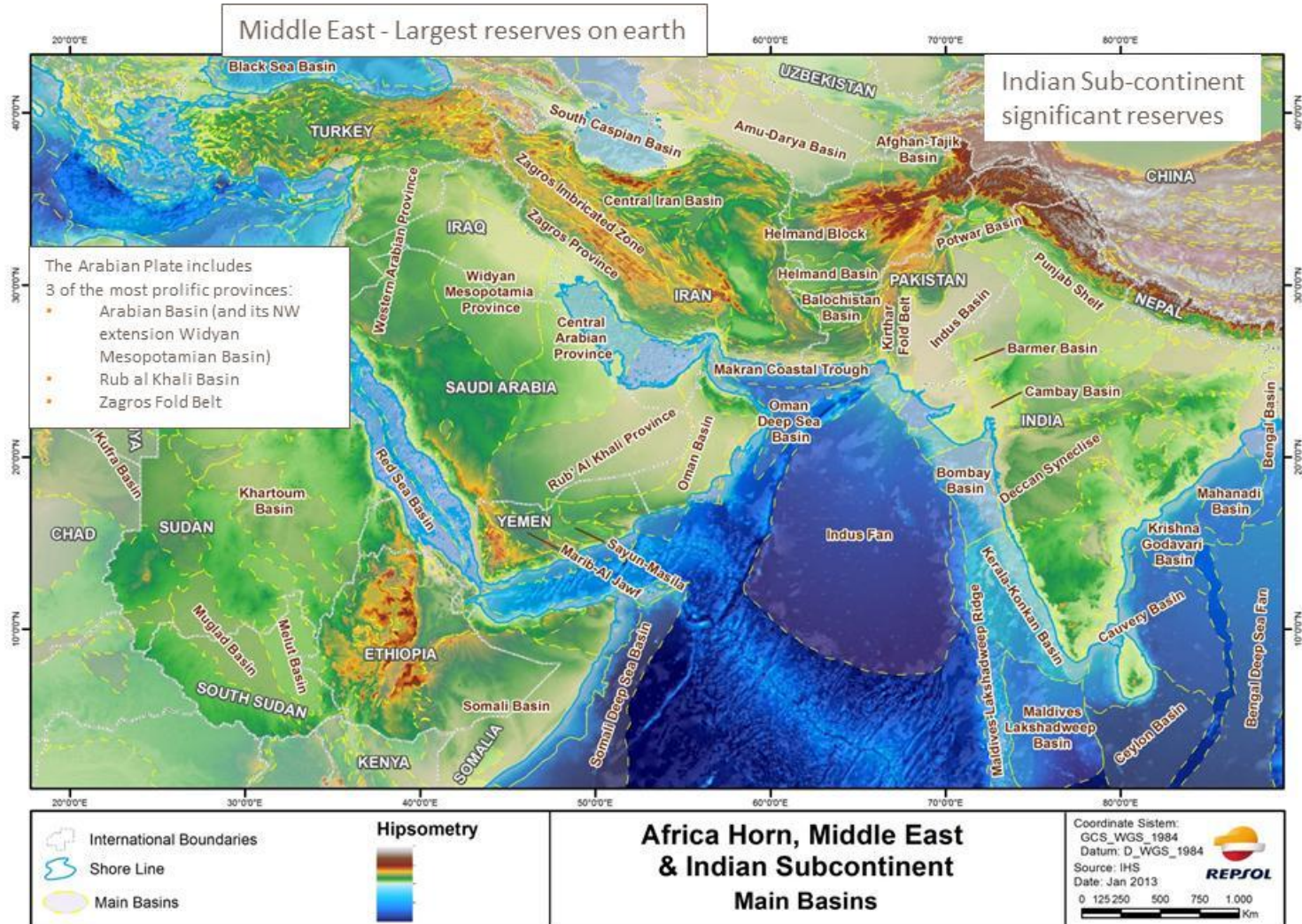


- Total: 26 countries
- Focusing in a few



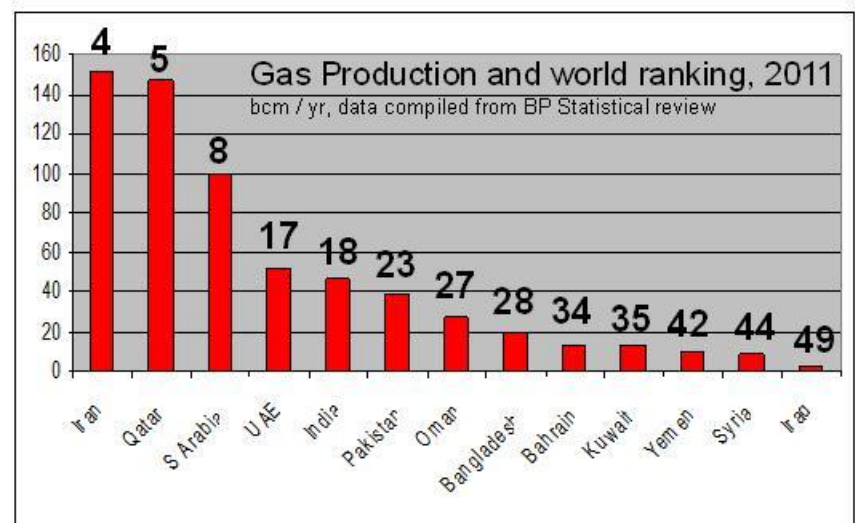
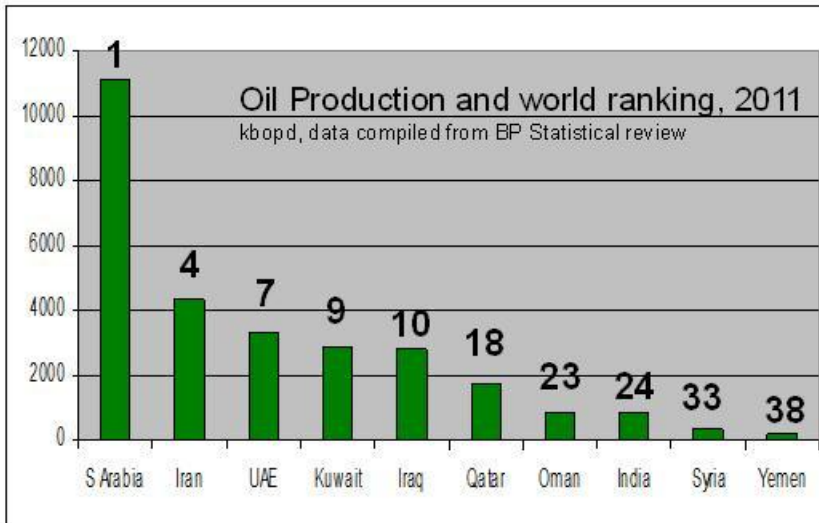
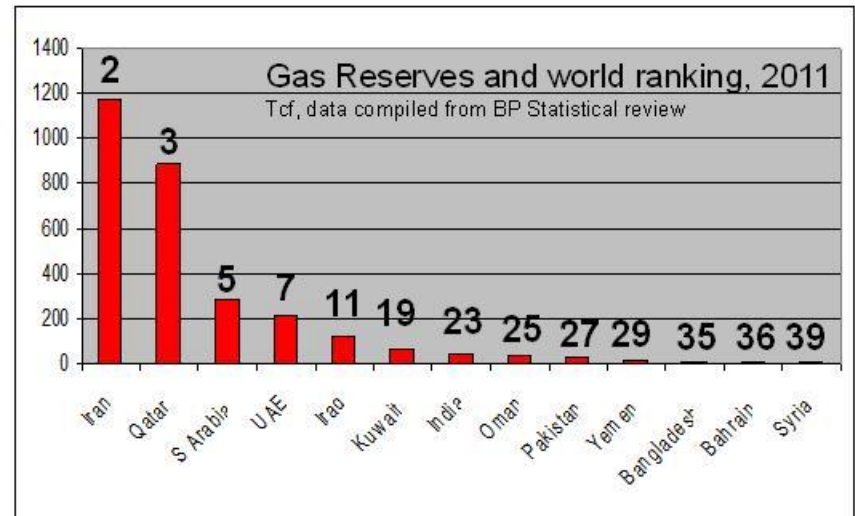
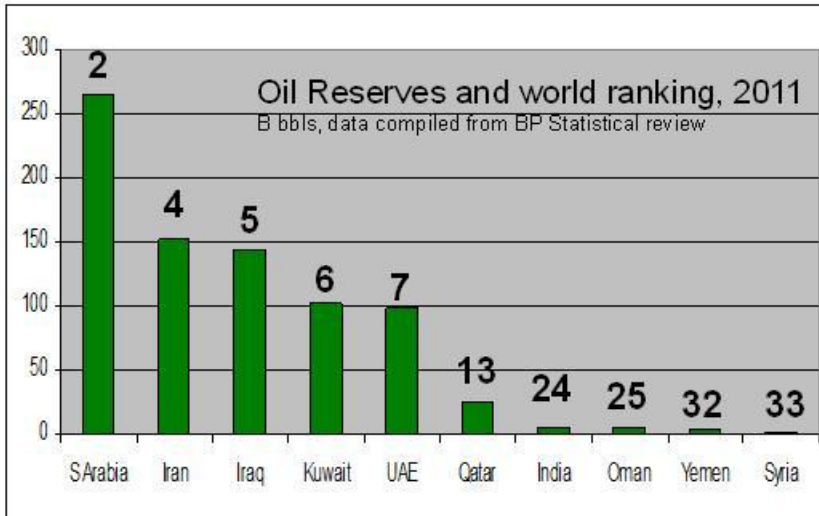
Middle East: Location of Major Resources

Main Petroliferous Basins



Middle East & South Asia

Main Resource Holders and Producers



Middle East & South Asia

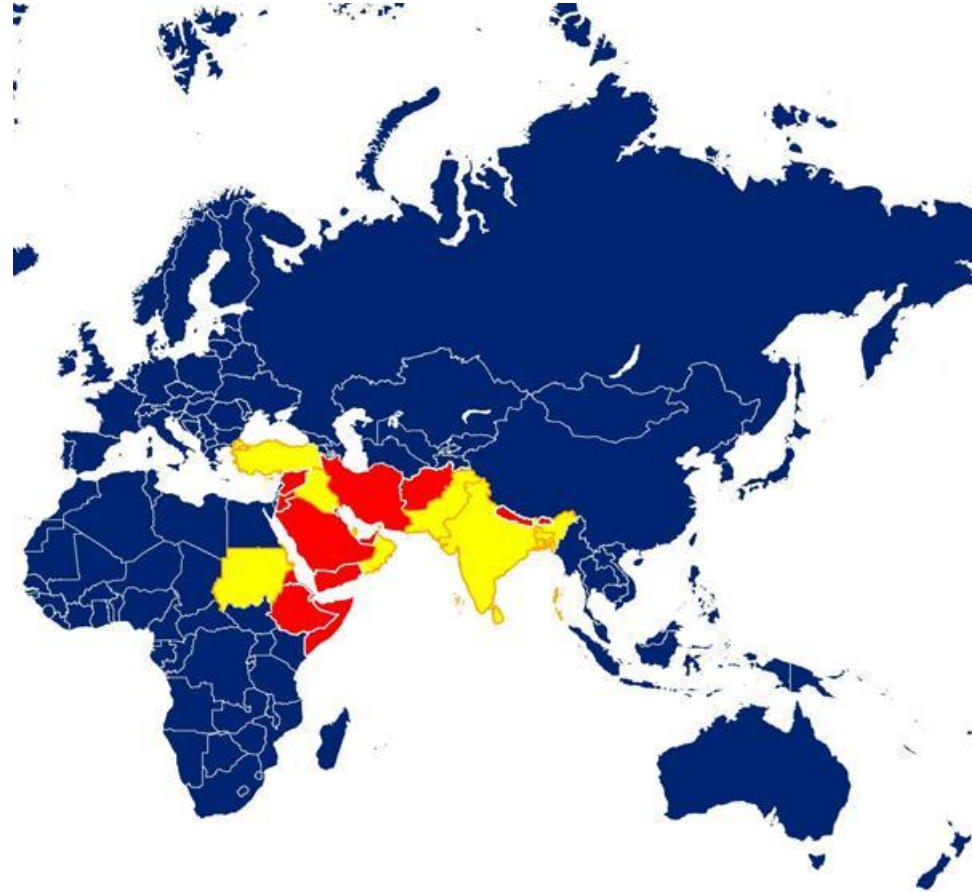
NV Forward Strategy

- Repsol Strategy:
 - ✓ Repsol company strategy: OECD countries short-term; Major Resource Holders (MRH) longer term.
- Description:
 - ✓ In the Region, only Israel and Turkey are OECD members.
 - ✓ But there are many MRH countries: (Saudi Arabia, Iran, Iraq, Qatar, UAE).
 - ✓ And India (oil / gas) Pakistan (gas) hold significant reserves.
- Middle East has restricted access and tough conditions where the Government take is amongst the highest in the World:
 - ✓ Saudi Arabia: Has nationalisation policy. Also, Repsol participated in deep pre Khuff gas exploration in Block C between 2004 – 2011 as a partner with eni and Saudi Aramco without success. Block relinquished 2011
 - ✓ Syria: Civil war
 - ✓ Yemen: Unrest
 - ✓ Kuwait: Tough contracts
 - ✓ UAE: Existing contracts.
 - ✓ Iran: Sanctions
 - ✓ Federal Iraq: Repsol currently opted for participation in Kurdistan PSC's
- Therefore, current focus on countries with remaining exploration potential and reasonable contractual regimes (PSC's / T&R Contracts) with access through Rounds of Licensing and / or farm-in opportunities. These include: Iraqi Kurdistan, Oman, Turkey, Qatar, India, Pakistan, Bangladesh, Sri Lanka.
- Watching brief on other countries awaiting improvement in security and / or political environment or an improvement in the contractual terms.
- Iran, where Repsol had a significant exploration portfolio is subject to both US and EU sanctions.
- Repsol exited Persian LNG and exploration in 2010.

Middle East & South Asia

Future Focus

- **Kurdistan:** Best chance for entering new blocks. Consolidation phase likely with exit of small players. Farm-outs and direct negotiation with MNR
- **Turkey:** Farm-out opportunities currently being reviewed. Exploration acreage available. Major energy deficit in a country that has expanding economy and population. Attractive investment environment and politically stable. Shale gas and oil opportunities
- **Qatar:** Bid rounds and farm –outs mainly for pre Khuff exploration. Government contract take is high
- **Oman:** Politically stable. Regular licensing rounds and farm-outs but very mature. Currently evaluating 5 blocks in the 2013 Round of Licensing.
- **North Sudan:** Rounds and farm outs available. Evaluating political situation and currently studying offshore blocks.
- **India subcontinent:** Farm-In opportunities available and opportunities have been reviewed. Likely Indian NELP bid round in 2013. Would need local Partner to proceed. Also bid rounds Bangladesh and Sri Lanka 2013
- **Others:** Bid rounds announced in Yemen and Somalia in 2013 but current security situation precludes participation



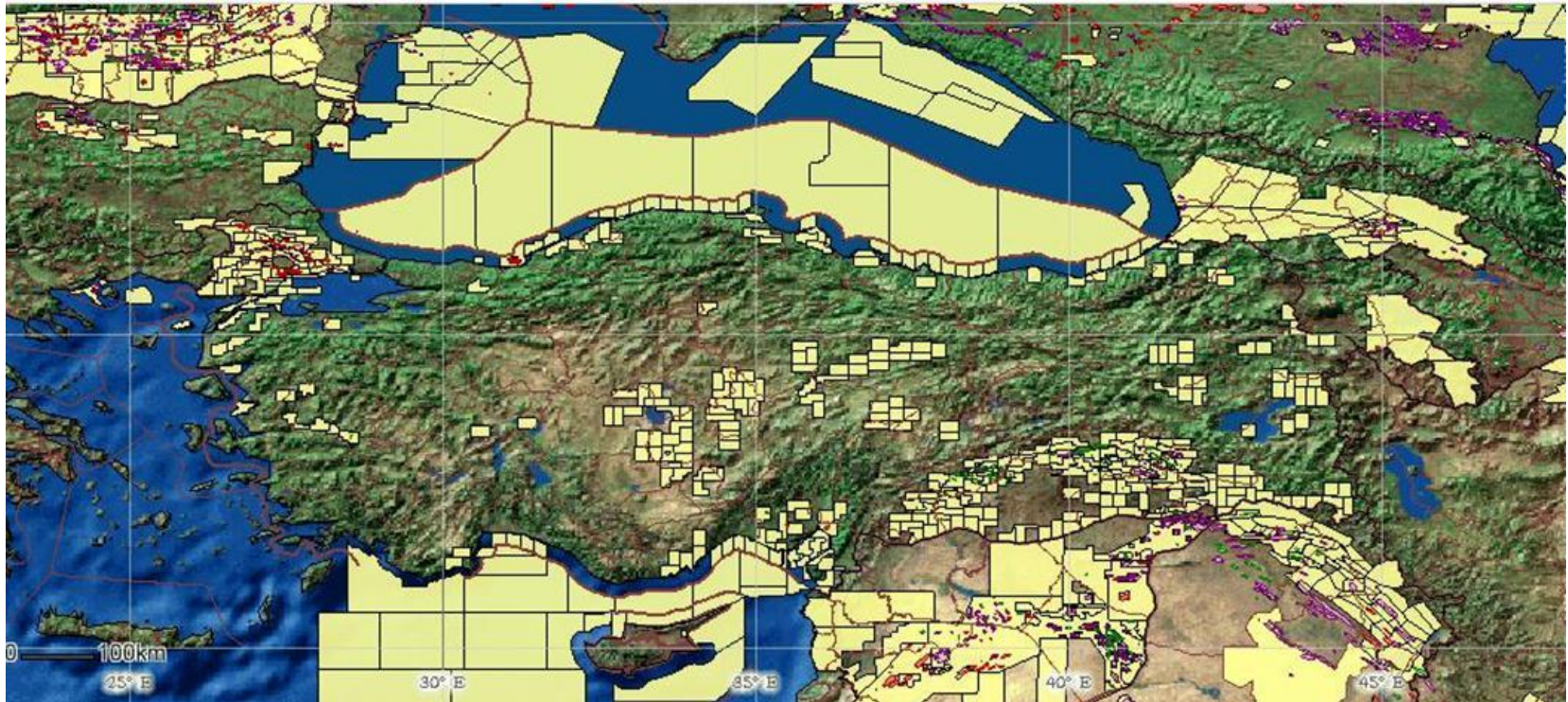
Turkey

Contracts, Blocks and Fields

Main Issue: Negligible reserves

But:

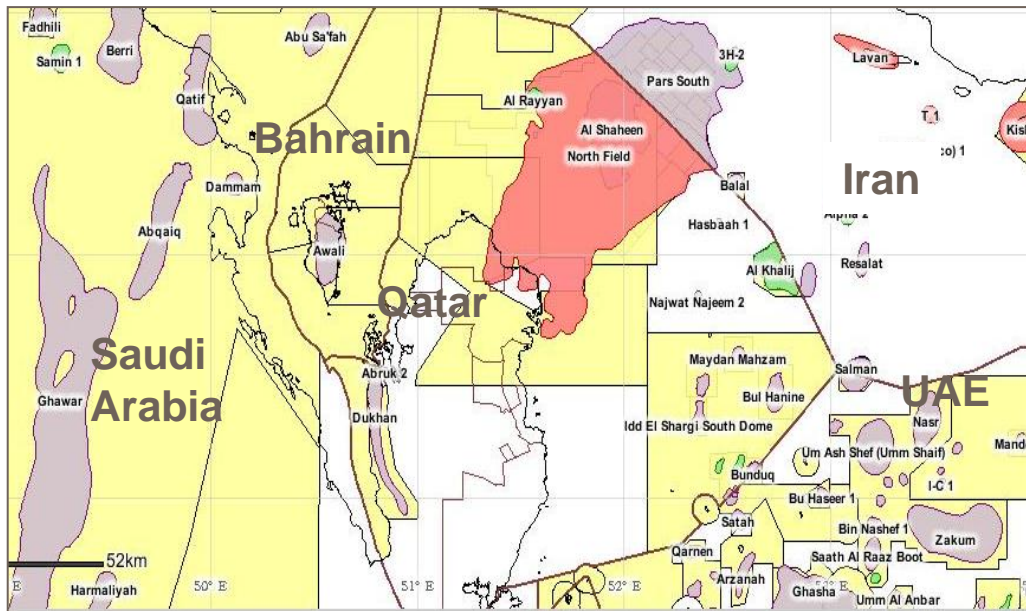
- Good domestic gas prices
- Rapid economic growth
- Exploration potential in Black Sea
- Possible shale gas and oil potential: Opportunities currently being evaluated in the Turkey Foreland



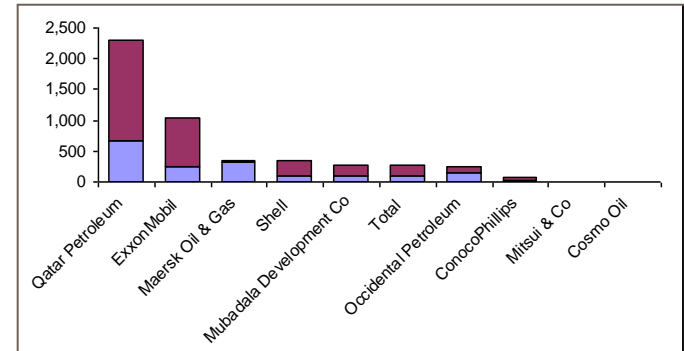
Qatar and Bahrain Contracts, Blocks and Fields

Qatar main Issues

- Licensing Rounds available. Last was for pre Khuff exploration that Repsol unsuccessfully explored in Saudi Arabia
- Farm-in opportunities evaluated in the recent past
- Moratorium on North Field
- Stable political and business environment

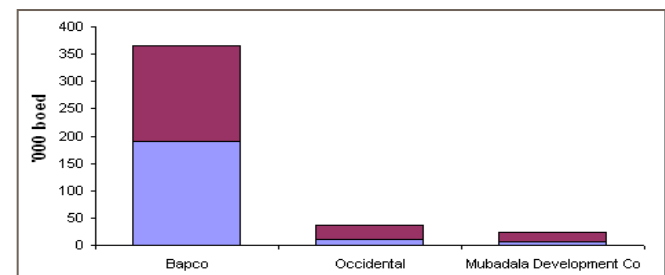


Boepd



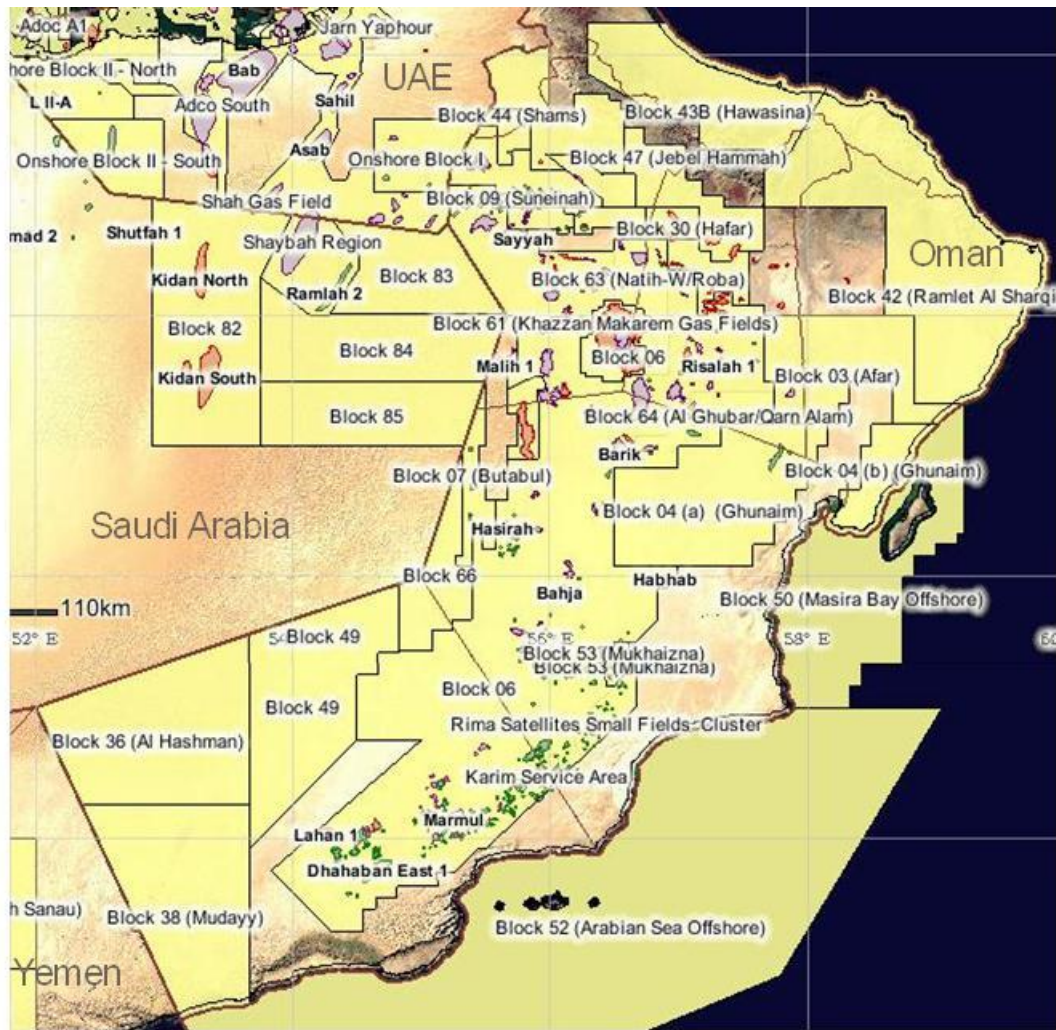
Bahrain Main issues:

- One producing field, Awali that has been in decline until 2009
- Redeveloped by Tatweer (Bapco, Oxy, Mubadala)
- Limited deep gas potential beyond existing developments
- Some social unrest
- Limited remaining exploration opportunities



Oman

Contracts Blocks and Fields



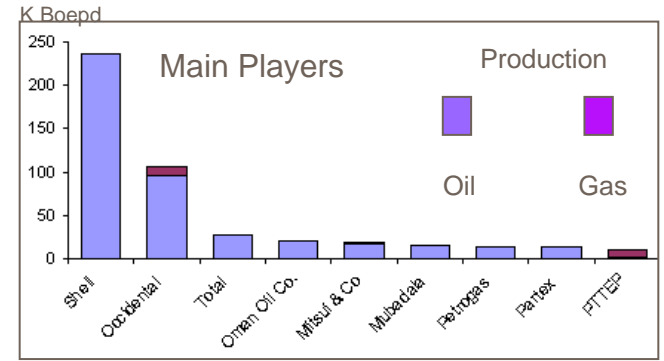
- Oman is the largest non-OPEC producer in the Middle East
- Repsol explored here in the 80's.
- Repsol held 50% in block 47 with RAK Petroleum but was relinquished Oct 2012.
- Repsol has small indirect interest in Qalhat LNG through shareholding in Gas Natural

Main Issues:

- Very mature exploration
- Shell Partnership holds the most prospective block 6
- Mostly heavy oil and gas opportunities remain

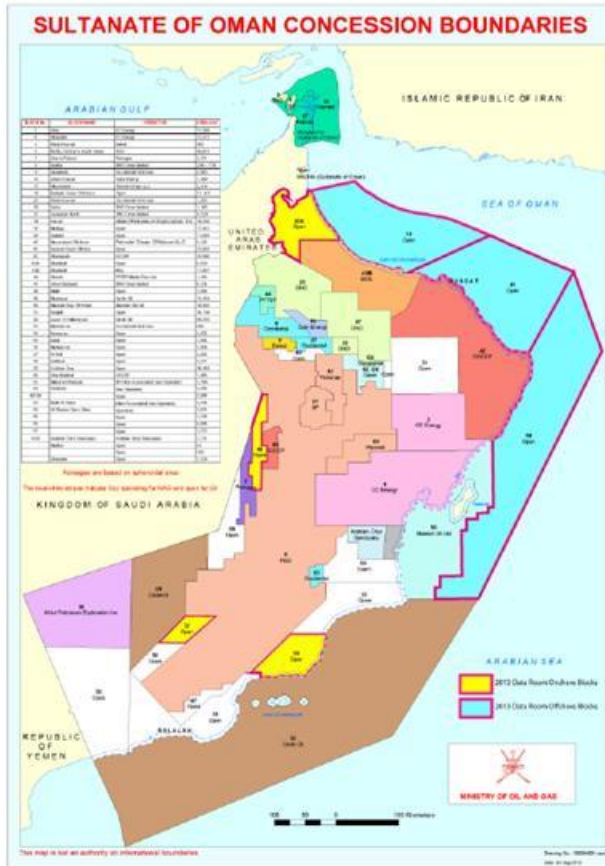
But:



- Regular Licensing Rounds
- Farm –in opportunities exist
- Good working environment
- Currently importing gas to satisfy deficit



OMAN

2013 Bid Round

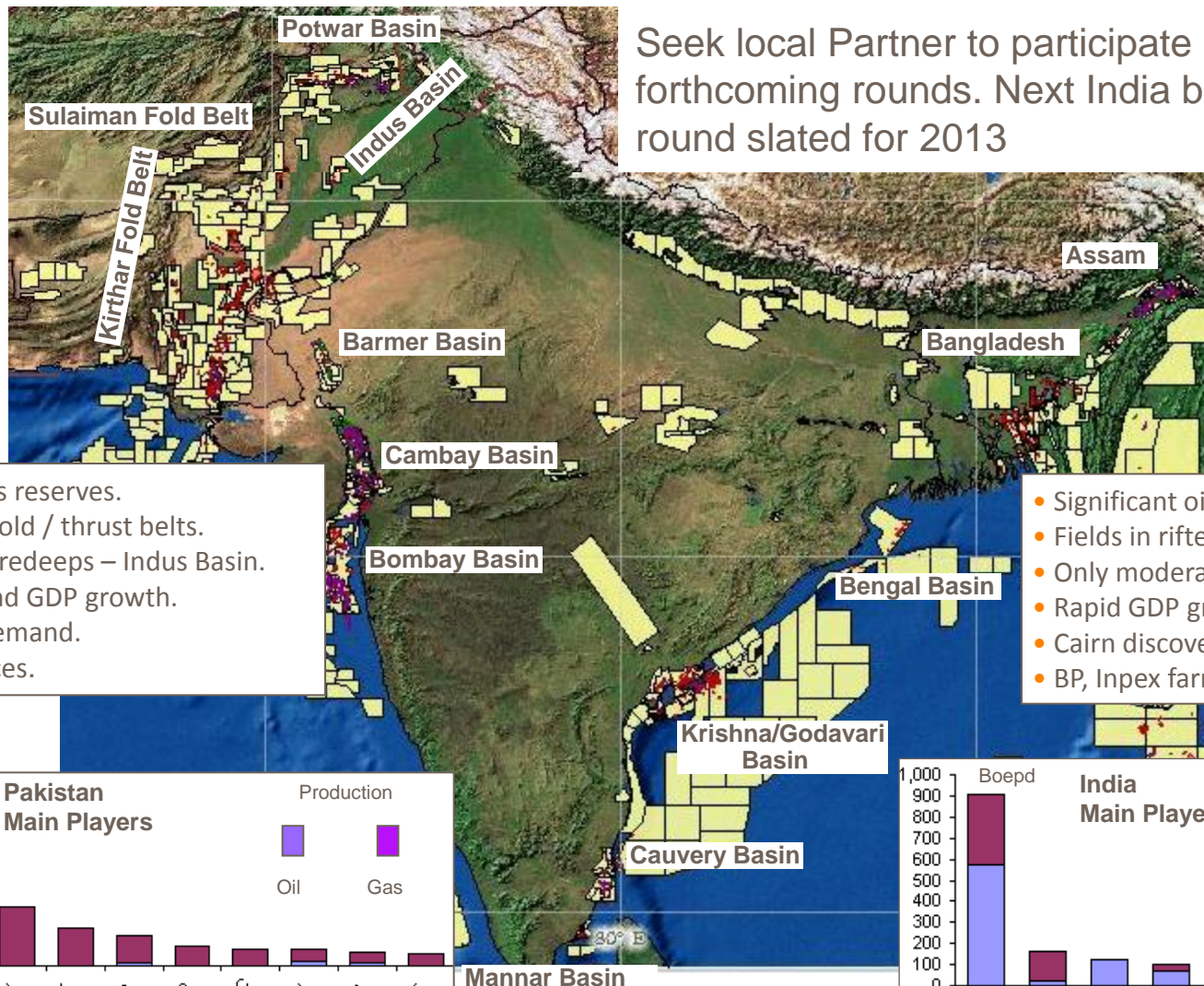


-  Onshore blocks
-  Offshore blocks

- Negotiating a JBA with a Partner who has a presence in Oman
- Offshore blocks 18, 41 and 59 high graded
- Onshore block 56 and 48 (for non conventionals high graded)
- Bid Round closing date: April 30th, 2013

India & Pakistan

Contract blocks and fields



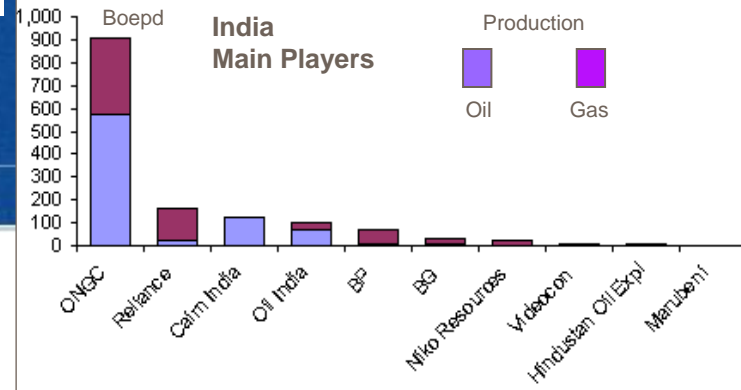
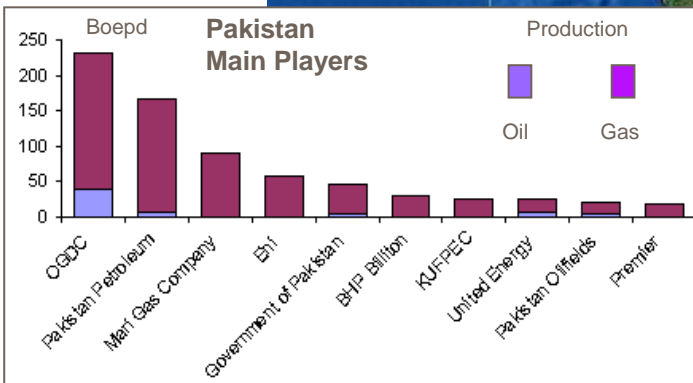
Seek local Partner to participate in forthcoming rounds. Next India bid round slated for 2013

Pakistan

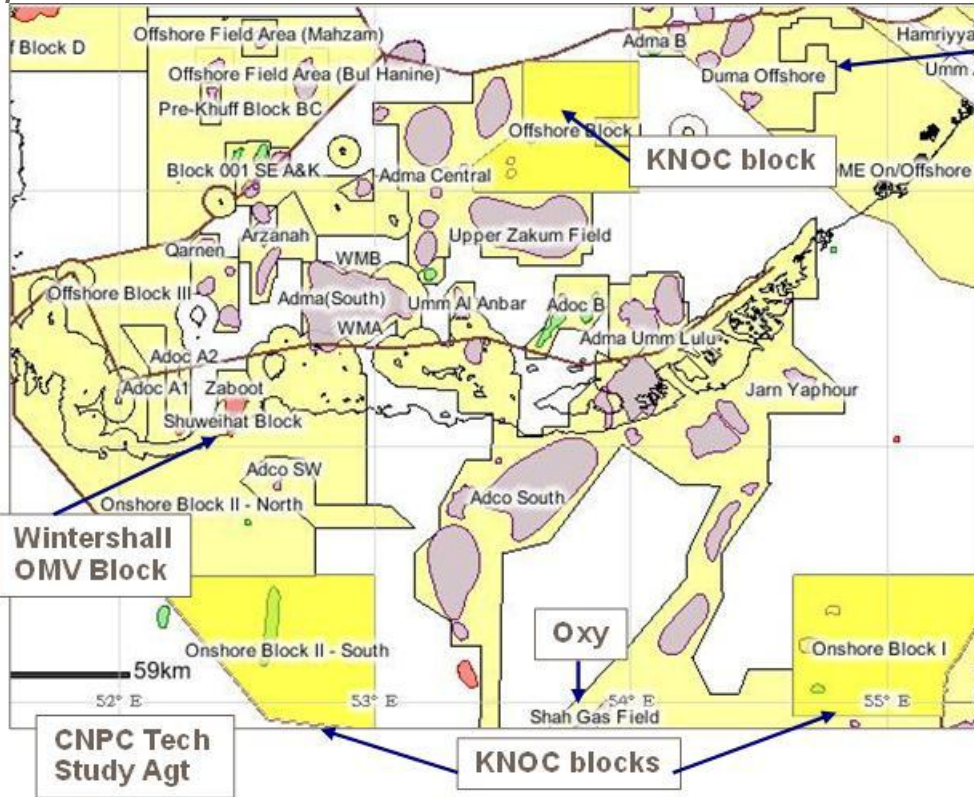
India

- Significant gas reserves.
- Gas fields in fold / thrust belts.
- Associated foredeeps – Indus Basin.
- Population and GDP growth.
- Driving gas demand.
- Good gas prices.

- Significant oil and gas reserves.
- Fields in rifted continental margins
- Only moderate IOC involvement.
- Rapid GDP growth.
- Cairn discoveries in Barmer Basin.
- BP, Inpex farms to Krishna Godavari.



Watching Brief: UAE Abu Dhabi Contracts, Blocks and Fields



Dubai offshore – formerly Repsol

- Oil discovered 1954 at Bab field.
- UAE British Protectorate at the time.
- Onshore concession dates from 1939.
- Offshore dates from 1953.
- Access restricted by these long-term agreements

Participants In Abu Dhabi

ADCO	BP	9,5	Zakum 2	ADNOC	88
	Exxon	9,5		Japan Gp	12
	Shell	9,5	Zakum 3	ADNOC	60
	Total	9,5		Japan Gp	40
	Partex	2	Zakum 4	ADNOC	60
ADMA	BP	14,7		Exxon	28
	Total	13,3		Japan Gp	12
	Inpex	12	Shah	ADNOC	60
Adoc	Cosmo	63		Oxy	40
	Nippon	31,5	Offsh Block 1	ADNOC	60
Bunduq	BP	33,3		KNOC	40
	Total	33,3	Shuweihat	OMV	50
	Japan Gp	33,3		Wtershall	50
Zakum	ADNOC	50	Shapetco	Sharjah Pet Co.	100
	Total	50			

- The agreements expire in 2014, and 2017 respectively.
 - Competitors for renewal short-listed by ADNOC.
 - BP rumoured excluded.
- New participants linked to other investments or initiatives in UAE:
- KNOC - Korean investments in nuclear power.
 - Oxy - Existing partner in Dolphin which imports gas to UAE from Qatar.
 - Wintershall – parent co. BASF providing sour gas technology.

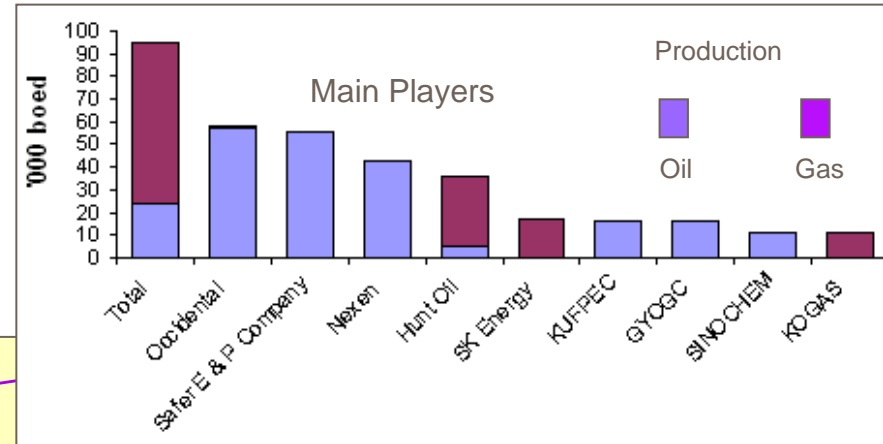
Yemen

Contract blocks and fields

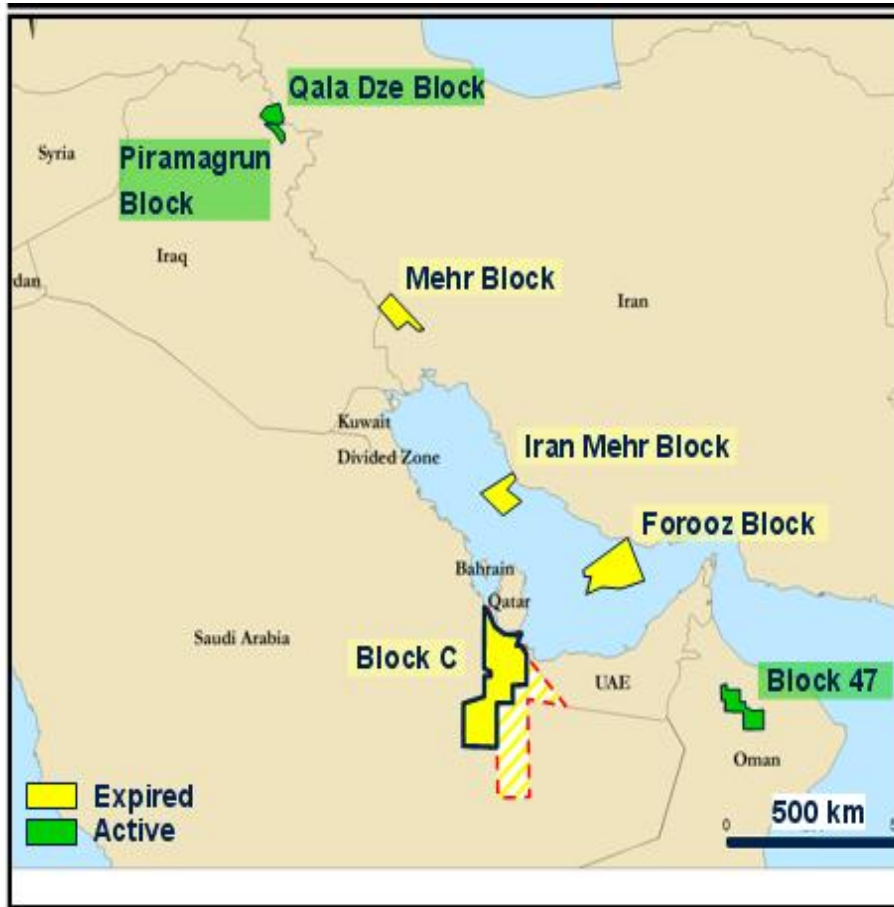


Main Issues:

- Civil unrest, political turmoil.
- Force Majeure declared by many companies.
- Limited production on-going.
- Production in decline pre-unrest.
- Perceived limited additional prospectivity.



Summary of Recent Repsol Middle East Exploration Block History



Expired ESC Iran Mehr, offshore PG, Iran. Repsol 100%

- Saravan-1 was P&A in Nov. 2007

Relinquished ESC Forooz, offshore PG, Iran. Repsol 100%

- Two unsuccessful wells, could not drill Farur B prospect

Expired Mehr Block, onshore Zagros, Iran. Net R 33%

- Band e Karkheh 2 discovery (BEK 2)
- Remuneration still pending

Block C, onshore, Saudi Arabia. Net R 30%

- 3 wells drilled
- Ubaylah-2 P&A. July 2007 TD @ 16565 ft
- Wutayd-1 P&A after testing in Sep. 2008
- Murayt-1 P&A. TD @ 16565 ft

Block Relinquished June 2011

In process of liquidating EniRepSa JV Company

Block 47, onshore, Oman Net R 50%

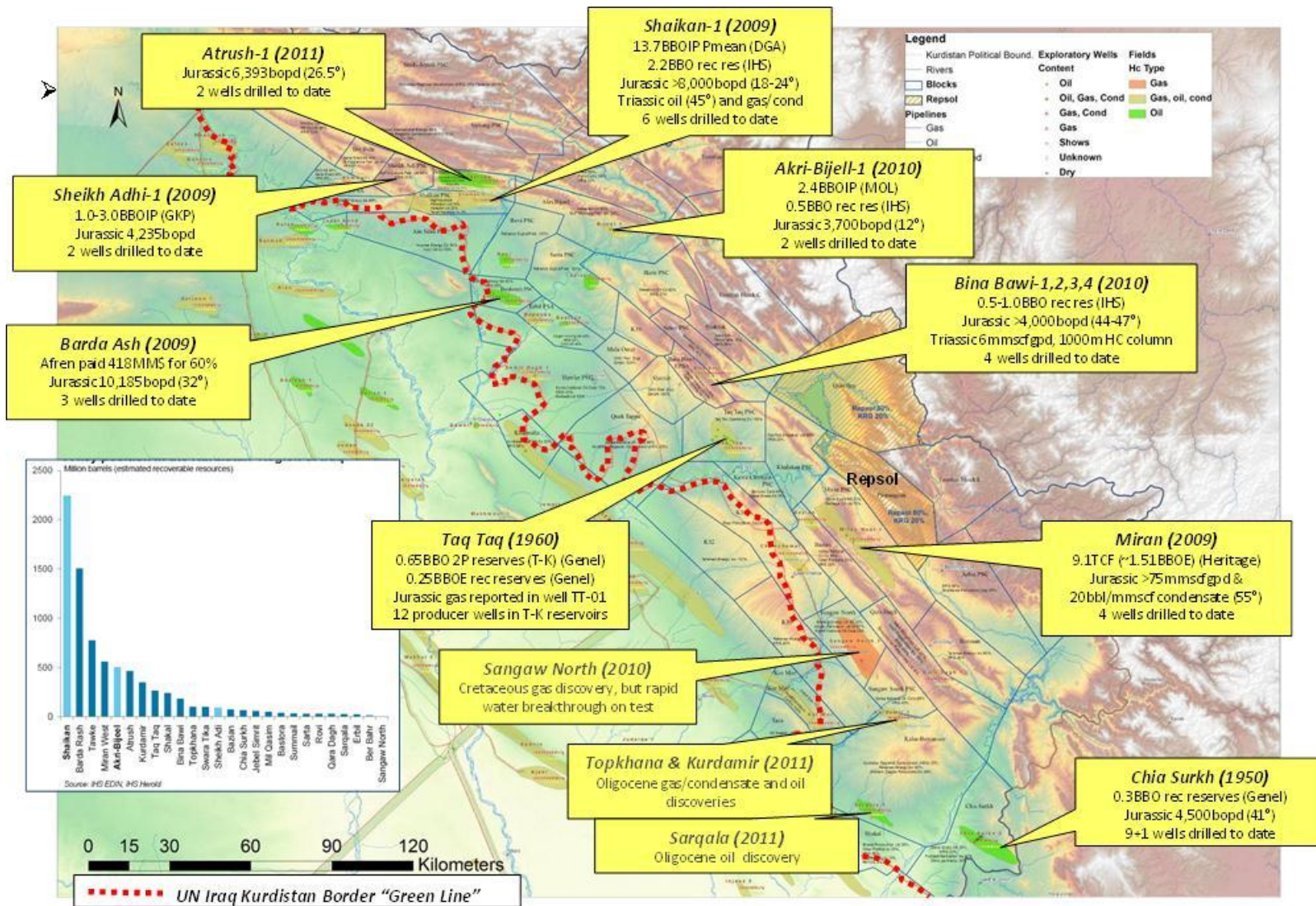
- Zad-2 drilled 2010 – 2011. 1 year extension from Oct 2011 for post well technical evaluation. Block relinquished October 11th, 2012

Blocks onshore Kurdistan.

- P.I. 100% (KRG 20% carried). First explo. Phase 3 years from July 26th, 2011

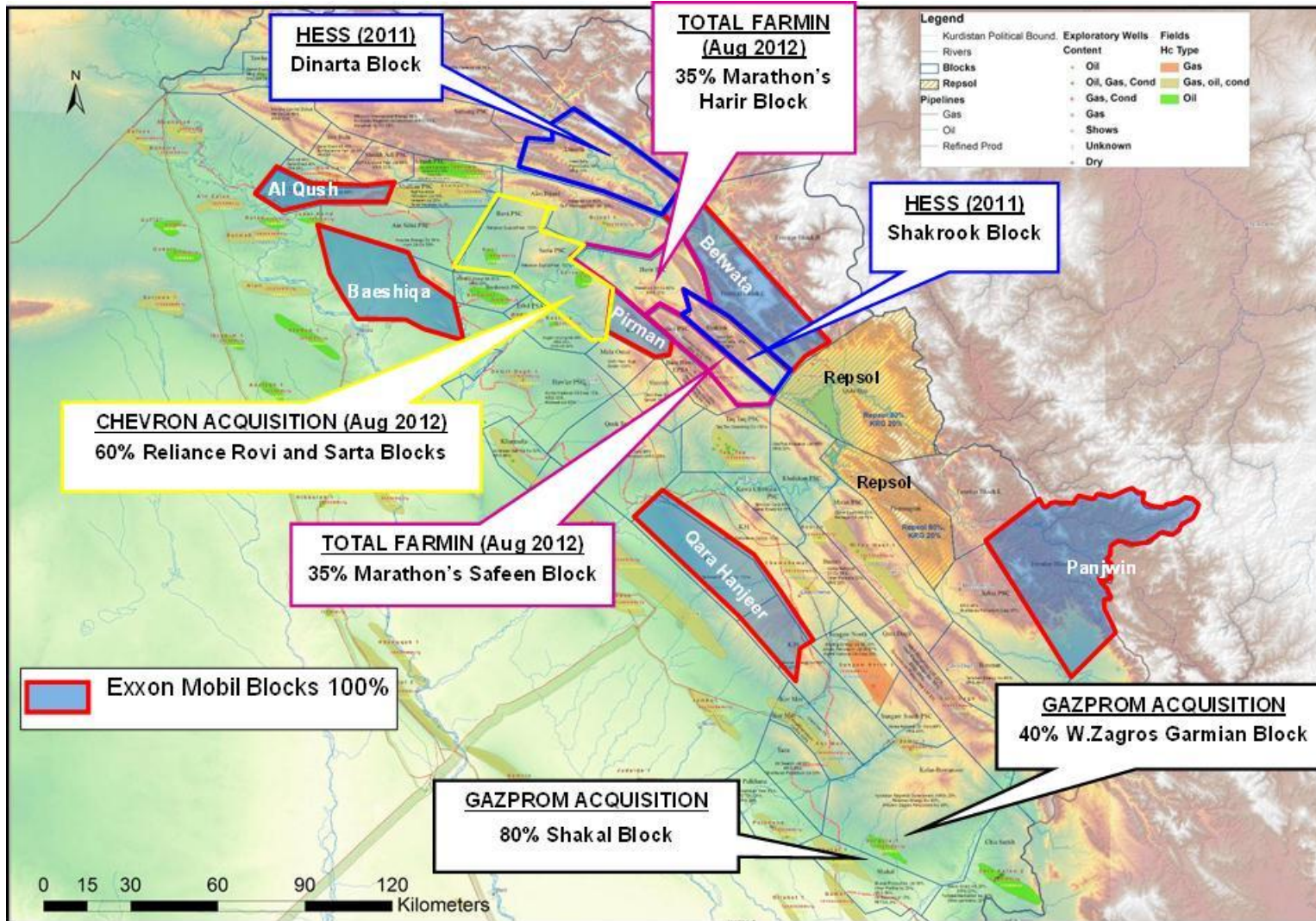
Discoveries in Kurdistan

Pre-Cretaceous Reservoirs

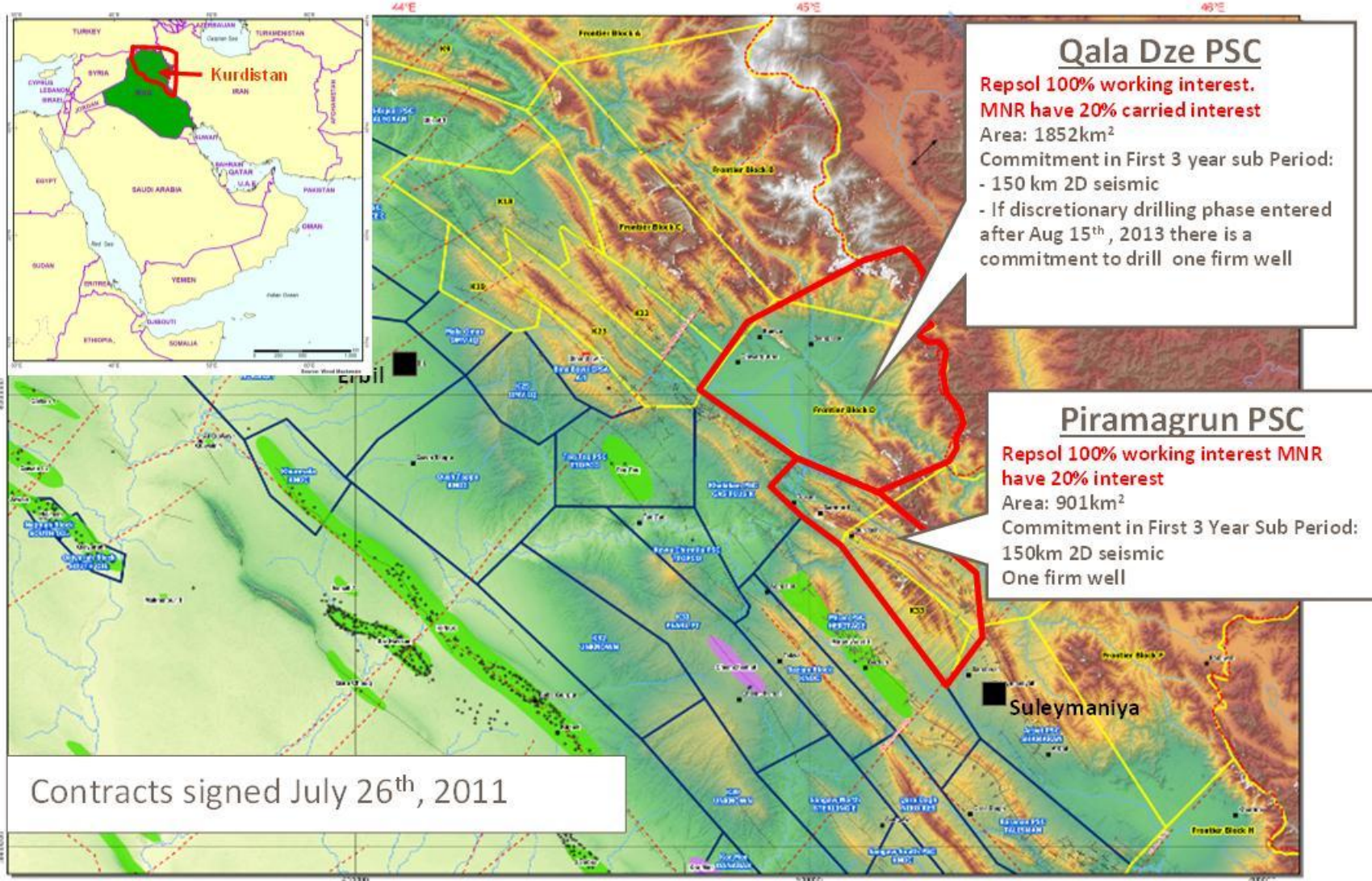


Kurdistan

Recent Block Acquisitions by Major Companies



Repsol Middle East Exploration Block History



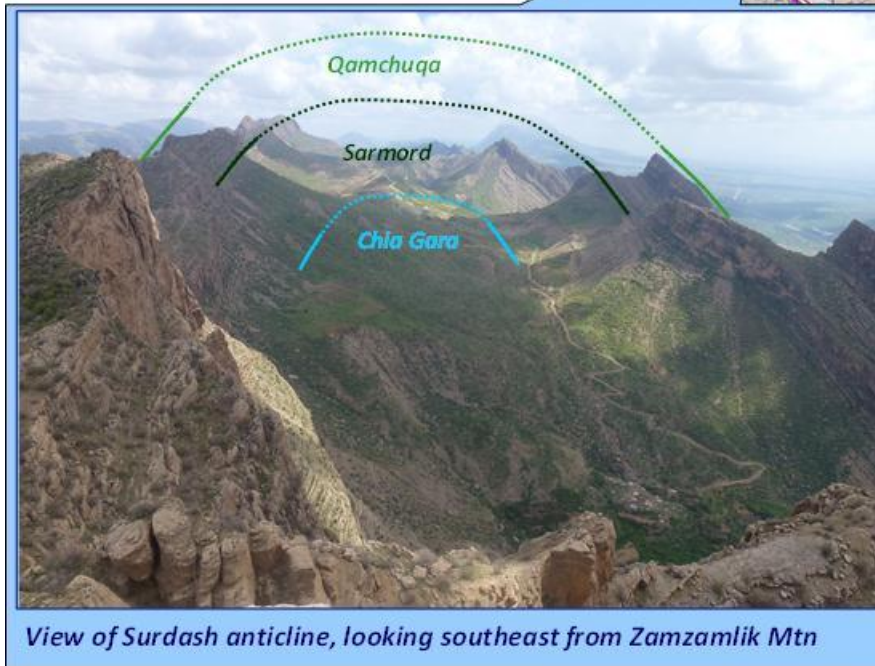
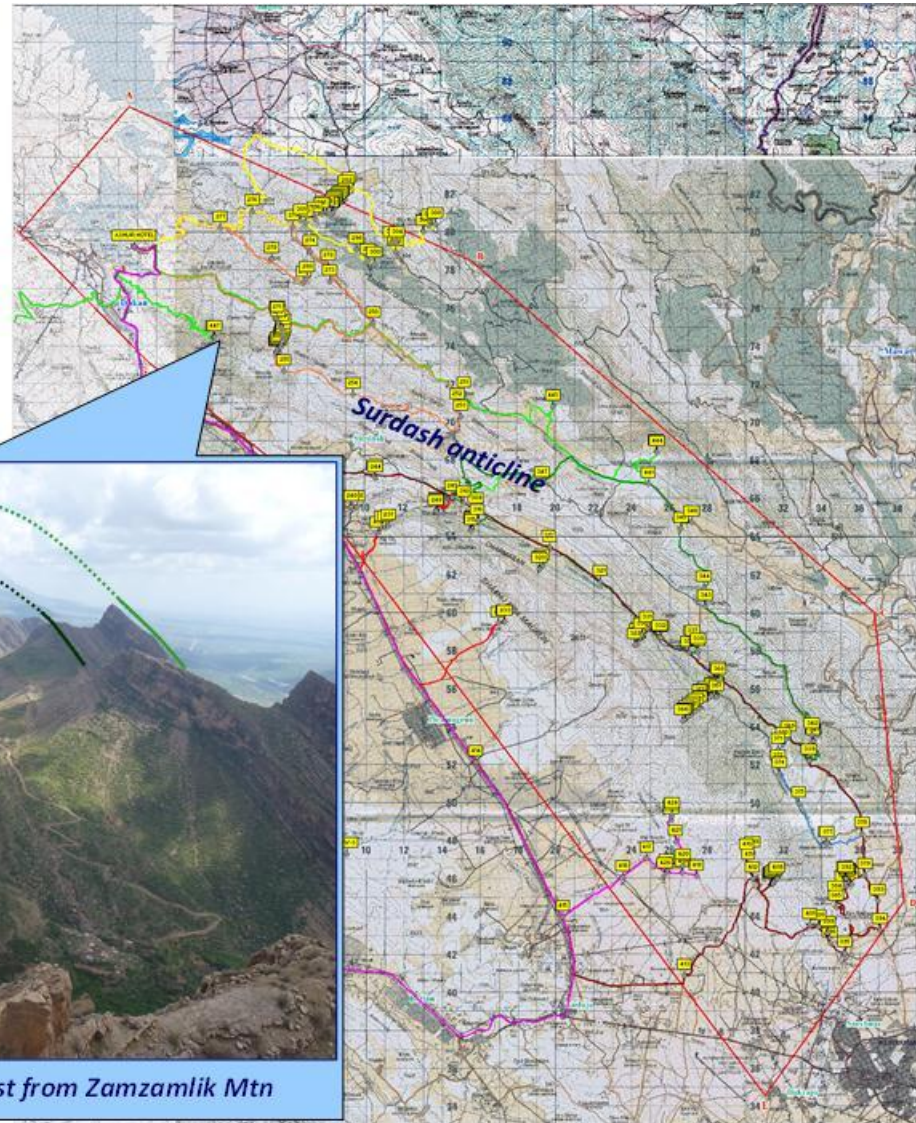
Piramagrun Block Surface Anticlines



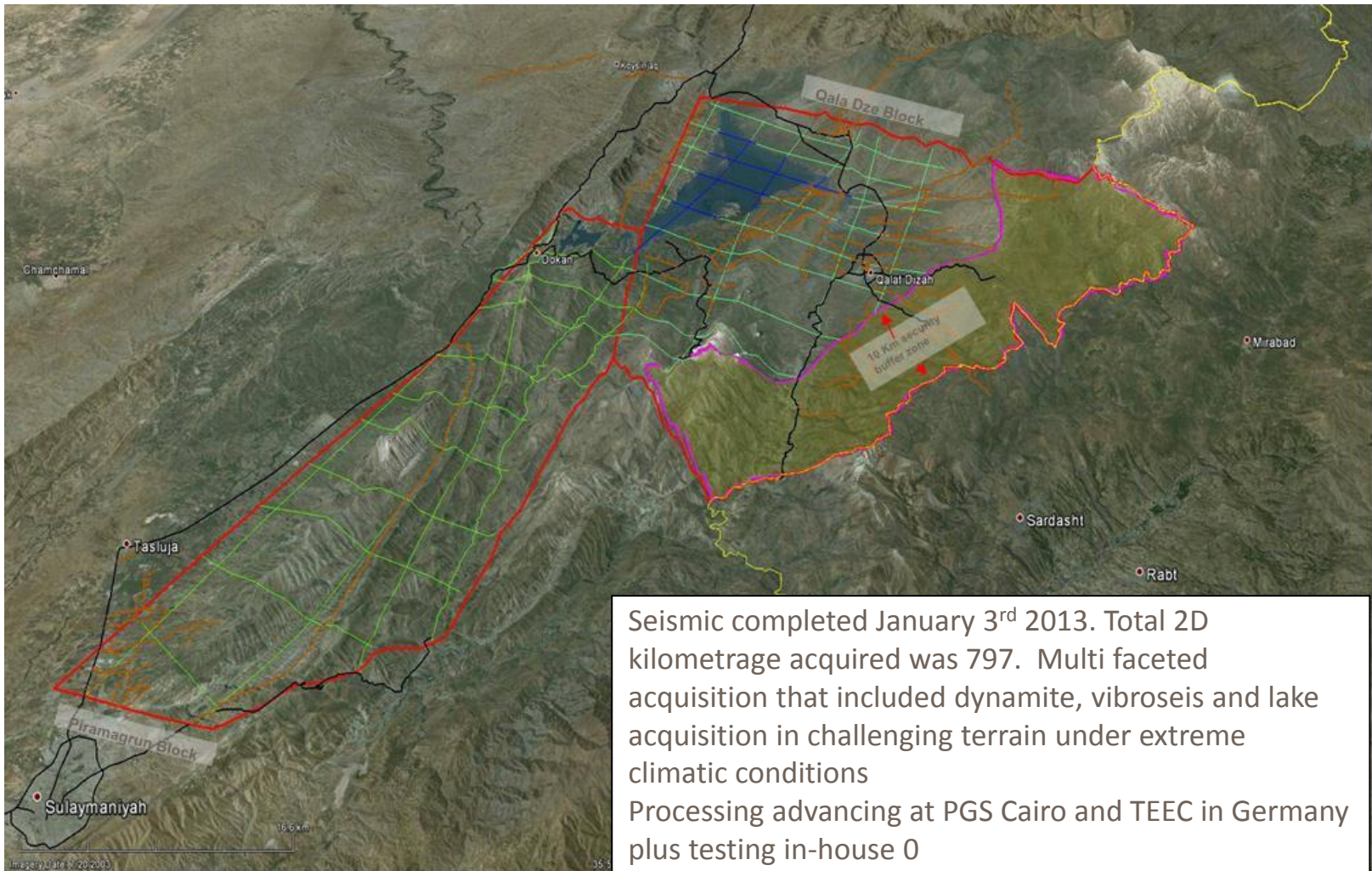
(view from northwest looking southeast)

Surdash Anticline

Structures in Pirmagrun Block have major areal closure and relief in a Basin that has seen some major recent success



Qala Dze and PIRAMAGRUM 2D Seismic Survey Programme



Gradiometric Survey

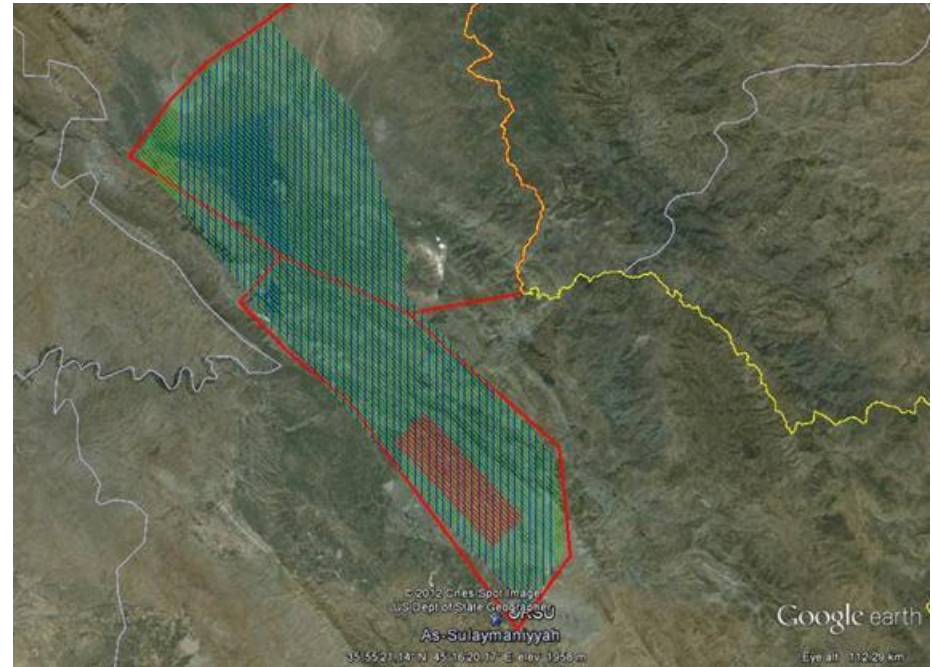


Gradiometric survey completed Dec. 24th 2012 with 5211 flight km of acquisition

This is a technically advanced method to acquire sub surface data in areas of complex geology. It will be used to support the interpretation of the seismic data

This is the first gradiometric survey in the Region and was successfully acquired by ArkEx

Processing will be performed by ArkEx in London



Area Name	Survey Line Spacing (m)	Survey Line Direction	Tie Line Spacing (m)	Tie Line Direction	Total Line km
Piramagrun & Qala Dze Blocks	500m and 250m infil	136.5 ⁰ (note 1) & 316.5 ⁰	1,000m	0 ⁰ & 180 ⁰	5,323

Summary and Conclusions



The Region remains challenging due to political change and sanctions. Security is an overriding issue in many of the countries and this will not be compromised.

Access to opportunities in the main resource holding countries is limited for various reasons, but the focus going forward will be:

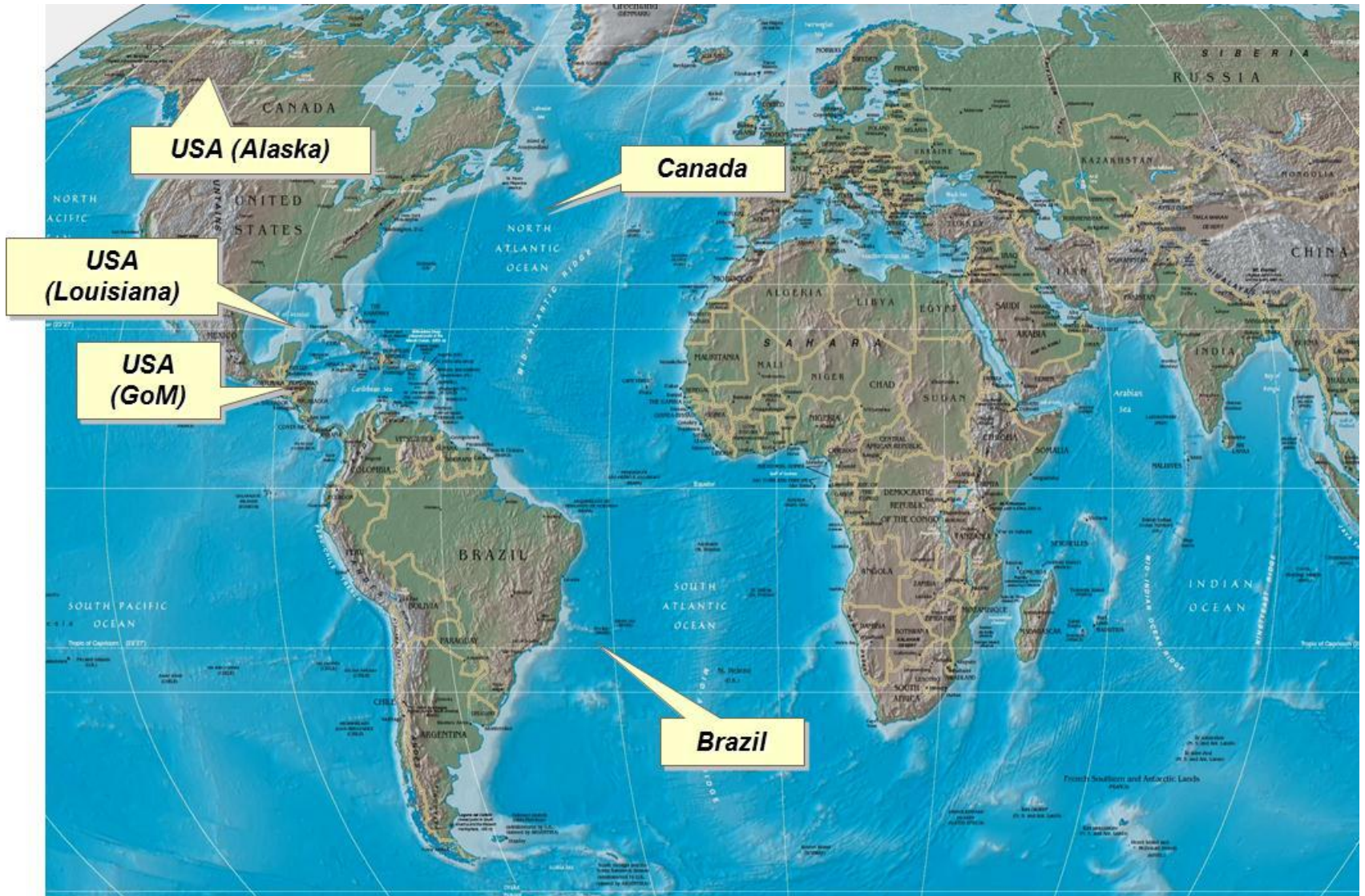
- On stable countries with PSC's and T&R Contracts that hold license rounds or where there is an opportunity for direct negotiations with Governments. Farm-in opportunities will be vigorously pursued in these countries
- Local partners or Companies with International operating experience will be sought by Repsol to form Joint bidding Groups in Round of Licensing.
- Good Company – Government relations are fostered
- Turkey is one of the only countries in the Region that is a member of the OECD and a special effort will be made to find an entry.
- Kurdistan is another area where a major effort will be made to consolidate our current acreage position.
- Regional technical studies are being performed to identify the most prospective basins and this effort will continue

North America & Brazil: Our Current Core

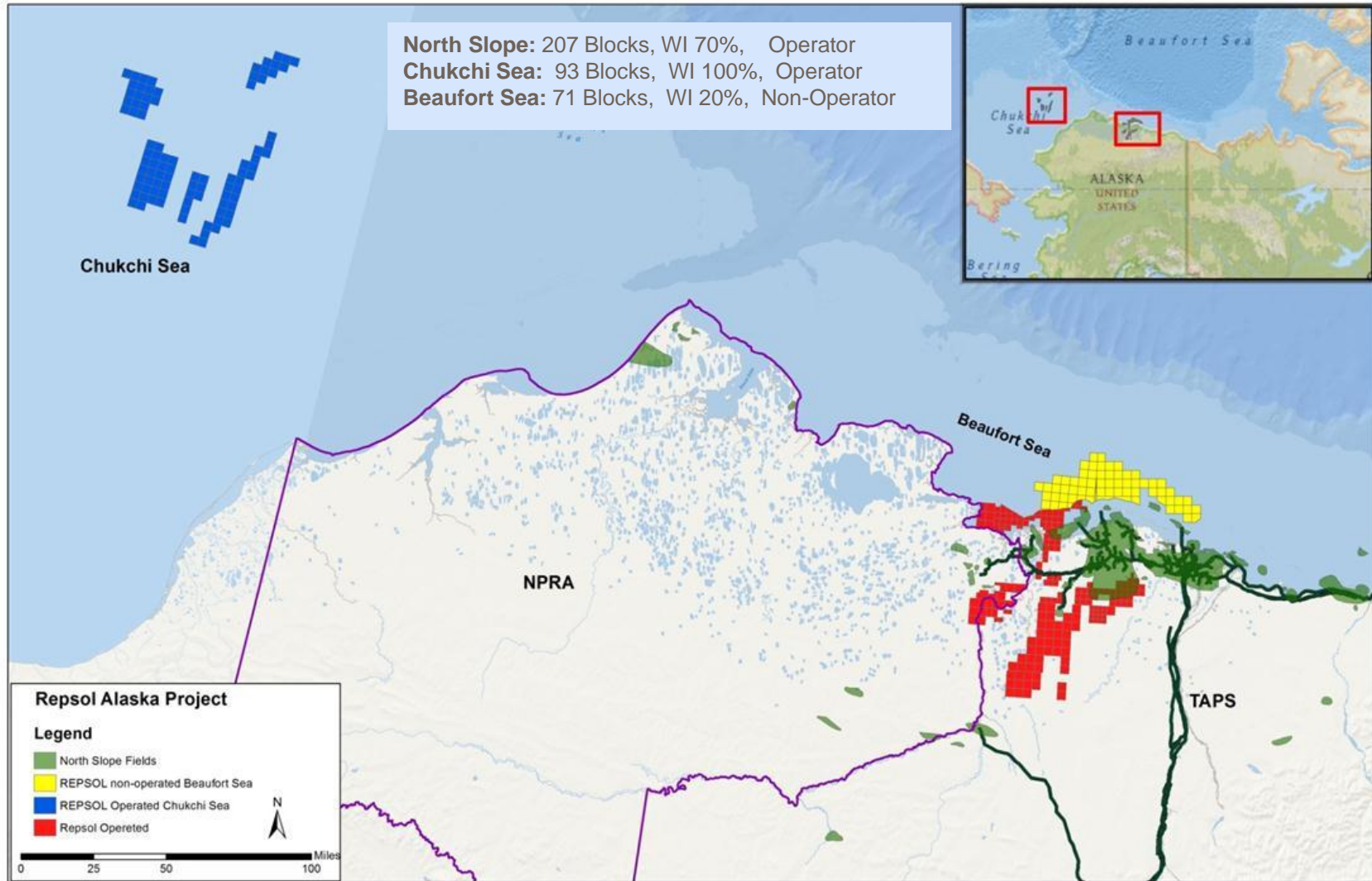


Repsol Exploration Day

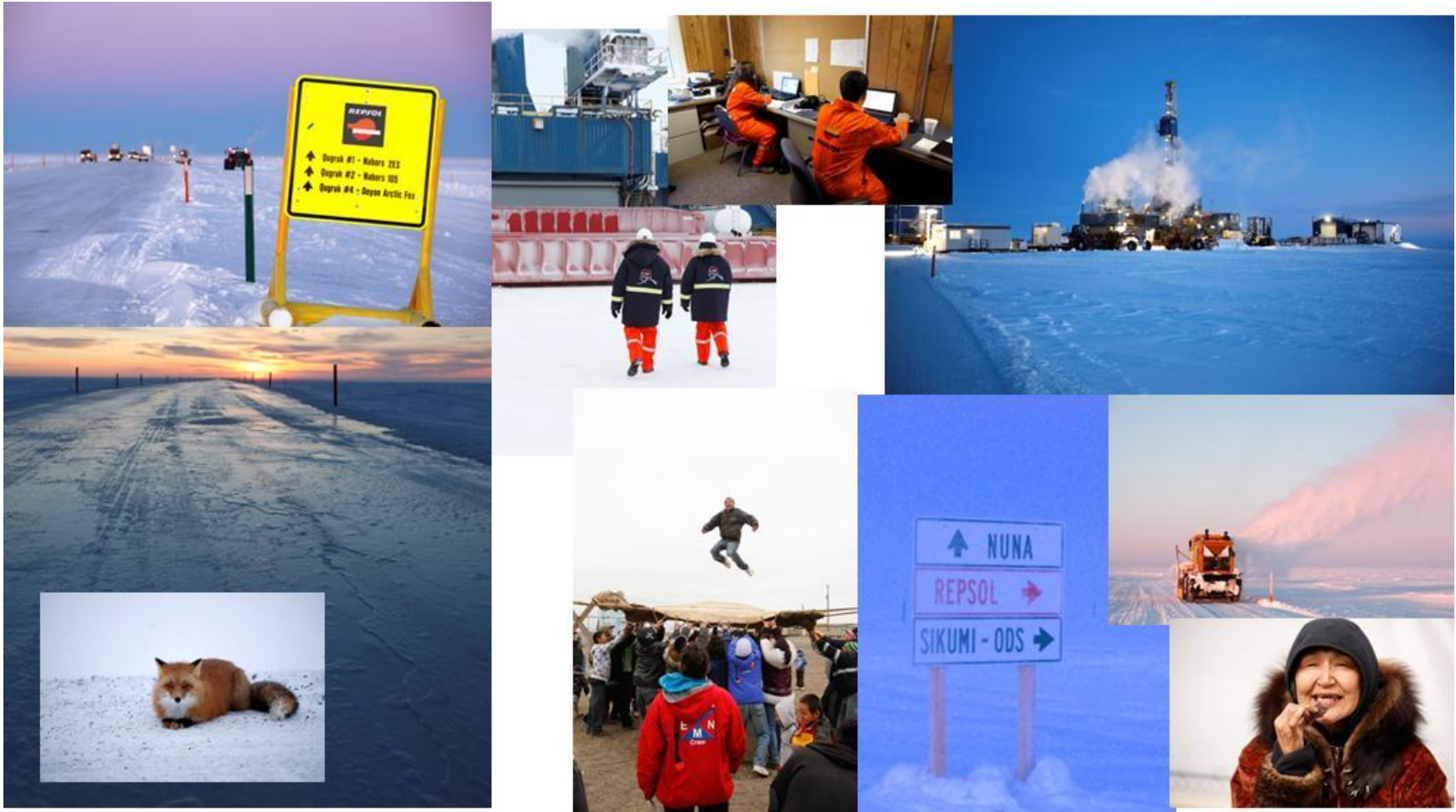
The Region



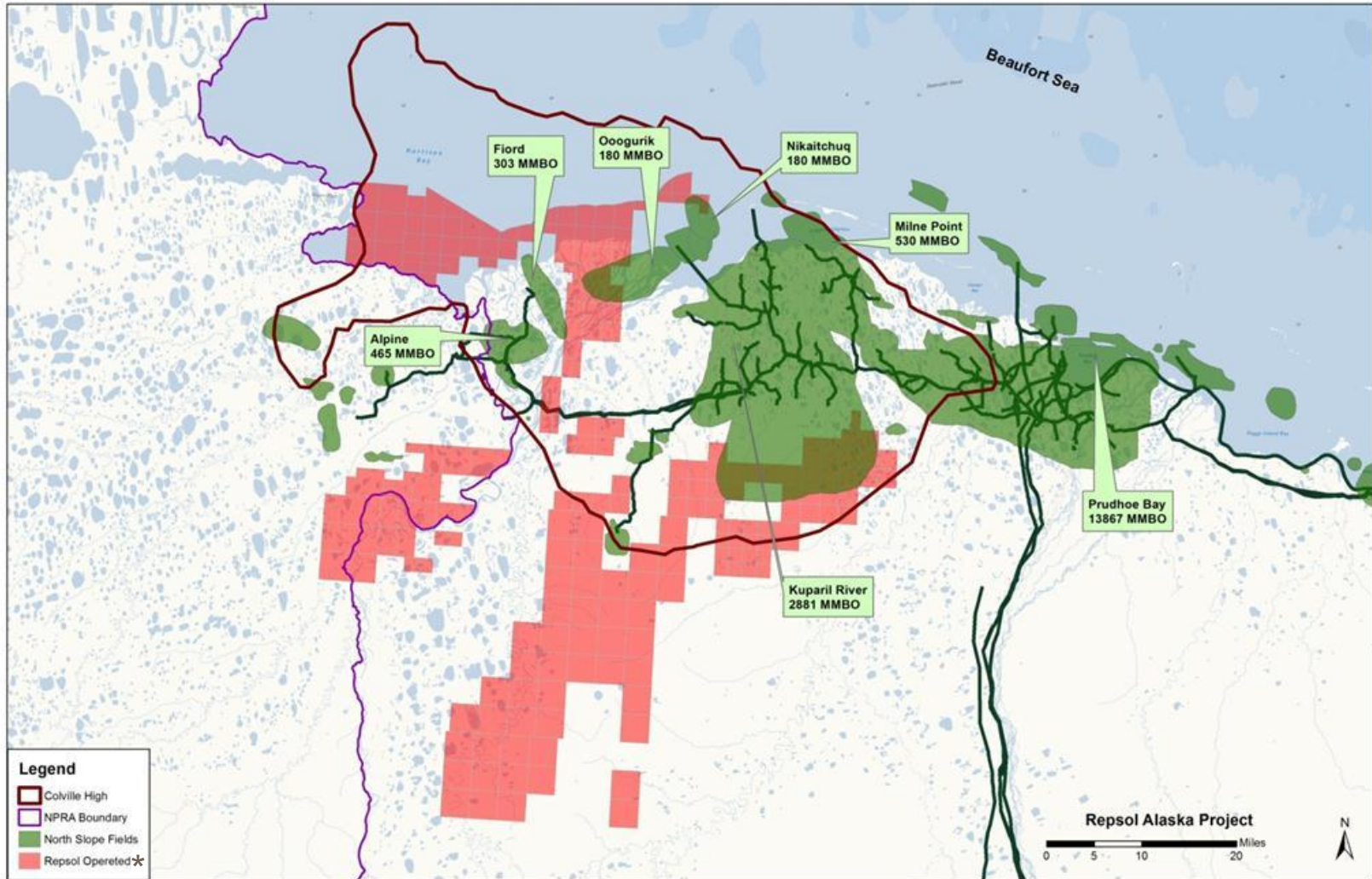
Repsol Alaska Portfolio



North Slope Activities



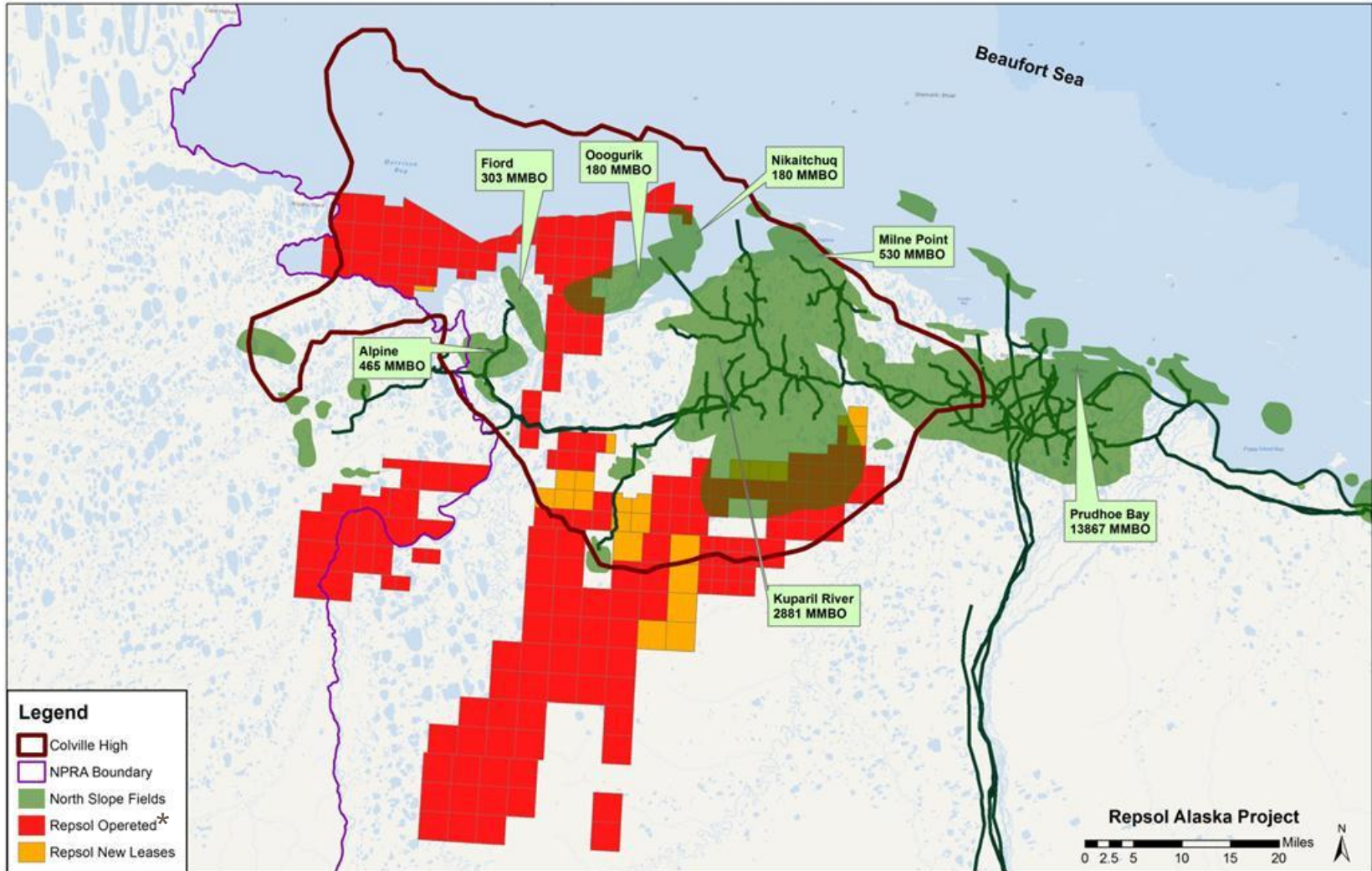
North Slope Acreage and Location Map



* Source Wood McKenzie

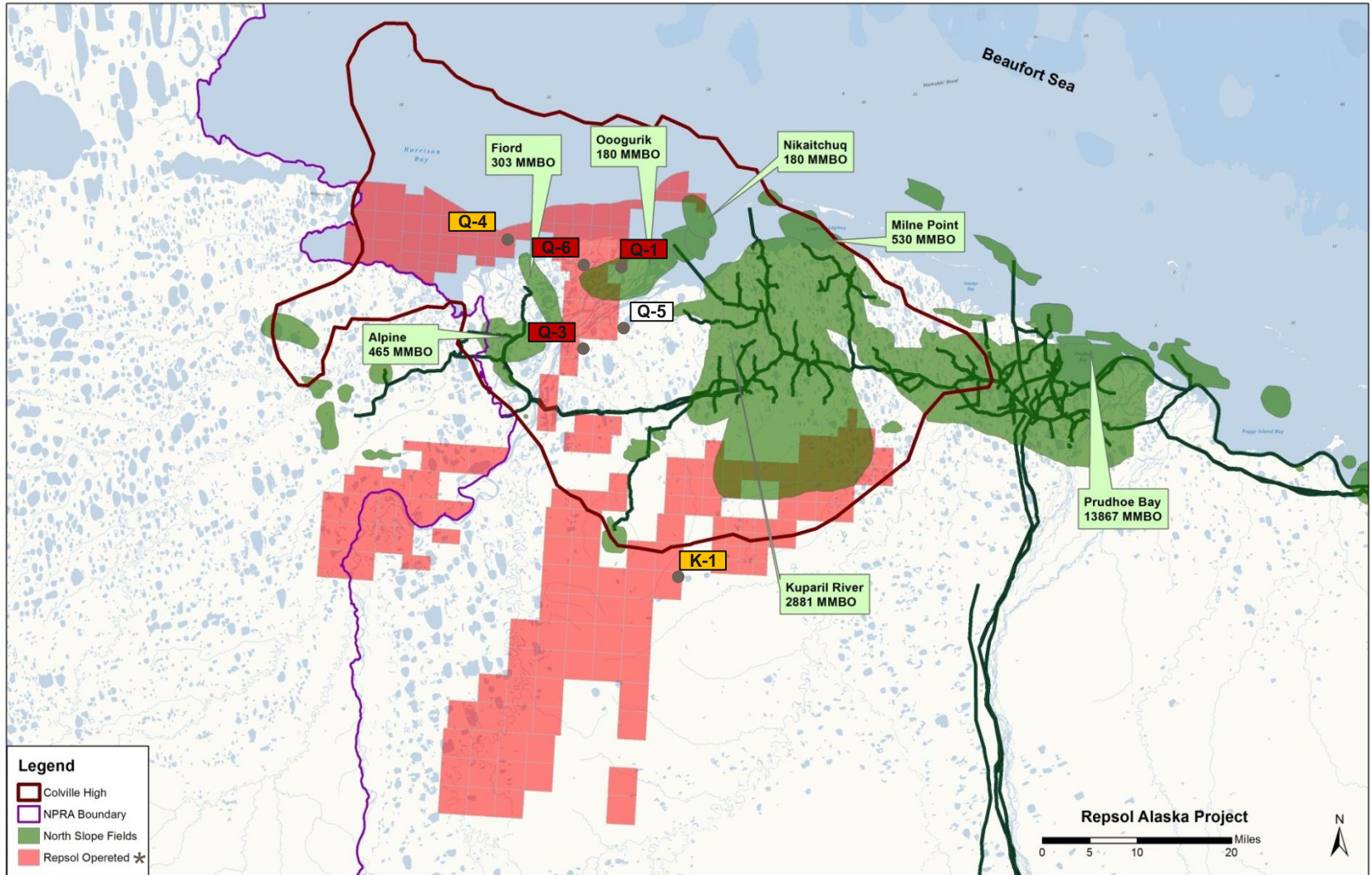
North Slope 2012 Lease Sale

Higher Bid Leases



* Source Wood McKenzie

North Slope Acreage and Location Map



* Source Wood McKenzie

Alaska North Slope 2013 Schedule



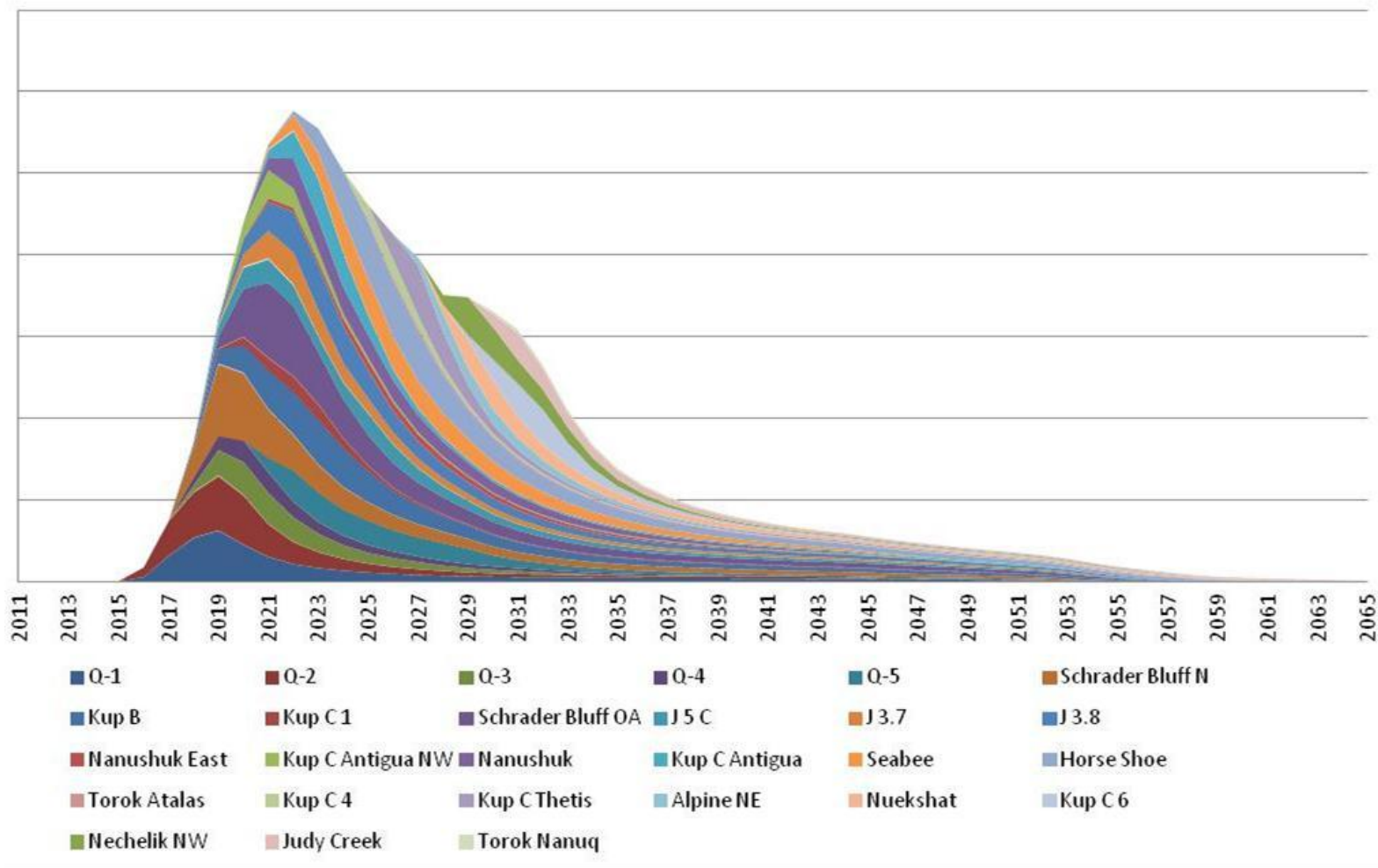
- 2013 activities: 3 wells campaign & 2 DST's
 - ✓ Qugruk-1 & Q-1 DST
 - ✓ Qugruk-6 & Q-6 DST
 - ✓ Qugruk-3

			Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sept	Oct	Nov	Dec
PO	Block	2013												
50%	Alaska N. Slope	Q-1 pista y plataforma de hielo	█											
50%	Alaska N. Slope	Q-1 perforación		█	█	█								
50%	Alaska N. Slope	Q-1 DST				█								
50%	Alaska N. Slope	Q-6 pista y plataforma de hielo	█											
50%	Alaska N. Slope	Q-6 perforación		█	█	█								
50%	Alaska N. Slope	Q-6 DST				█								
50%	Alaska N. Slope	Q-3 pista y plataforma de hielo	█	█										
50%	Alaska N. Slope	Q-3 perforación		█	█	█								

Risked Production profile with future potentials



Aggregated production profile



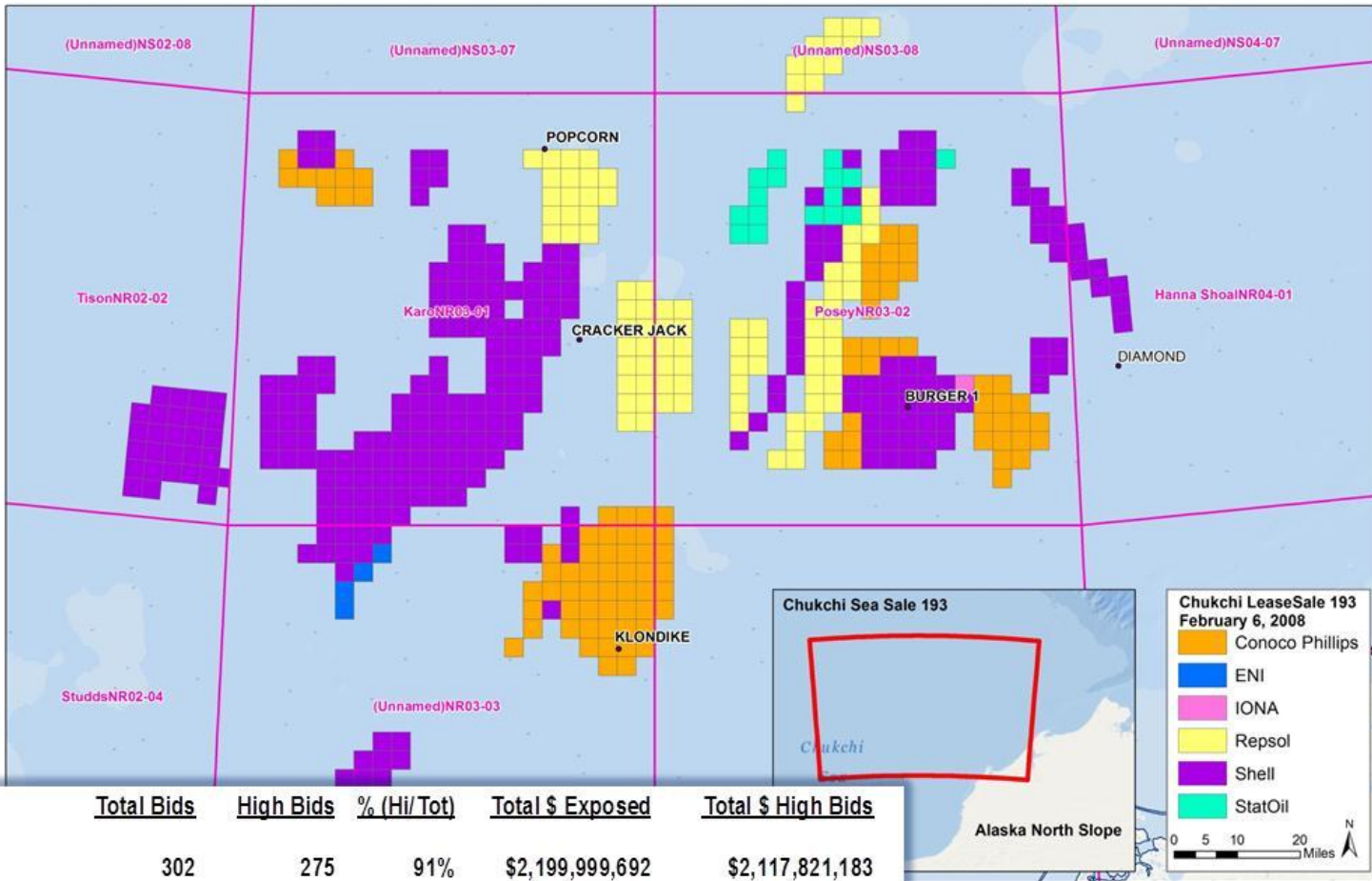
Repsol in Beaufort Sea



- **Beaufort Sea:** 71 Blocks, WI 20%
- Non-Operated (Acreage: \pm 355.000 Acres)

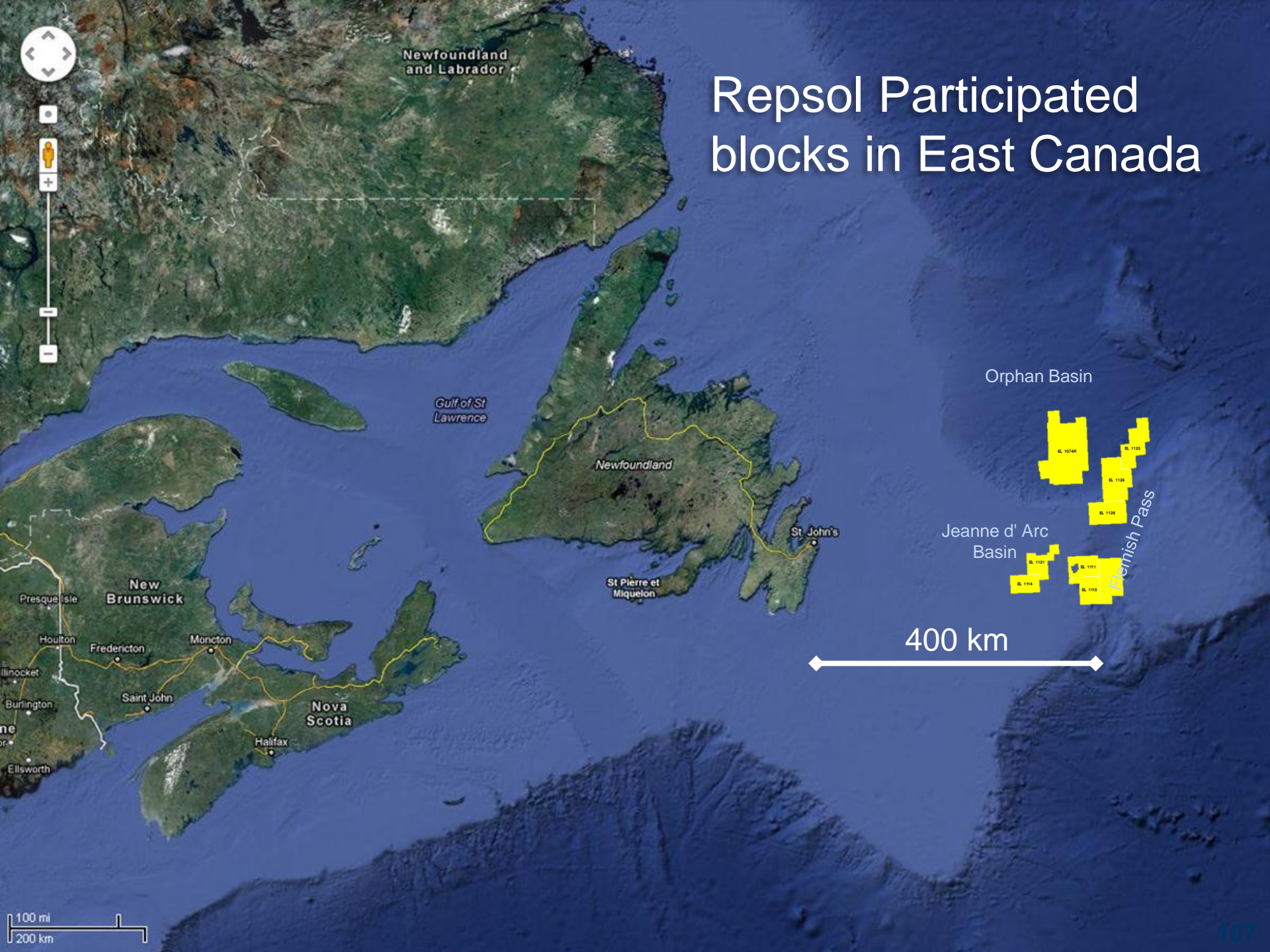


Repsol in Chukchi Sea



<u>Company</u>	<u>Total Bids</u>	<u>High Bids</u>	<u>% (Hi/Tot)</u>	<u>Total \$ Exposed</u>	<u>Total \$ High Bids</u>
Shell	302	275	91%	\$2,199,999,692	\$2,117,821,183
Conoco Phillips	145	98	68%	\$1,100,000,000	\$506,425,955
Repsol E&P	104	93	89%	\$15,614,973	\$14,449,363

Repsol Participated blocks in East Canada



Orphan Basin

Jeanne d'Arc Basin

Flemish Pass

400 km

Newfoundland and Labrador

Gulf of St Lawrence

Newfoundland

St John's

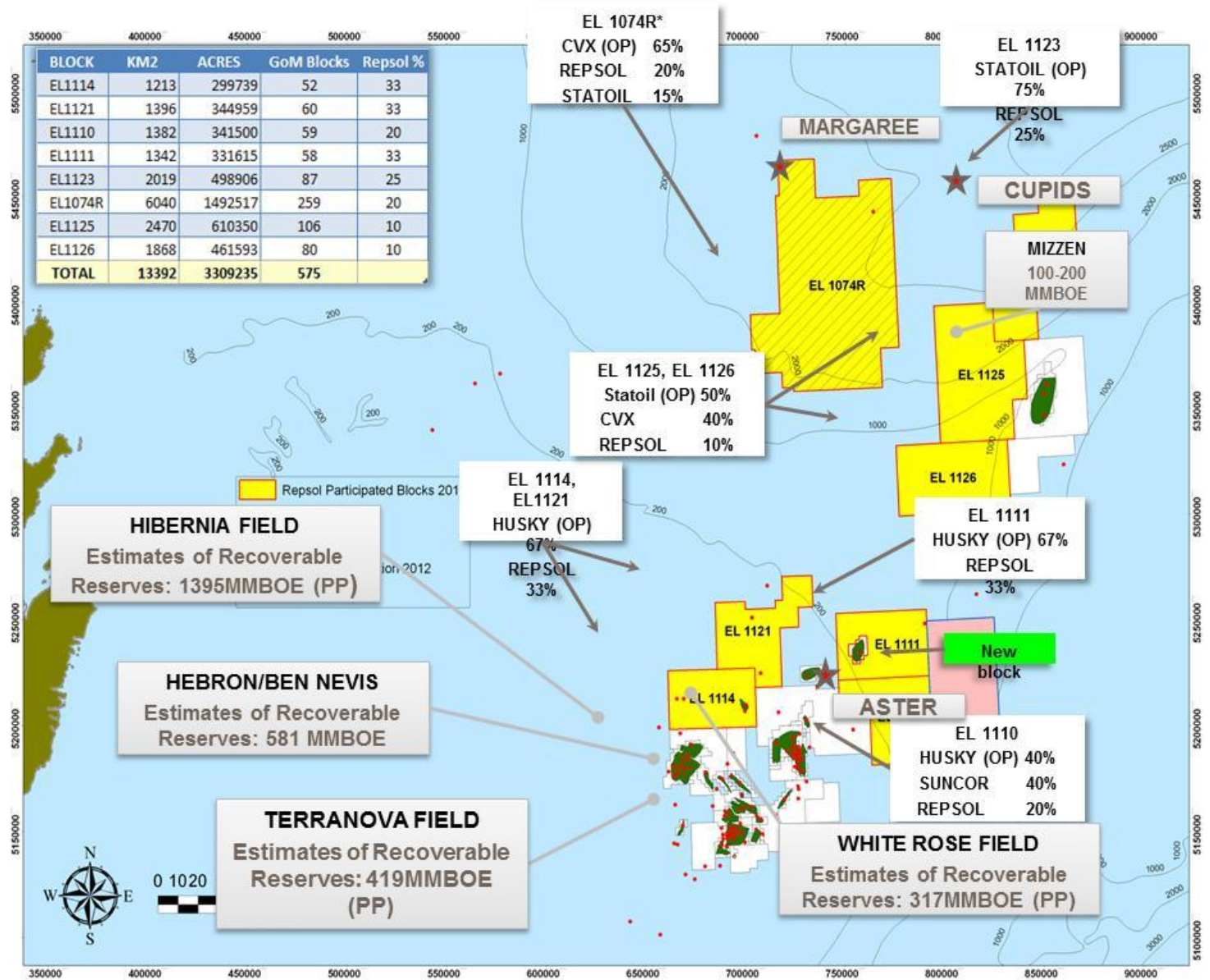
St Pierre et Miquelon

New Brunswick

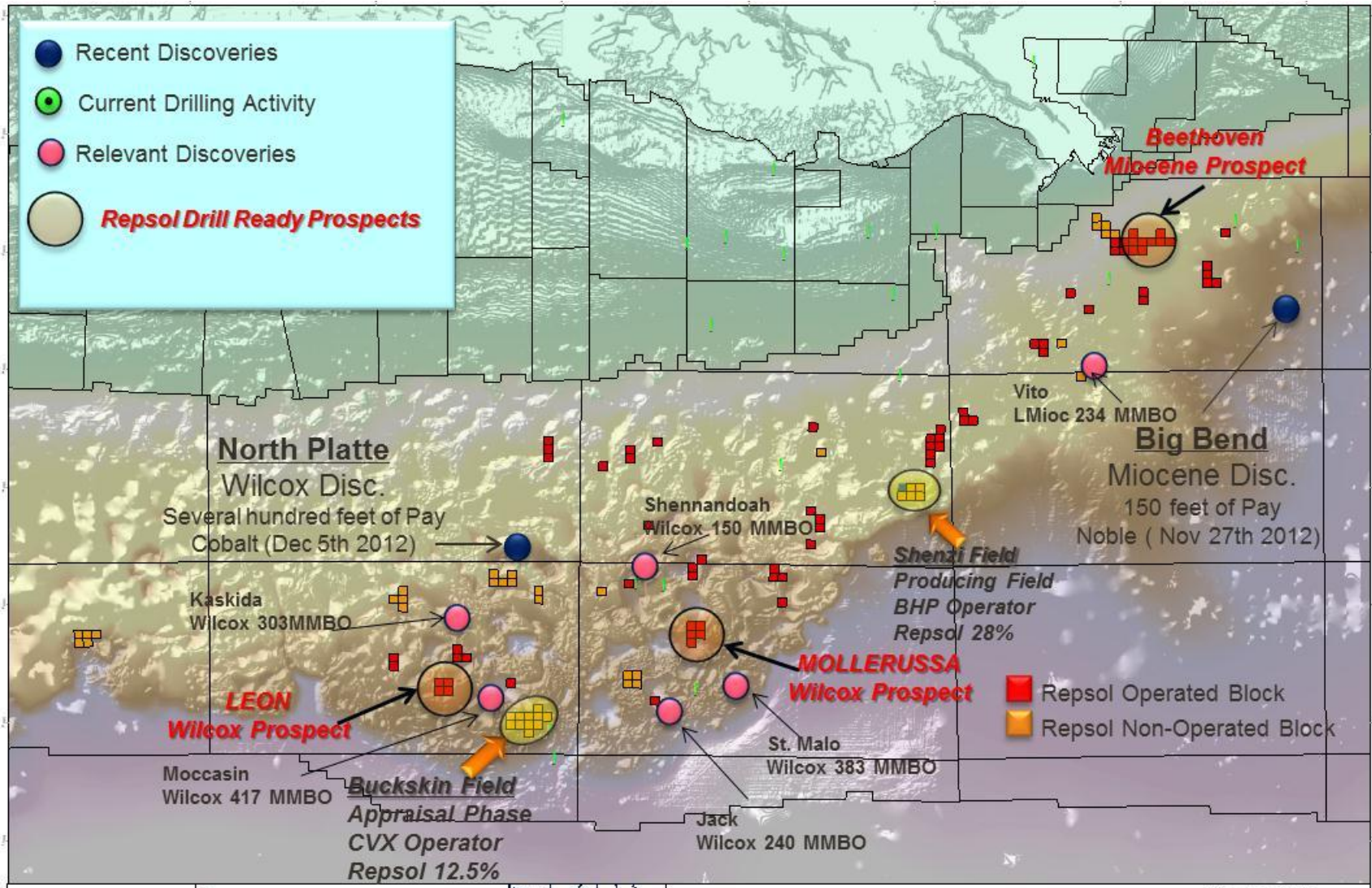
Nova Scotia

100 mi
200 km

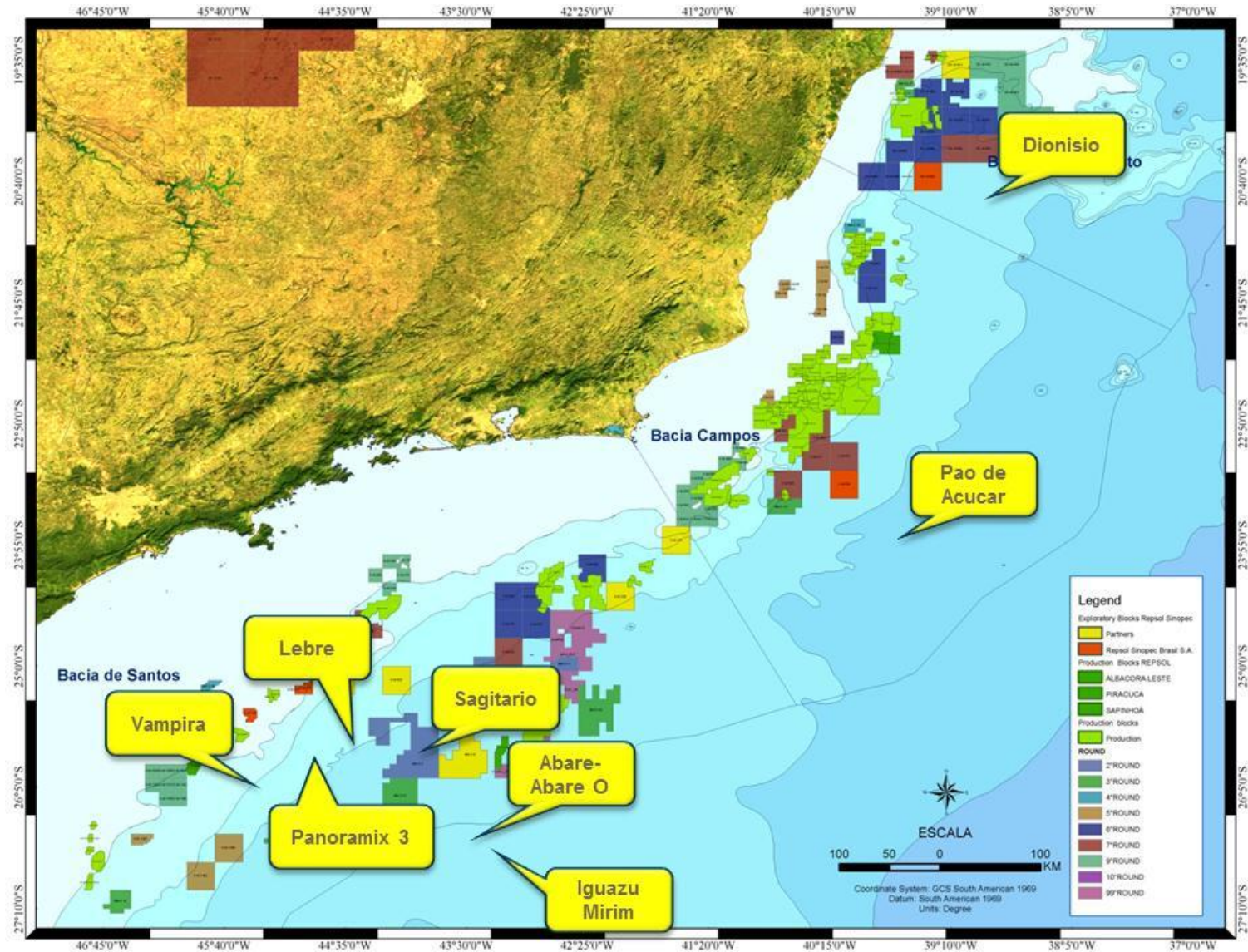
Repsol in Canada



GOM Location Map



Brazil Exploration activity 2013



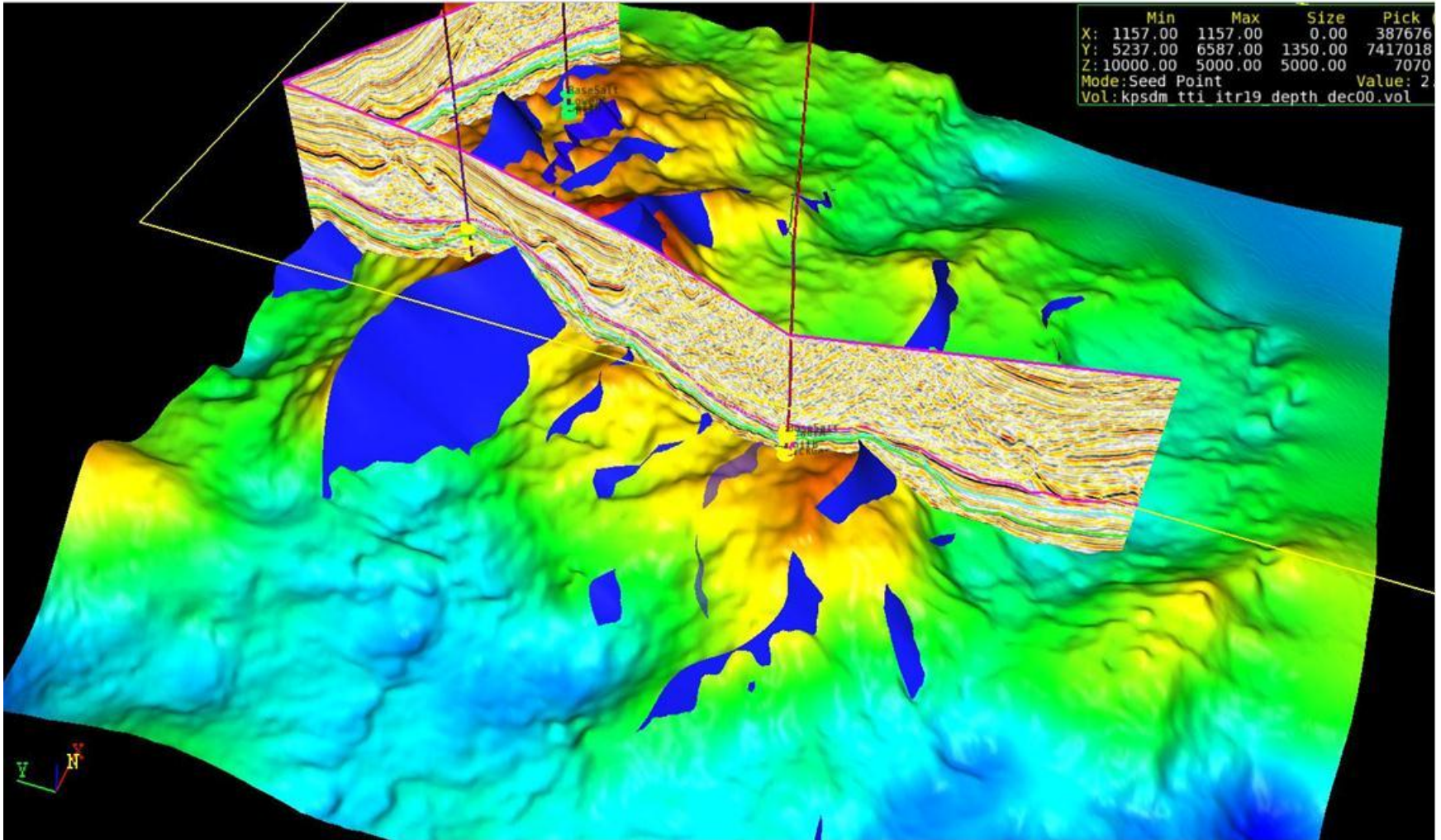
Brazil Exploration activity 2013



GAVEA

SEAT

PAO DE ACUCAR



Highlights & Conclusions



Repsol Exploration Day

Highlights for 2013

Back to full speed



- 32 firm wells (could reach 40 wells depending on rig availability)
- Investigate around 6 billion barrels in gross terms
- 70% of investments targeting oil
- Almost 65% spent in drilling
- Largest expenditure in USA, Brazil, Norway, Canada, Peru
- Strong activity offshore in Brazil, USA, Norway and Canada, coupled with recovery of onshore activity in Libya, Algeria and new operations in Russia

Highlights for 2014

Maintaining speed



- Targeting +30 wells (includes contingencies, from 40 in inventory)
- Another 6 billion barrels in gross terms to investigate
- Main drilling activity forecasted for Angola, Libya, Norway, Brazil, USA and possibly Colombia.
- Other plays investigated are Kurdistan, Portugal, Namibia and Canada
- Expected resources from 2014 again above 300 MBOE

Countries with drilling activity during 2013 & 2014



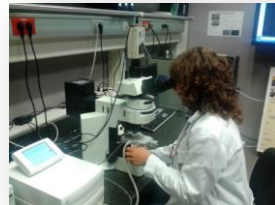
Operated Operated & non operated Non Operated

Continue Our search for Excellence



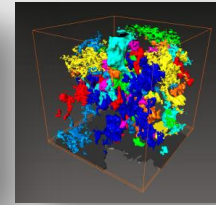
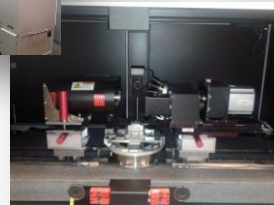
In Geology:

- Redeveloping our competencies on folded belts
- Working on our algorithms for GWD “gas while drilling” predictive tools
- Sherlock, a State of the Art, In-House Know-How, not available from service companies that positions Repsol with the majors in the integral knowledge of Petroleum Systems, from Deposition to Diagenetic History.



The DNA of rocks

in



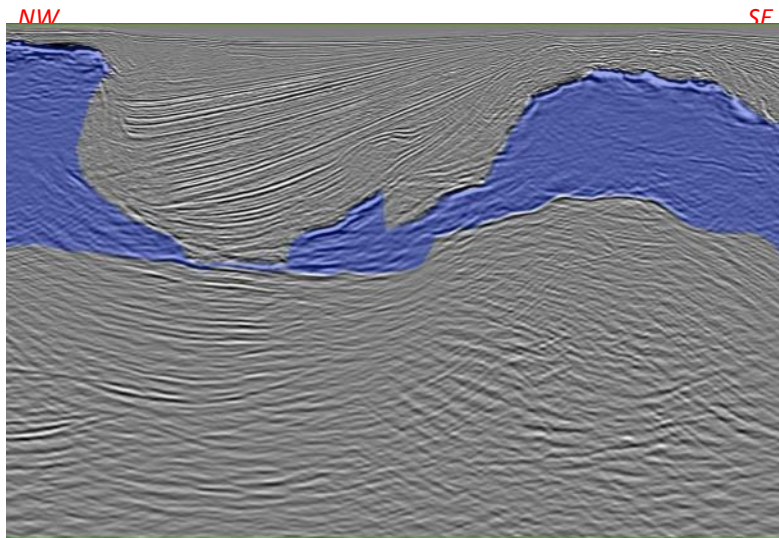
Three locations with
increasing analytical
complexity

Continue Our search for Excellence

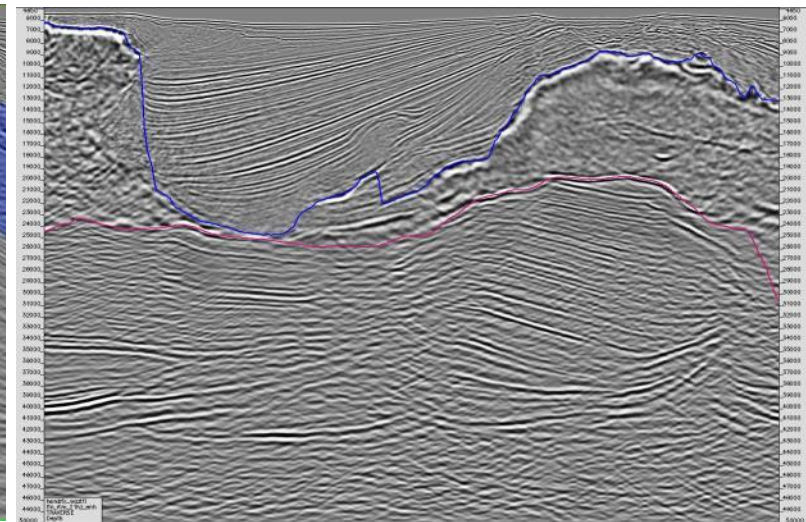
In Geophysics:

- Relying on the development of better tools for imaging (Kaleidoscope 2.0)
- Defining the future for non seismic methods
- Consolidating Repsol's technical reputation with IOCs and NOCs

External WEM NAZ



Re-processed TTI RTM WAZ



Conclusions



- Leverage on strong recent exploration track record to create value from current exploration pipeline
- Growing exposure to attractive areas, crude oil prices and increasing share of OECD
- Focus on our technical themes (Atlantic break-up analogies, off-shore carbonates, underexplored folded belts)
- Notable improvement in reserve replacement, without exhausting contingent resources bank
- Fulfilling our acreage replacement goals
- Delivery of +300million barrels in contingent resources

Repsol Exploration Day



London, January 25th 2013