

Petsec Energy Ltd

RIU Good Oil Conference - Perth
September 2016



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The reserves assessment follows guidelines set forth by the Society of Petroleum Engineers – Petroleum Resource Management System (SPE-PRMS). The USA and Yemen reserve estimates provided within this presentation are based on information contained within the following releases to the ASX: Announcements on 8 March 2016 and 15 March 2016; and the 2015 Annual Report.

The Company confirms that it is not aware of any new information or data that materially affects the information included within the above releases, and that all the material assumptions and technical parameters underpinning the estimates therein continue to apply and have not materially changed.

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Petsec Energy: Capital Structure / Oil & Gas Prices

Capital Structure / WTI Oil and US Natural Gas Prices

Petsec Energy (PSA) Share Price / WTI Oil Price / U.S. Natural Gas Price

■ PSA Share Price ■ Natural Gas Price ■ WTI Oil Price

Capital Structure

Market Listing	ASX: PSA / OTC ADR: PSJEY
Shares on issue	231.5 MM
Market capitalisation at 29/8/16 @ 19.5 c/s	A\$45.1 MM
Cash at 30/06/16	US\$9.2 MM
Convertible note facility – 29/8/16 (available)	US\$15 MM
Net oil & gas reserves (2P) as of 1/1/16	9.3 MMboe
NPV ₁₀ reserves (2P) as of 1/1/16	US\$188.1 MM

>80% Drilling Success
Rate in the GOM

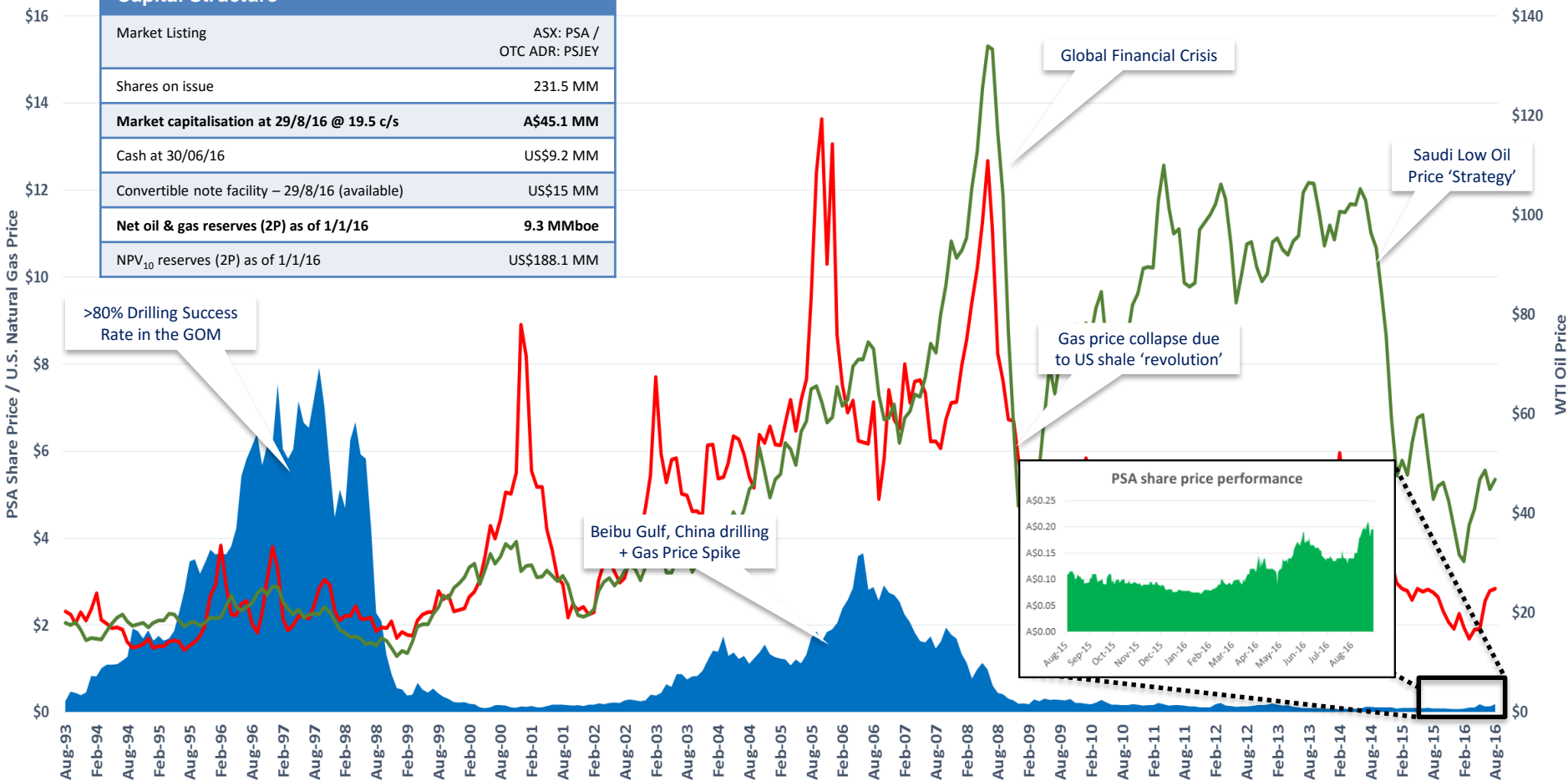
Beibu Gulf, China drilling
+ Gas Price Spike

Global Financial Crisis

Gas price collapse due
to US shale 'revolution'

Saudi Low Oil
Price 'Strategy'

PSA share price performance



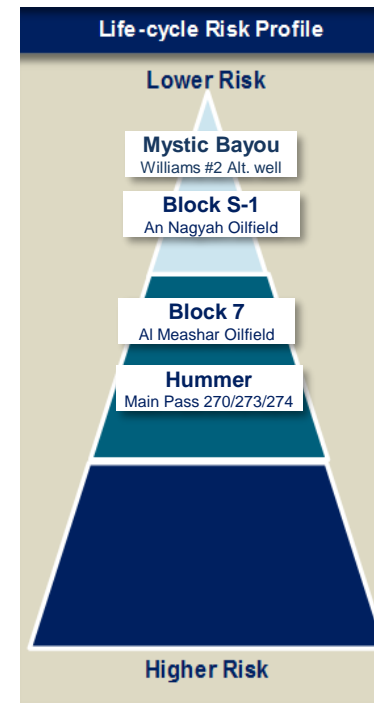
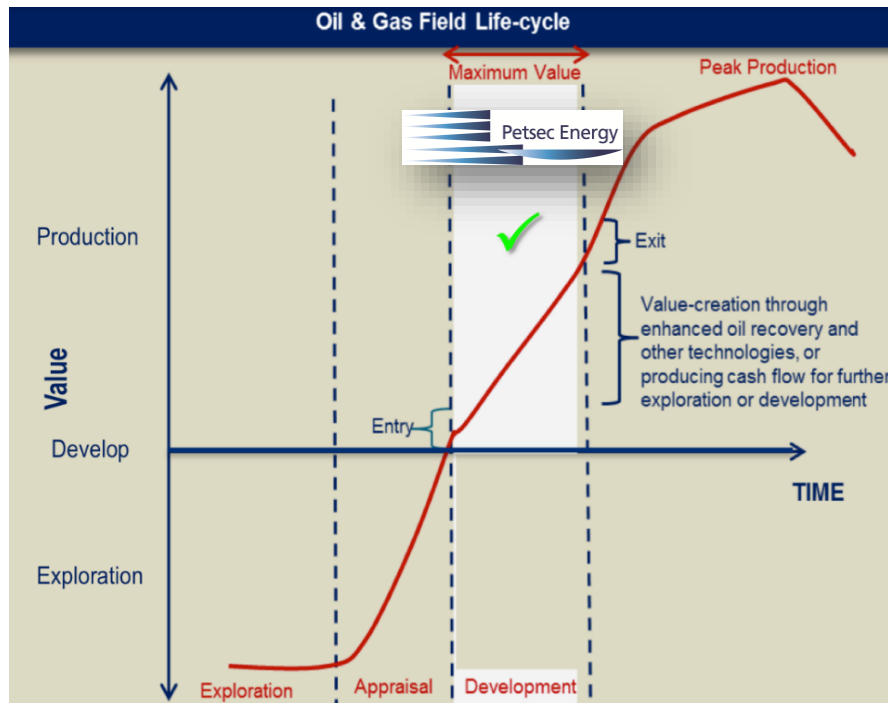
Corporate Strategy: Expansion Philosophy

Acquire assets during the current period of low oil prices and in locations with a challenging political climate which prohibits much larger companies from operating, and where our network of contacts and relationships can advance projects.

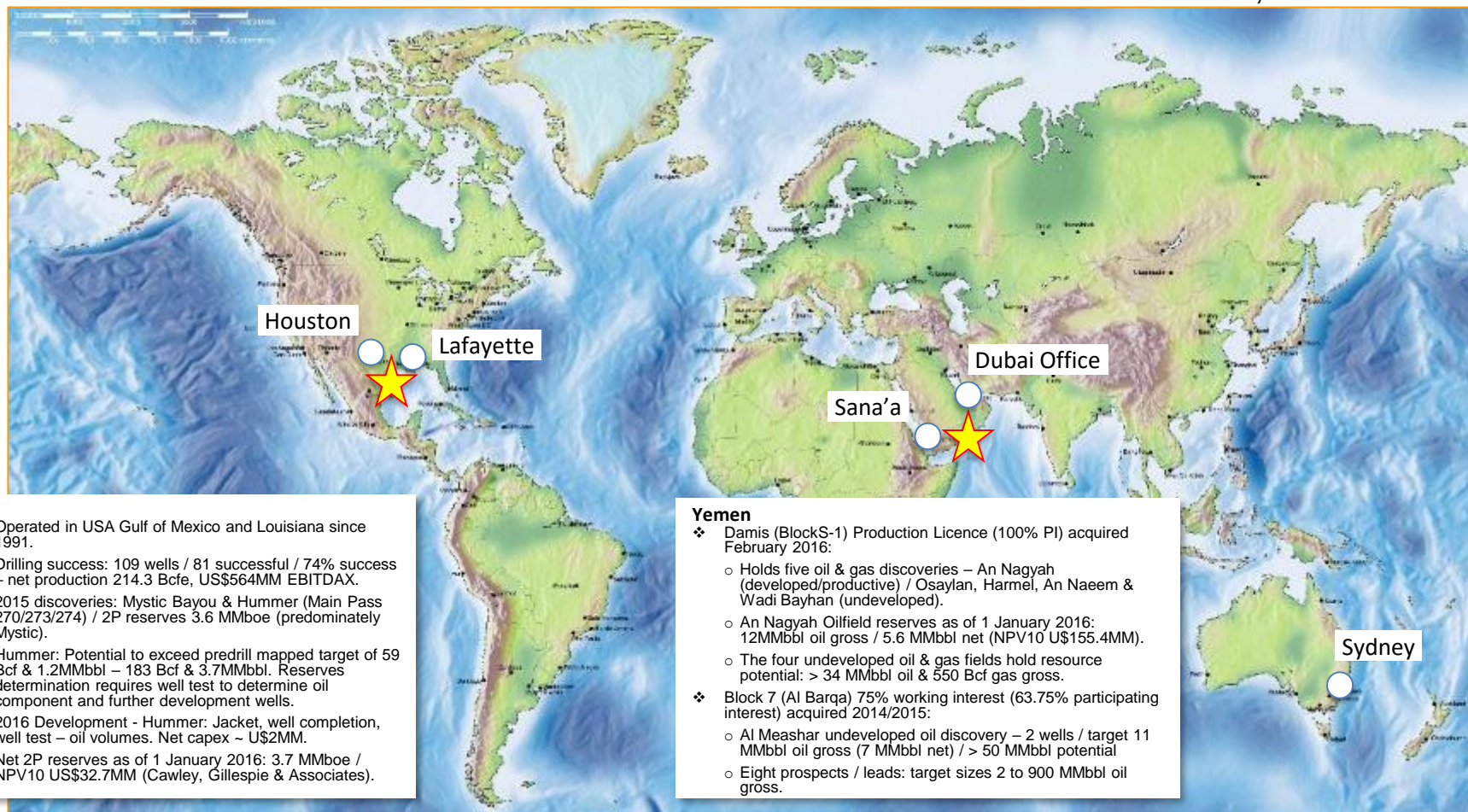
Acquire oil reserves both developed/producing and undeveloped, with near term production capacity, which hold the potential to substantially increase the value of Petsec Energy.

❖ Risk Management:

- **Subsurface: The Geology – Target ‘World Class Petroleum Systems’.**
- **Engineering: Acquire ready to produce hydrocarbons / Facilities & wells are in place.**
- **Surface Conditions / Operating Environment: ‘Licence to operate’ – local knowledge, leverage relationships & contacts.**



Petsec Energy is an **Australian independent oil and gas exploration and production company** listed on the Australian Stock Exchange and has operations onshore in the Republic of Yemen and in the shallow waters of the Gulf of Mexico and onshore Texas and Louisiana, USA.



USA

- ❖ Operated in USA Gulf of Mexico and Louisiana since 1991.
- ❖ Drilling success: 109 wells / 81 successful / 74% success – net production 214.3 Bcf, US\$564MM EBITDAX.
- ❖ 2015 discoveries: Mystic Bayou & Hummer (Main Pass 270/273/274) / 2P reserves 3.6 MMboe (predominately Mystic).
- ❖ Hummer: Potential to exceed predrill mapped target of 59 Bcf & 1.2MMbbl – 183 Bcf & 3.7MMbbl. Reserves determination requires well test to determine oil component and further development wells.
- ❖ 2016 Development - Hummer: Jacket, well completion, well test – oil volumes. Net capex ~ US\$2MM.
- ❖ Net 2P reserves as of 1 January 2016: 3.7 MMboe / NPV10 US\$32.7MM (Cawley, Gillespie & Associates).

Yemen

- ❖ Damis (BlockS-1) Production Licence (100% PI) acquired February 2016:
 - Holds five oil & gas discoveries – An Nagyah (developed/productive) / Osaylan, Harmel, An Naeem & Wadi Bayhan (undeveloped).
 - An Nagyah Oilfield reserves as of 1 January 2016: 12MMbbl oil gross / 5.6 MMbbl net (NPV10 US\$155.4MM).
 - The four undeveloped oil & gas fields hold resource potential: > 34 MMbbl oil & 550 Bcf gas gross.
- ❖ Block 7 (Al Barqa) 75% working interest (63.75% participating interest) acquired 2014/2015:
 - Al Meashar undeveloped oil discovery – 2 wells / target 11 MMbbl oil gross (7 MMbbl net) / > 50 MMbbl potential
 - Eight prospects / leads: target sizes 2 to 900 MMbbl oil gross.

1 Calculated using deterministic method and conversion to BOE was calculated using ratio of six thousand cubic feet of natural gas to one barrel of oil

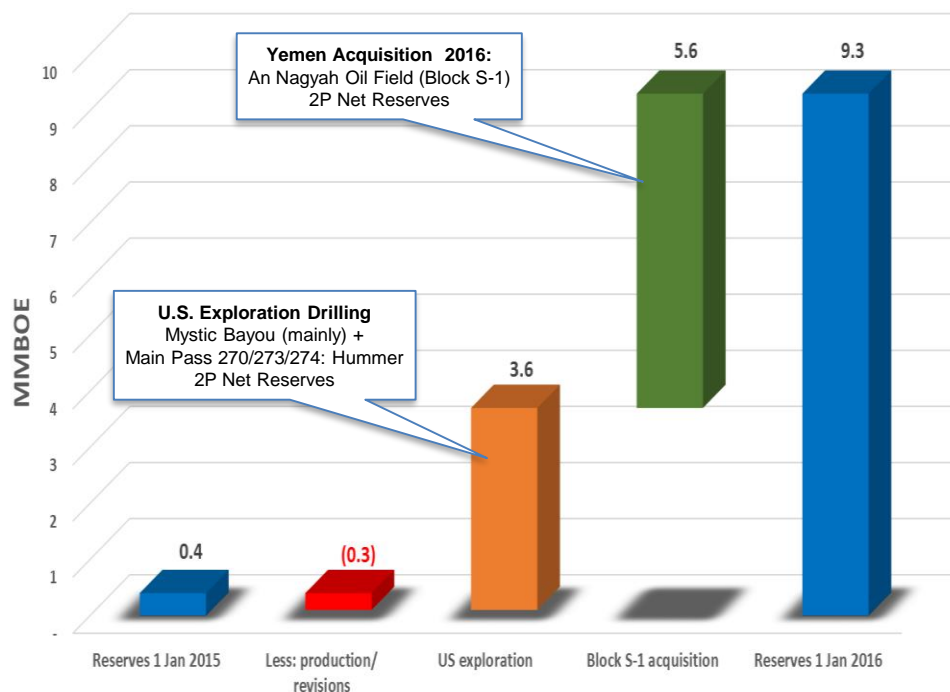
2 Source: DeGolyer and McNaughton Canada Limited

3 Source: Wood Mackenzie Asia Pacific Pty Ltd

Petsec Energy:

2P Reserves & Valuation

3000% Growth in Net 2P Oil & Gas Reserves



Net Reserves – NPV10 US\$188.1MM (~ A\$1.06/share)

Oil Equivalent (MMBoe) ¹	Net Proved Reserves ²	Net Probable Reserves ²	Net Proved + Probable Reserves ²
USA Reserves			
Reserves as of 1 Jan 2015	0.3	0.1	0.4
Additions	2.0	1.6	3.6
Revisions	(0.1)	(0.1)	(0.2)
Production	(0.1)	-	(0.1)
USA reserves as of 1 Jan 2016	2.1	1.6	3.7

Yemen Reserves

Reserves as of 1 Jan 2015	-	-	-
Acquisitions – An Nagyah Oilfield	4.5	1.1	5.6
Yemen reserves as of 1 Jan 2016	4.5	1.1	5.6
Group Reserves as of 1 Jan 2016	6.6	2.7	9.3

NPV₁₀ Petsec Group Reserves as of 1 Jan 2016

**US\$188.1MM
~ A\$1.06/share**

- 1 Million barrels of oil equivalent (using a ratio of approximately six thousand cubic feet of natural gas to one barrel of oil).
- 2 Net reserves means those reserves representing the Company's net revenue interest (or net economic interest) which is the Company's working interest less royalties payable in the USA, and in Yemen net of all costs including all Yemen government costs including taxes.

Onshore Louisiana & Shallow Waters Gulf of Mexico

- ❖ USA net 2P oil & gas reserves as of 1 January 2016 were 3.7 MMboe with a NPV10 of US\$32.7 million (Cawley, Gillespie & Associates) mostly attributed to the Mystic Bayou Field.
- ❖ Production: Two fields – Jeanerette (ASF #4 well) and Mystic Bayou Williams # 2 Alt. well.
- ❖ **Development Projects:**
 - Williams No.2 Alt. well brought into production on 31 August 2015, four months after spud. Three further development well locations.
 - Main Pass 270 #3 BP 1 well on the Hummer prospect discovered in 2015 will be completed and tested in 2016. A further three to nine development well locations identified.



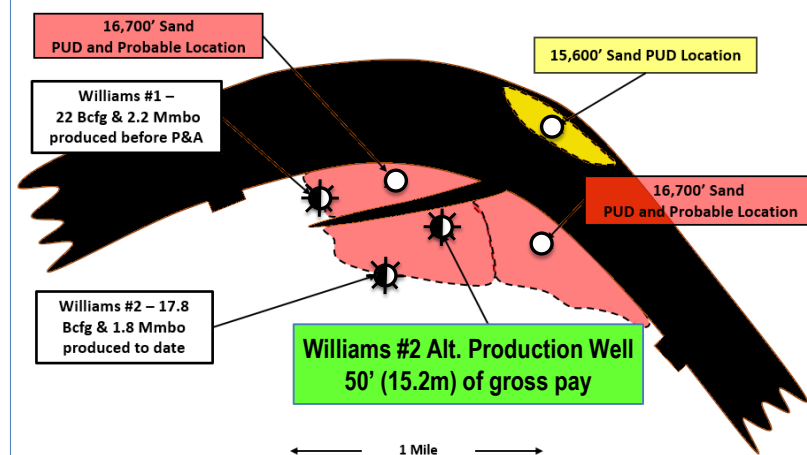
2015 USA Discovered Reserves: 3.6 MMboe

Mystic Bayou Prospect – Onshore Louisiana

- ❖ Located 65 kilometres (40 miles) southeast of Lafayette in a low lying area of the Atchafalaya River Basin in St. Martin Parish, onshore Louisiana USA, the Mystic Bayou Field has produced in excess of 3.4 million barrels of oil and 39 billion cubic feet of gas in the target horizons.
- ❖ Petsec owns a 25% non operating working interest (18.5% net revenue interest).
- ❖ The Williams #2 Alt well was drilled to a total measured depth of 5,263 metres (17,266'), equivalent to 5,143 metres (16,873') true vertical depth.
- ❖ Currently producing at a gross rate of ~5.5 MMcfd and 190 bcfd.
- ❖ Future development will focus on drilling the adjacent three well locations of proved undeveloped reserves shown in the adjacent schematic.

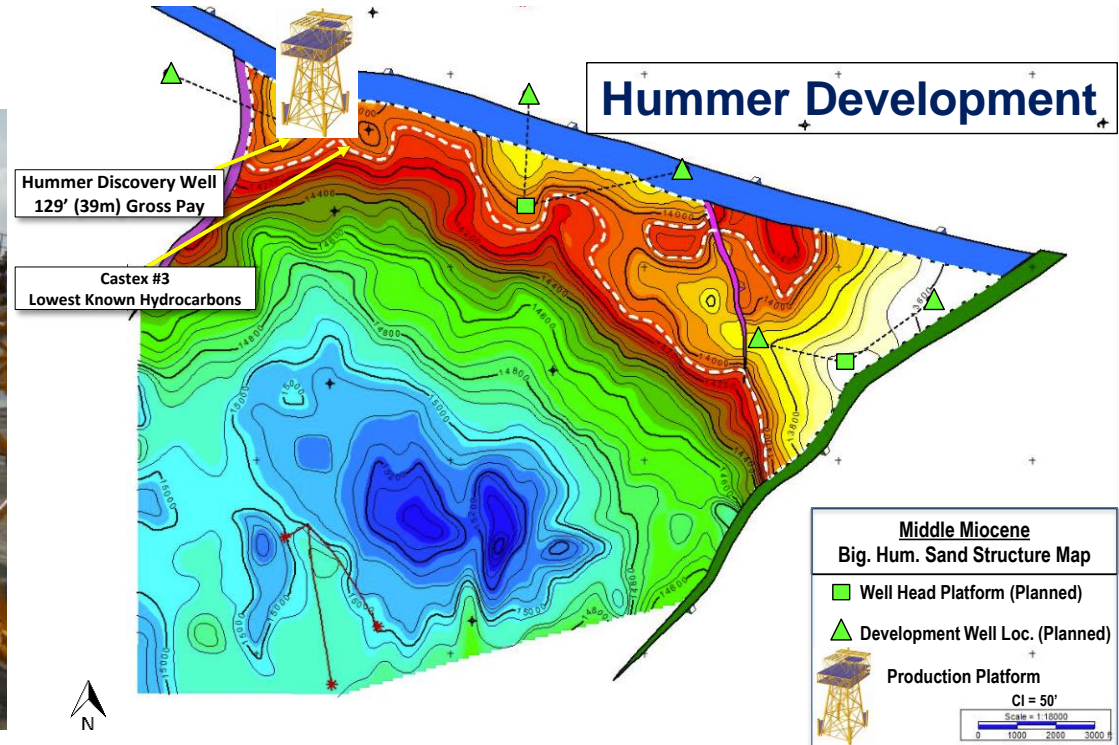


Mystic Bayou Map with 16,700' Reservoir Outlines



2015 USA Discovered Reserves: 3.6 MMboe

Main Pass 270/273/274



- ❖ Located 80 kilometres (50 miles) southeast of the Mississippi River delta, in 65 metres (215') of water in the Gulf of Mexico USA.
- ❖ Petsec owns a 12.5% non-operating working interest (10.24% net revenue interest).
- ❖ The Main Pass 270 #3 exploration well was drilled in June-December 2015 to a total depth of 4,800 metres (15,748') TVD.
- ❖ Fabrication of jacket completed in July 2016.
- ❖ Installation of jacket, completion of well and well testing is anticipated in September, with first production expected in 2nd quarter 2017.

Petsec Energy Yemen Leases

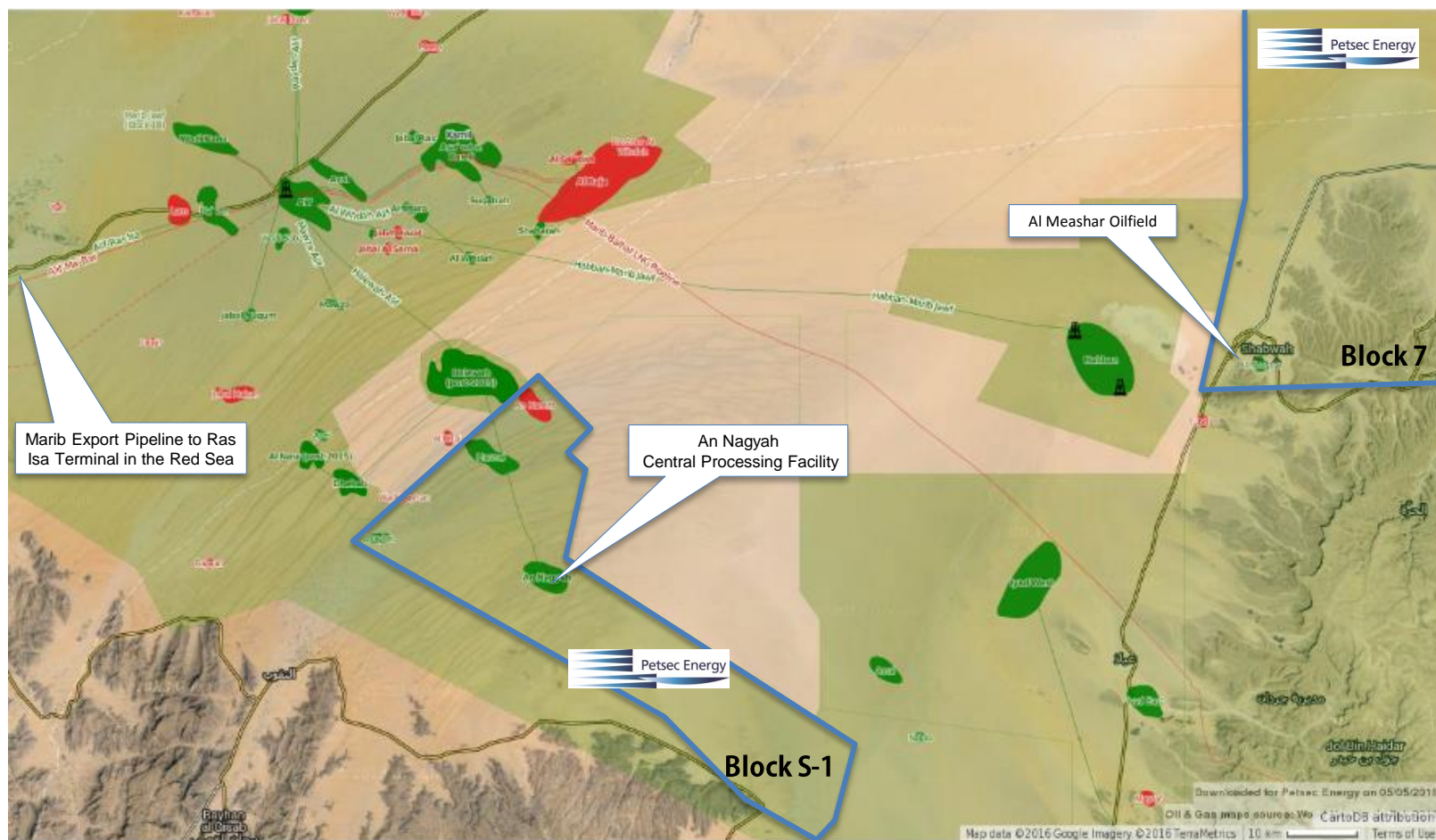
Damis (Block S-1) & Al Barqa (Block 7)

- ❖ Petsec's Yemen blocks are located in the prolific Shabwa Basin that has exceptional petroleum source rocks and associated petroleum system, in excess of 2 billion barrels of oil have been discovered in the basin to date.
- ❖ Al Barqa (Block 7) holds the Al Meashar Oilfield and eight material prospects and leads located adjacent to major infrastructure and planned future pipelines.
- ❖ Damis (Block S-1) includes 5 oil and gas fields, including the productive and developed An Nagyah Oil Field with significant production infrastructure that is connected to the main Marib Export Pipeline.

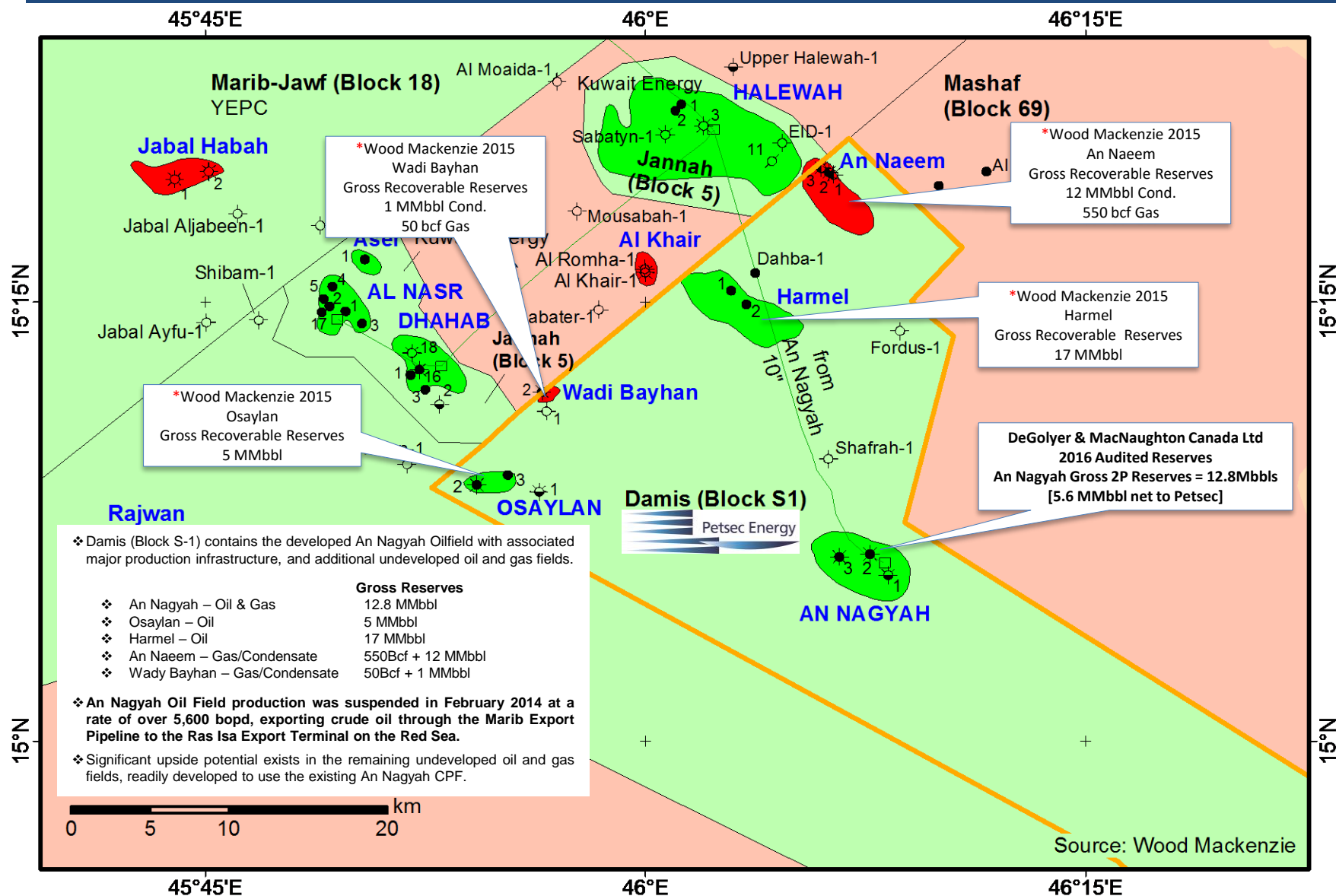


Damis (Block S-1) & Al Barqa (Block 7) Marib-Shabwah Basin Production Hub

- ❖ Damis (Block S-1) and Block 7 are located within the prolific, 'world class', Marib-Shabwah Basin.
- ❖ Excess production capacity at the An Nagyah CPF in Block S-1 can be utilised to produce the identified reserves in the four undeveloped fields within the block.
- ❖ An Nagyah is connected to the Marib-Shabwah production hub which delivers crude for export directly to the Ras Isa Terminal on the Red Sea via a 610-910mm diameter 438 km export pipeline.



Damis (Block S-1) Production Licence 5 Oil & Gas Fields



An Nagyah Oilfield Infrastructure Central Processing Facility

Accommodation & Life Support Area.

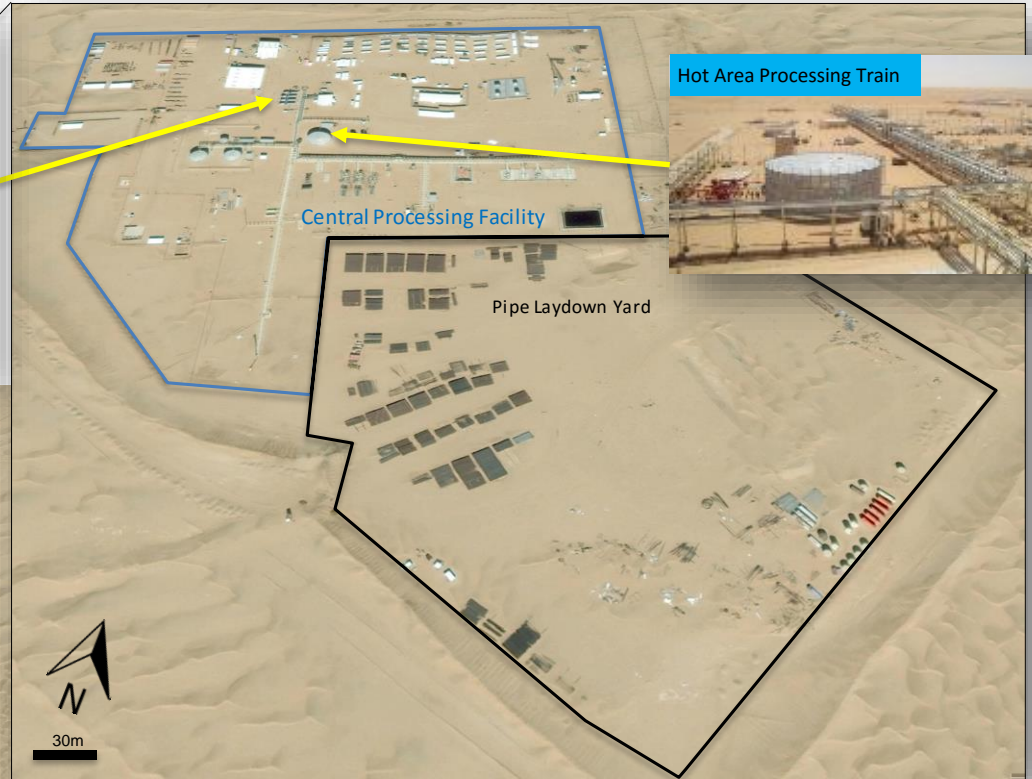


Hot Area Processing Train



Central Processing Facility

Pipe Laydown Yard



- ❖ **The previous operator has invested over \$450 million in the An Nagyah Oilfield;** acquiring seismic data, drilling, production facilities and associated infrastructure.
- ❖ Due to the arid environment the An Nagyah facility is in exceptional condition and has been well maintained during the current shut-in period.
- ❖ The CPF is connected via the Company's 80,000 bopd pipeline to the Marib Export Pipeline (350,000 bopd capacity) to the Export Terminal at Ras Isa on the Red Sea.
- ❖ **A large inventory of spare parts, drilling equipment and compression equipment is warehoused onsite.**

An Nagyah Oilfield

Central Processing Facility



Crude Storage

- ❖ The Central Processing Facility (CPF) was completed in 2004 reaching a peak production rate of over 12,000 bopd.
- ❖ The CPF can process 20,000 bopd.
- ❖ Crude storage capacity of 17,500 bbls.
- ❖ The field was producing in excess of 5,600 bopd when production was suspended in February 2014.
- ❖ There are currently 15 production wells shut-in.
- ❖ Experienced Yemeni production staff are based at the CPF.
- ❖ **The company is planning for the re-start of production in the fourth quarter of 2016.**

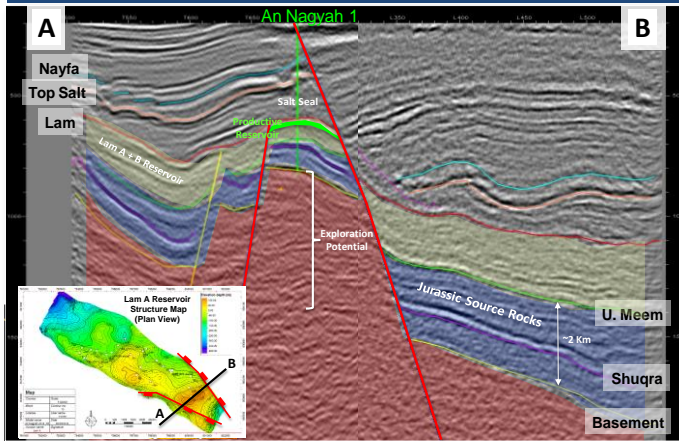


Desalinator

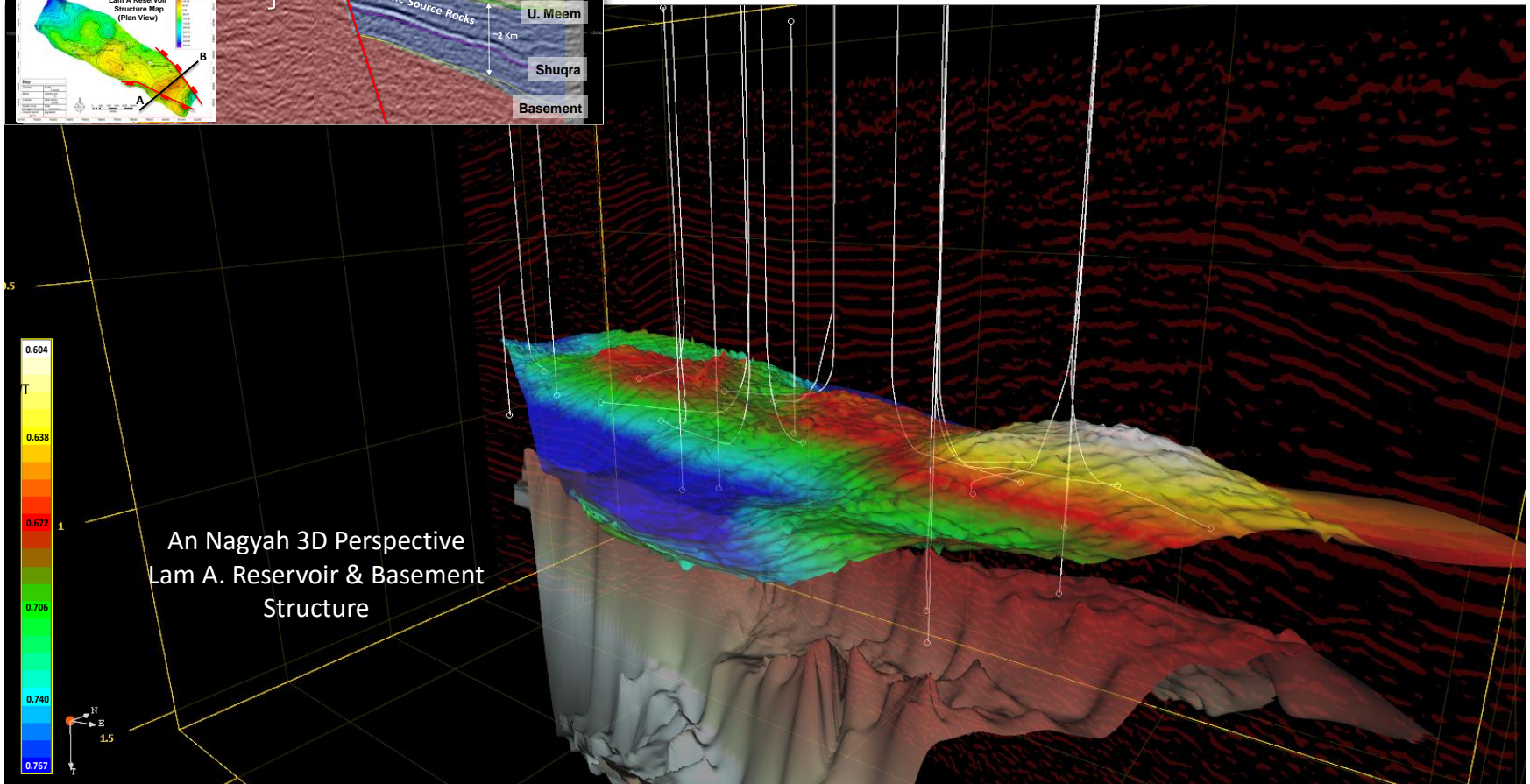


Separator Pipework

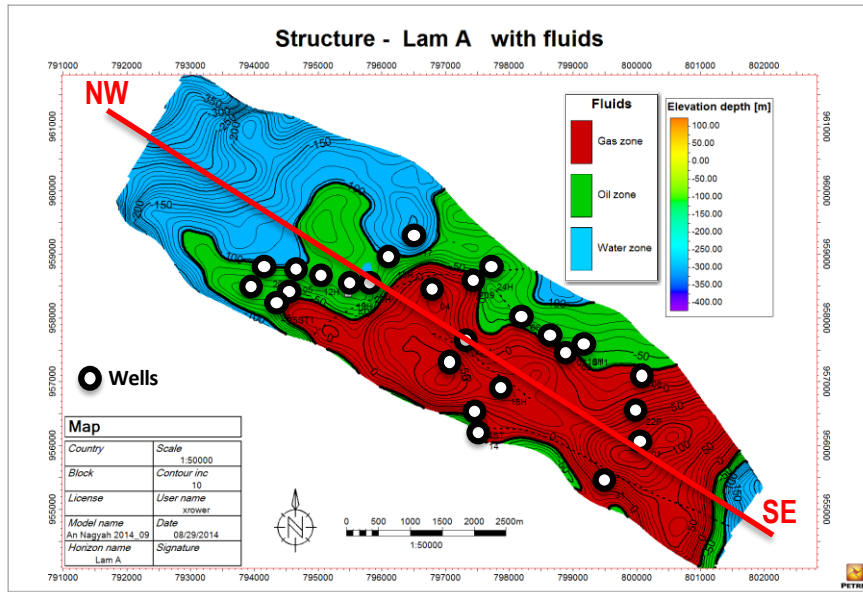
An Nagyah Oilfield Subsurface 3D TWT Cube & Seismic Cross Section



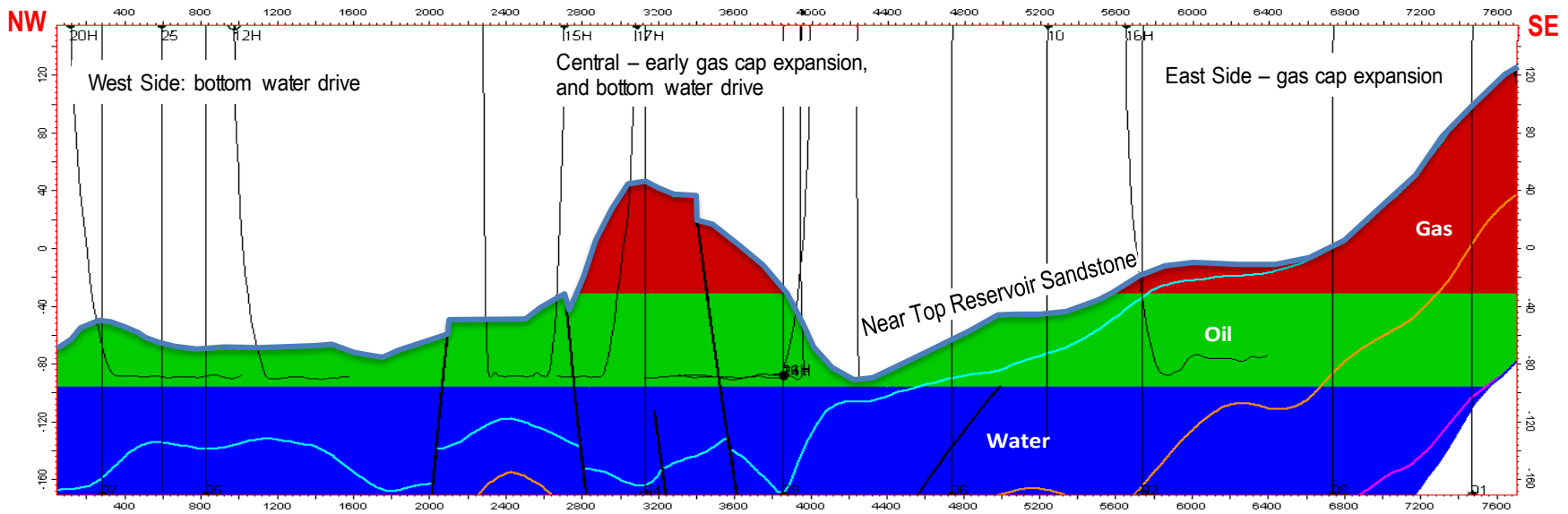
- ❖ The An Nagyah Oilfield is located within a world class petroleum system containing in excess of 2,000m of exceptional quality Jurassic source rocks.
- ❖ Structurally the field is a North-West to South-East trending tilted horst block within the Jurassic aged Sab'atayn Rift Basin.
- ❖ The most prolific reservoir is the uppermost Lam Sandstone, a thick sequence (100-125m) of delta front sandstones of Late Jurassic age.
- ❖ 15 production wells currently shut-in available for restart of production.



An Nagyah Oilfield Reservoir Geological Cross Section

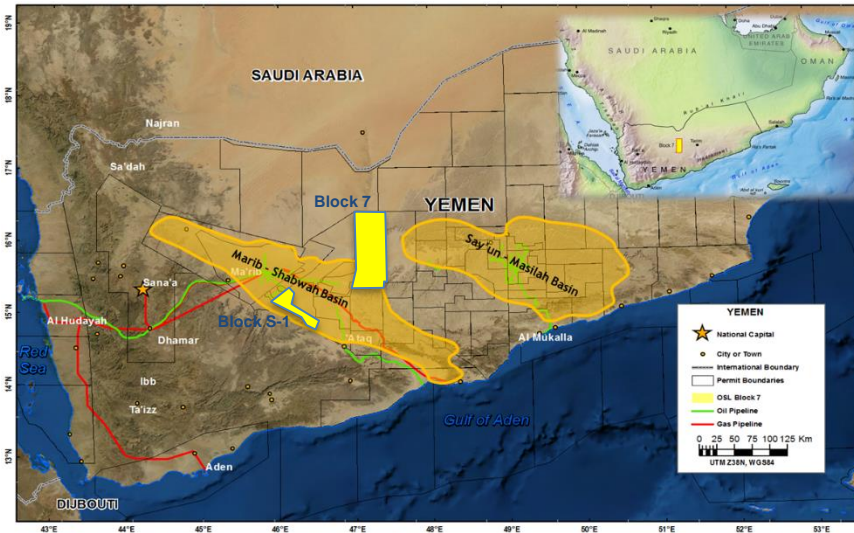


- ❖ The An Nagyah Oilfield contains a 50 metre oil column and up to a 135 metre gas cap at its structural crest.
- ❖ Oil is produced through vertical and horizontal wells drilled across the sandstone reservoir.
- ❖ Production in the field is maintained through an active aquifer in the north-west flank of the field and via gas expansion in the up dip South-Eastern crest where there is a significant gas cap.
- ❖ Peak production has exceeded 12,000 bopd but has been limited by gas compression capacity for the re-injection of produced gas back into the reservoir.
- ❖ The re-injected gas maintains reservoir pressure and allows for greater recovery of oil from the field.

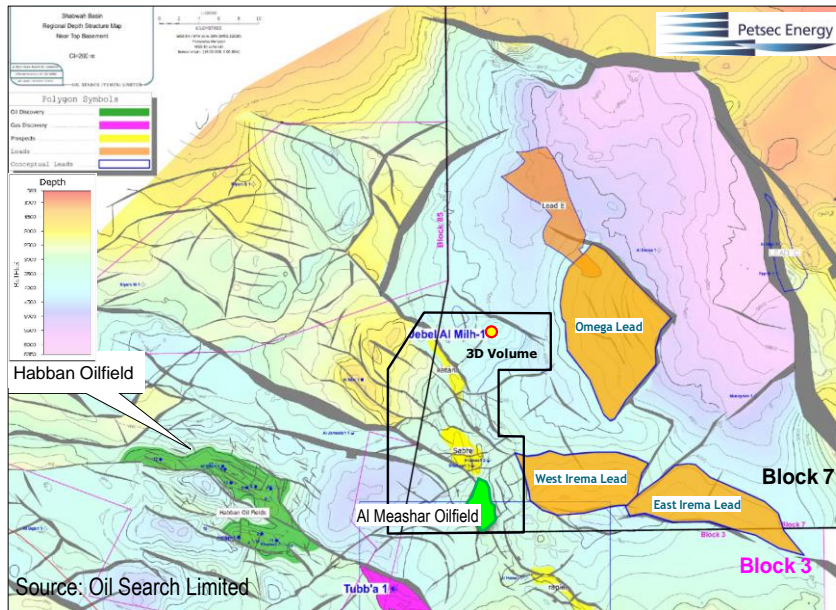


Al Barqa (Block 7)

Development & Exploration Potential



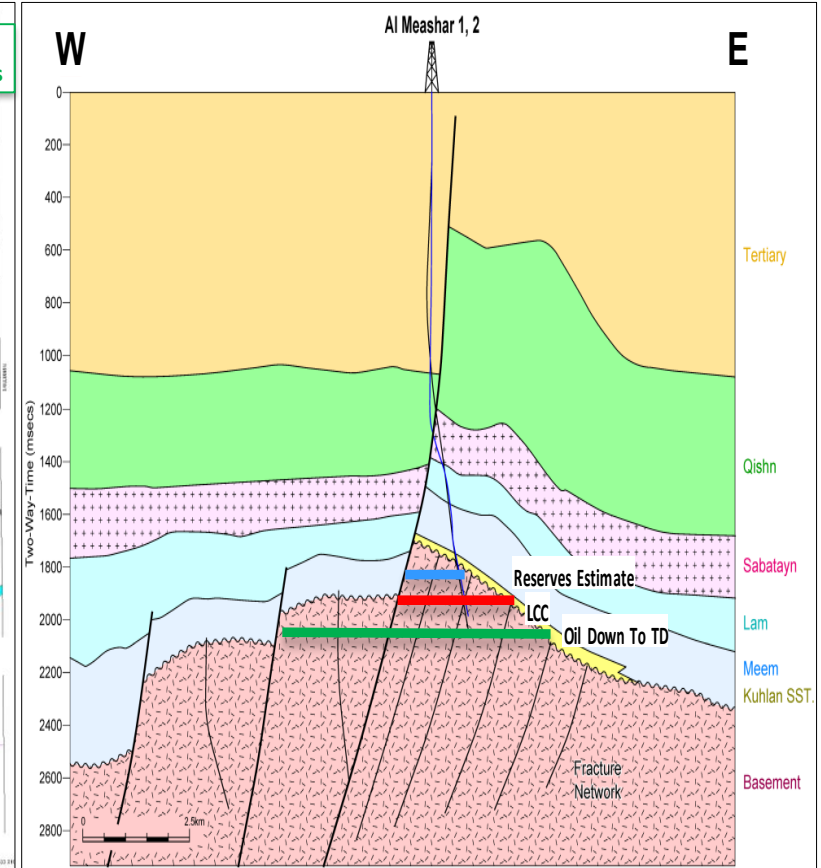
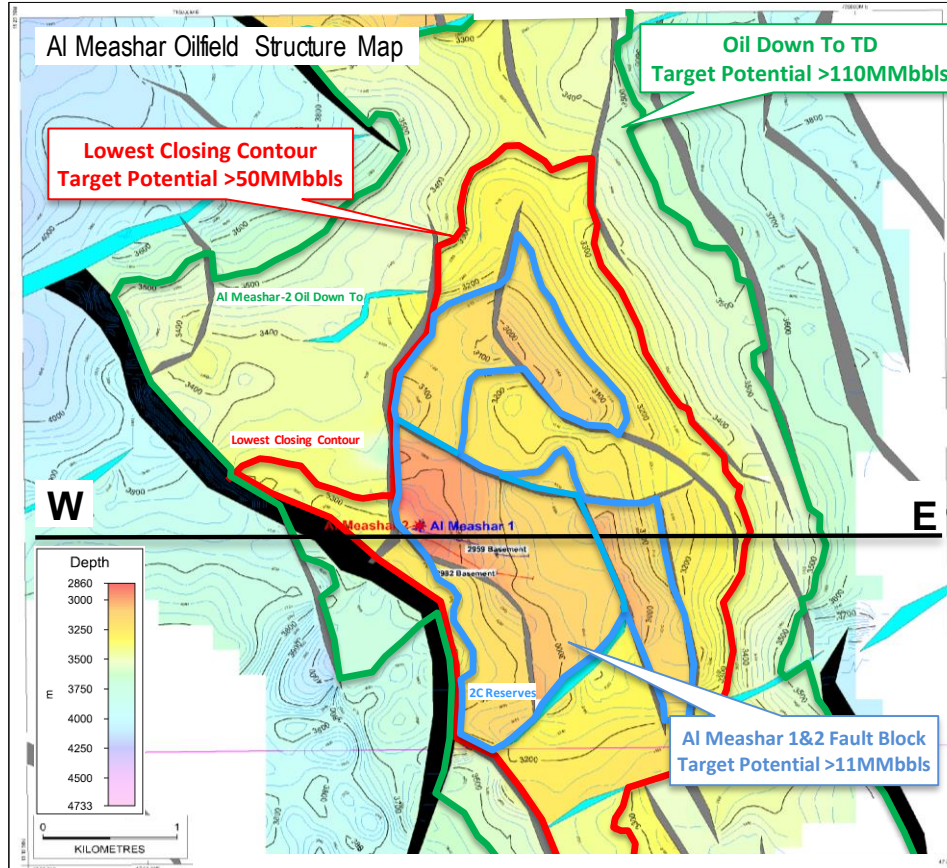
- ❖ Block 7 is located approximately 80km east of Block S-1, within the prolific Shabwah Basin.
- ❖ The block holds the Al Meashar Oilfield (two wells) - targeting 11 MMbbl oil gross (7 MMbbl net) to > 50 MMbbl potential.
- ❖ In addition, there are eight seismically (3D and 2D) defined prospects and leads with mapped target sizes ranging from 2 – 900 MMbo all with the same primary objectives of the Khulan-Basement reservoirs productive in OMV's Habban Oilfield 14km to the west of Al Meashar in the adjacent Block S2 recently producing ~20,000 BOPD.
- ❖ Significant potential is also recognised in Cretaceous sands of the Lam formations (An Nagyah Block S-1 production) - extensive shows in the wells drilled in Block 7 and flowed over 1000 bopd in the neighbouring Habban Oilfield.



Al Barqa (Block 7)

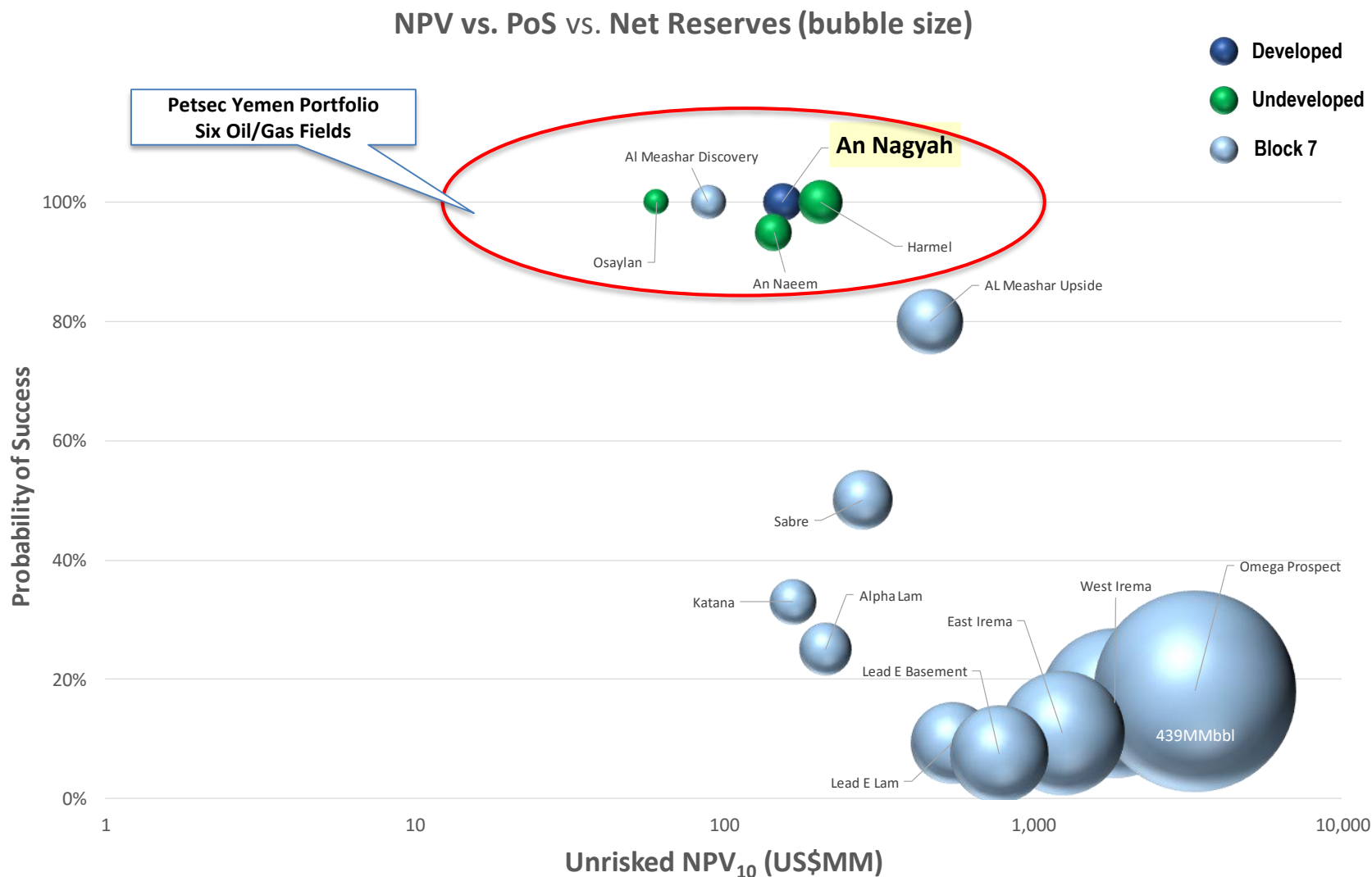
Al Meashar Development Potential

- ❖ The **Al Meashar 1 & 2 discovery wells intersected an oil column in excess of 800m** in the Kuhlan Sandstone and Basement formations, the same formations as in **OMV's Habban Oilfield** which has an oil column of 945m and has been producing **~20,000 BOPD** up until production was suspended in March of 2015.
- ❖ The Al Meashar undeveloped oil discovery within the drilled fault block – two well intersection targets **11 MMbbl oil gross (7 MMbbl net)** with potential to increase to **> 50 MMbbl** within the currently mapped red Lowest Closing Contour.
- ❖ The oil column identified in the Al Meashar wells exceeds the mapped structural closure by more than 200m as defined by the red LCC contour in the map below. **Current estimates of oil target within the oil-down-to (ODT) green contour exceeds 110 MMbbls.**



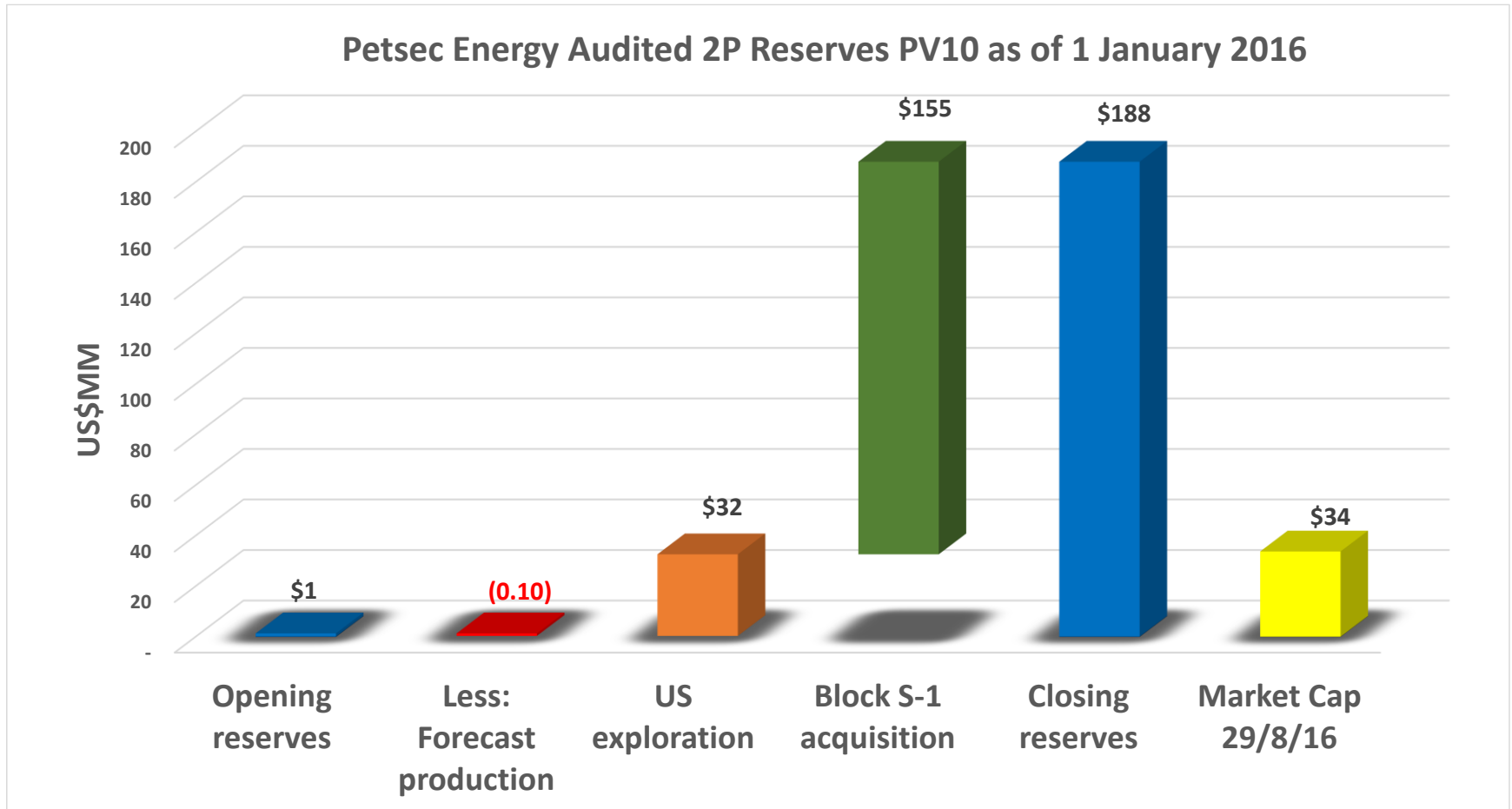
Yemen Reserves Potential

P&L Inventory With Significant Upside



The attributed NPV₁₀ of US\$188MM is solely restricted to the audited reserves of the An Nagyah developed oilfield. The Chart above clearly identifies An Nagyah as the starting point to a significant reserve base of material value.

Net Reserves – NPV10 US\$188.1MM (~ A\$1.06/share)



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